REMEDIAL INVESTIGATION REPORT

APPENDIX A

Phase I Reports

Sylvania Corning FUSRAP Site

Hicksville, Nassau County, New York

Prepared for:
UNITED STATES ARMY CORPS OF ENGINEERS
Kansas City District
And
New York District

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FINAL REPORT
GEOPHYSICAL INVESTIGATION
SYLVANIA CORNING FUSRAP SITE
HICKSVILLE, NEW YORK

Prepared for Ecology and Environment, Inc.
Lancaster, New York

Prepared by GeoView, Inc.
St. Petersburg, Florida

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November 15, 2006

Mr. Gene Florentino
Ecology and Environment, Inc.
368 Pleasantview Drive
Lancaster, New York 14086

Subject: Transmittal of Final Report for Geophysical Investigation
Sylvania Corning FUSRAP Site – Hicksville, New York
GeoView Project Number 3376

Dear Mr. Florentino,

GeoView, Inc. (GeoView) is pleased to submit the final report that summarizes and presents the results of the geophysical investigation performed at the above referenced site. Time domain electromagnetics and ground penetrating radar were used to help determine the presence of buried drums or underground storage tanks and to identify the location of historical leach pools, drains and drywells within the accessible areas of the project site. GeoView appreciates the opportunity to have assisted you on this project. If you have any questions or comments about the report, please contact us.

Sincerely,
GEOVIEW, INC.

Christopher Taylor, P.G.
Vice President

Michael J. Wightman, P.G.
President
Florida Professional Geologist Number 1423

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1.0 Introduction

A geophysical investigation was conducted at the Sylvania Corning FUSRAP Site located in Hicksville, New York. The project site consisted of a 10.5-acre area partially abandoned industrial facility divided into three separate but contiguous properties located at 70, 100, and 140 Cantiague Rock Road. (Figures 1 and 3). Of concern was the presence or absence of any remaining buried drums or underground storage tanks beneath the site and to identify the location of several of the historical leach pools, drains and drywells.

The geophysical investigation was conducted using time domain electromagnetics (TDEM) and ground penetrating radar (GPR). Mr. Chris Taylor, P.G. and Mr. Chris Kibler performed the investigation over a 5-day period on September 11th-15th, 2006.

2.0 Site Description

The site was approximately 10.5 acres in size. A chain link fence bordered the site. Three main buildings, Building 70, Building 100, and Building 140, were located within the survey area. Ground cover across the majority of the site was asphalt. Reinforced concrete was present within the floors of the three buildings. At the time of the geophysical investigation, the majority of the site was clear and accessible to the investigation.

During previous site activities and investigations, 57 buried drums were encountered and removed during the 1986 expansion of Building 70; one underground storage tank was encountered and abandoned in-place during the soil boring activities in Building 100; and several underground storage tanks were encountered and removed during remedial excavation activities to the east of Buildings 140 and 100, and south of Building 100. In addition, one underground storage tank was removed to the west of Buildings 140 and 100.

3.0 Description of Geophysical Investigation

The TDEM survey was conducted with a Geonics, Ltd. Model EM-61 Buried Metal Detector (EM-61). A discussion of the limitations of the survey grid is provided in Appendix A1.1. The survey was conducted along parallel lines spaced 5 ft apart. The TDEM readings were collected every 0.62 ft along the transect lines. The locations of the TDEM survey are shown in Figures 1 and 3. A total of 47,708 data readings were collected. The TDEM data was then contoured using Surfer^{tm}, a computer-contouring program. A discussion of the TDEM method is provided in Appendix A1.2.

The lateral sensitivity of the TDEM equipment to surficial metallic debris is usually 3 ft or less. In such areas, it is not possible to discriminate which portion of

the instrument response is being caused by the surficial debris and which portion (if any) is being cause by buried metallic debris. Accordingly, it is usually not possible to determine if buried metallic debris is present within 3 ft of areas where surficial metallic debris is present. It is also not possible to determine the depth of debris burial in areas where the TDEM response is affected by the presence of surficial metallic debris.

The GPR survey was conducted along a series of perpendicular or parallel transects spaced 10 ft apart. The results of this survey are presented in Figures 2 and 4. Additional GPR transects were performed using a smaller GPR grid over the suspected locations of the eight historical leach pools, drains, and drywells and over the majority of the EM-61 anomalies.

On the exterior of the buildings, the GPR data was collected using a Mala radar system with a 500-megahertz antenna. A time range setting of 60 to 90 nano-seconds was used. This time range setting provided information to an estimated depth of 5 to 11 ft below land surface (bls). On the interior of the buildings, the GPR data was collected using a Mala radar system with 500-megahertz and 800-megahertz antennas. A time range setting of 15 to 70 nano-seconds was used. This time range setting provided information to an estimated depth of 3 to 4 ft below land surface (bls). The reinforced concrete slab limited the penetration of the GPR signal. A detailed description of the GPR technique and the methods employed for debris studies is provided in Appendix A1.3.

4.0 Survey Results

4.1 Exterior Areas

The results of the geophysical investigation are presented in Figures 1-4. A summary of the results is provided in Table 1. The EM-61 data indicates multiple areas of elevated responses throughout the survey area. The majority of these areas of elevated response are due to reinforced concrete pads (visible at ground surface), fencing, possible underground utilities, manholes/drains, or other known metallic structures. However, several of the areas of elevated response may be due to areas of buried debris or other structures. These areas are indicated on Figures 1 and 3 as EM-61 Anomalies 1-35. GPR data collected within several of the EM-61 anomalies indicated areas of small shallow debris and did not indicate the existence of underground storage tanks or buried drums within the EM-61 anomalies. However, in some areas, the depth of penetration of the GPR signal was limited and the EM-61 may be responding to features that are buried beyond the depth of penetration of the GPR signal. Multiple circular anomalies were identified between buildings 100 and 140. These circular anomalies are the locations of drainage

structures installed during previous site activities. The locations of these structures are shown on Figures 1 and 2.

The GPR data identified seven additional anomalies. These anomalies are shown as GPR Anomalies A-G on Figures 2 and 4. GPR anomalies A and E are characterized by downwarping of the GPR reflectors and an increase of penetration of the GPR signal. These two anomalies may be areas of previous excavation activity. GPR Anomalies B, C, and F are characterized by parabolic reflections at depths ranging from 3 to 4 ft bls. These anomalies my indicate areas of possible buried debris. GPR anomalies D and G correspond to the possible locations of former drain DRYH-C and the drain within Building 140, respectively.

Additional geophysical testing was performed with an 800 MHz antenna and a Subsite Utility Locator at each of the proposed locations of the sub-slab sampling locations to identify possible utilities or other obstructions. If a utility was identified proximate to a proposed sampling location, the location of the suspected utility was marked with lumber crayon and the sampling location was moved to a more suitable location.

A known underground storage tank was located north of the northwest corner of Building 70. The existence of the underground storage tank was confirmed by the geophysical survey and the location of this underground storage tank is shown on Figures 3 and 4. Examples of the GPR data showing GPR Anomalies A and F are provided in Appendix 1.

4.2 Interior Areas

Initial GPR tests were performed across the location of a known underground storage tank located within the southeast corner of the interior of Building 100. The testing was performed to determine whether significant GPR signal penetration could be achieved to meet the project objectives of identifying underground storage tanks inside of the buildings. The underground storage tank was at a depth of 6 to 6.5 ft bls. The GPR signal did not have sufficient depth of penetration and was therefore not able to resolve the underground storage tank. Additional testing was performed within of western portion of Building 70, the eastern portion of Building 100 and the central portion of Building 140. Several utilities were identified at a maximum depth of 3 to 3.5 ft bls. Based on these results, it was determined that the signal penetration depth of the GPR was insufficient to identify unknown underground storage tanks or buried drums inside of the buildings. Accordingly, the GPR survey was not conducted throughout the remainder of the interior of the buildings. A discussion of the limitations of the GPR technique in underground storage tank/buried debris studies is provided in Appendix 2.3.

Table 1 – Summary of Geophysical Survey Results

Anomaly ID	Figure Number	GPR Response	EM-61 Response	Estimated Depth (feet)	Estimated Size of Anomaly Area (feet)	Comments
A	1,2	High	High	6-7	20x20	Downwarping of GPR reflector and associated increase in penetration of GPR signal. Possible area of previous excavation. Coincides with Anomaly 3.
B	1,2	Medium	Low	1-3	3x3	Single parabolic reflection only evident on one GPR transect. It is suspected that Anomaly B is small amounts of minor near surface debris.
C	1,2	Medium	Low	2-3	3x3	Anomaly comprised of multiple reflections, indicating multiple, smaller objects
D	3,4	High	Interference from metal fence	2-4	2x2	Single parabolic reflection. Anomaly D was located 5 ft to the northeast of the reported location of former drywell DRYH-C.
E	3,4	High	None	2-4	2x2	Apparent increase in depth of the GPR reflector and an increase in penetration of the GPR signal. May indicate an area of former excavation activity or a former pit.
F	3,4	High	High	2-4	8x20	GPR Anomaly is comprised of a single, strong parabolic reflection at a depth of 2-4 feet bls and several smaller, shallower parabolic reflections. Anomaly is located at the suspected termination of a utility identified by the EM-61 data.
G	1,2	Medium	Not Surveyed	2-4	3x3	Single parabolic reflection. Near reported location of DRH-A.

Table 1 – Summary of Geophysical Survey Results

Anomaly ID	Figure Number	GPR Response	EM-61 Response	Estimated Depth (feet)	Estimated Size of Anomaly Area (feet)	Comments
1	1	Low	Medium	1-3	5x5	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
2	1	None	Medium	Unknown	7x10	Relatively large anomaly. Evident on 3 EM transects. May represent Former Leach Pool LPH-B.
3	1	High	High	6-7	5x10	Coincides with Anomaly A
4	1	Low	Medium	1-3	5x5	Possible area of buried debris. Evident of 4 parallel EM transect lines. Reinforced concrete barrier is located immediately north of Anomaly 4
5	1	None	High	Unknown	8x8	Larger EM-61 anomaly. No associated GPR anomaly. May be area of small, scattered near surface debris.
6	1	None	Low	Unknown	3x3	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
7	1	None	Medium	Unknown	4x6	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
8	1	None	Medium	Unknown	5x5	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.

Table 1 – Summary of Geophysical Survey Results

Anomaly ID	Figure Number	GPR Response	EM-61 Response	Estimated Depth (feet)	Estimated Size of Anomaly Area (feet)	Comments
9	1	None	Medium	Unknown	5x5	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
10	1	None	Low	Unknown	3x3	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
11	1	None	Medium	Unknown	3x3	Adjacent to fence. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
12	1	None	Low	Unknown	3x3	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
13	1	Low	Medium	2-4	5x10	Anomaly comprised of multiple small GPR reflections and EM anomalies indicating possible area of scattered debris.
14	1	None	Low	Unknown	5x30	Possible Utility
15	1	Low	Medium	1-4	7x30	Anomaly comprised of multiple small GPR reflections and EM anomalies indicating possible area of scattered debris.

Table 1 – Summary of Geophysical Survey Results

Anomaly ID	Figure Number	GPR Response	EM-61 Response	Estimated Depth (feet)	Estimated Size of Anomaly Area (feet)	Comments
16	1	None	Medium	Unknown	5x3	Sharp increase and decrease in EM response, indicating small, near surface targets. Based on low to medium levels of response, is expected that this is an area of minor, near surface metallic debris.
17	1	None	Low	Unknown	3x3	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
18	1	None	Low	Unknown	5x5	Based on low to medium levels of response, it is expected that this is an area of minor, near surface metallic debris.
19	1	None	Medium	Unknown	5x5	Based on low to medium levels of response, it is expected that this is an area of minor, near surface metallic debris.
20	1	None	Low	Unknown	3x3	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
21	1	None	Medium	Unknown	7x10	Larger EM anomaly seen on two parallel transect lines. May be comprised of 2 individual anomalies.

Table 1 – Summary of Geophysical Survey Results

Anomaly ID	Figure Number	GPR Response	EM-61 Response	Estimated Depth (feet)	Estimated Size of Anomaly Area (feet)	Comments
22	1	None	Low	Unknown	3x3	Small EM-61 anomaly evident on two EM transect lines. Anomaly may be associated with leach pool LPH-C. May be an area of minor, near surface metallic debris or associated with former LPH-C.
23	1	None	Medium	Unknown	3x3	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
24	1	Low	Medium	1-2	20x40	Anomaly comprised of multiple small GPR reflections and EM anomalies indicating possible area of scattered debris.
25	1	Low	Medium	1-3	7x10	Anomaly comprised of multiple small GPR reflections and EM anomalies indicating possible area of scattered debris.
26	3	None	Medium	Unknown	10x10	Larger EM anomaly seen on three parallel transect lines.
27	3	None	Low	Unknown	5x7	Minor area of debris
28	3	None	Medium	Unknown	7x7	Corresponds to former drywell DRY-E. Evident on 3 EM transect lines.
29	3	None	Medium	Unknown	40x40	Large EM anomaly comprised of multiple smaller EM anomalies. May be an area of scattered metallic debris or former foundation.

Table 1 – Summary of Geophysical Survey Results

Anomaly ID	Figure Number	GPR Response	EM-61 Response	Estimated Depth (feet)	Estimated Size of Anomaly Area (feet)	Comments
30	3	None	Medium	Unknown	5x5	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
31	3	None	Low	Unknown	5X5	Probably associate with nearby reinforced concrete pad.
32	3	None	Low	Unknown	3x5	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
33	3	None	Medium	Unknown	5x8	Probably associate with nearby reinforced concrete curb.
34	3	None	Low	Unknown	3x3	Small EM-61 anomaly with rapid increase and decrease of the EM response. Only evident on one EM transect line. Suspected to be an area of minor, near surface metallic debris.
35	3	Minor	Medium	1-3	3x3	Anomaly is located within a larger, rectangular EM-61 anomaly, which may be associated with a former building foundation.
36	3	None	Medium	Unknown	5x20	Along Cantiague Rock Road. Anomaly may be associated with Utility.

Table 1 – Summary of Geophysical Survey Results

Target ID	Figure Number	GPR Response	EM-61 Response	Estimated Depth (feet)	Estimated Size of Anomaly Area (feet)	Comments
DRYH-A	1, 2	Did Not Survey	Could not survey due to reinforced concrete	Unknown		The reported location of former drain DRYH-A was within the northeast portion of Building 140. Was not surveyed because of limited depth of penetration of GPR signal on the interior of the buildings.
DRY-B	1, 2	None	High	Unknown		EM-61 Anomaly is associated with existing catch basin. It is possible that DRY-B is the existing catch basin.
DRYH-C	3, 4	High	Interference from metal fence	2-4	2x2	A GPR was identified 5 ft to the northeast of the reported location of former drywell DRYH-C. The location of this anomaly is shown as GPR Anomaly D on Figure 4.
DRY-D	3, 4	None	High	Unknown		EM-61 Anomaly is associated with existing catch basin. It is possible that DRY-D is the existing catch basin.
DRY-E	3, 4	None	Medium	Unknown	7x7	A circular EM-61 anomaly was identified at the reported location of former drywell DRY-E. The location of this anomaly is shown on Figure 3 as EM-61 Anomalies 28.
LPH-A	1, 2	None	Interference from existing reinforced concrete pad	Unknown		Limited depth of penetration of GPR signal due to existing reinforced concrete pad.

Table 1 – Summary of Geophysical Survey Results

Target ID	Figure Number	GPR Response	EM-61 Response	Estimated Depth (feet)	Estimated Size of Anomaly Area (feet)	Comments
LPH-B	1, 2	Low	Medium	Unknown		Two geophysical anomalies were identified near the reported location of former leach pool LPH-B. The locations of these two anomalies correspond to Anomalies 1 and 2.
LPH-C	1, 2	Medium	None	Unknown		Reported location corresponds to Anomaly 22. Evident on 2 EM-61 transect lines.
DRH-A	1, 2	High	Not Surveyed	2-4	3x3	The reported location of former drain DRH-A was within the central portion of Building 140. One GPR anomaly was located in the vicinity of the reported drain. The GPR data was of poor quality due to the reinforced concrete floor. The location of the GPR anomaly is shown on Figure 2 as GPR Anomaly G.
DRH-B	1, 2	None	Could not survey due to reinforced concrete	Unknown		Reported to be located on interior of Building 100. Limited depth of penetration of GPR signal due to reinforced concrete.

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APPENDIX 1
FIGURES AND EXAMPLE OF THE GPR DATA ACROSS GPR ANOMALIES A AND F

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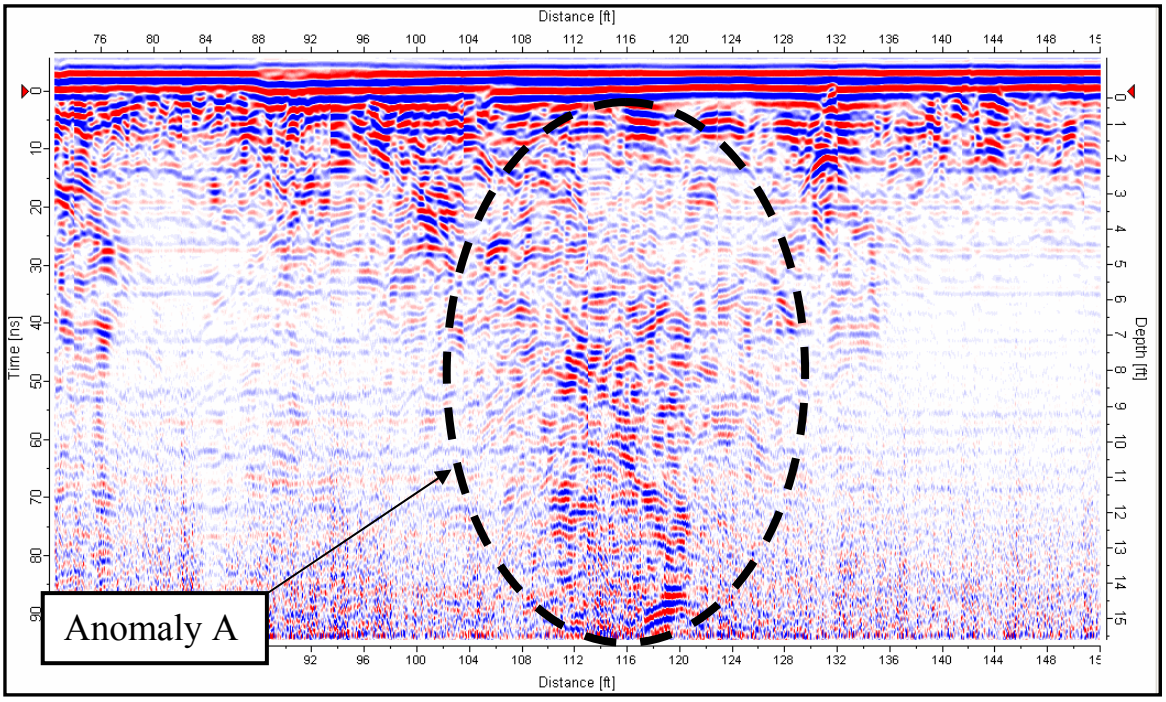
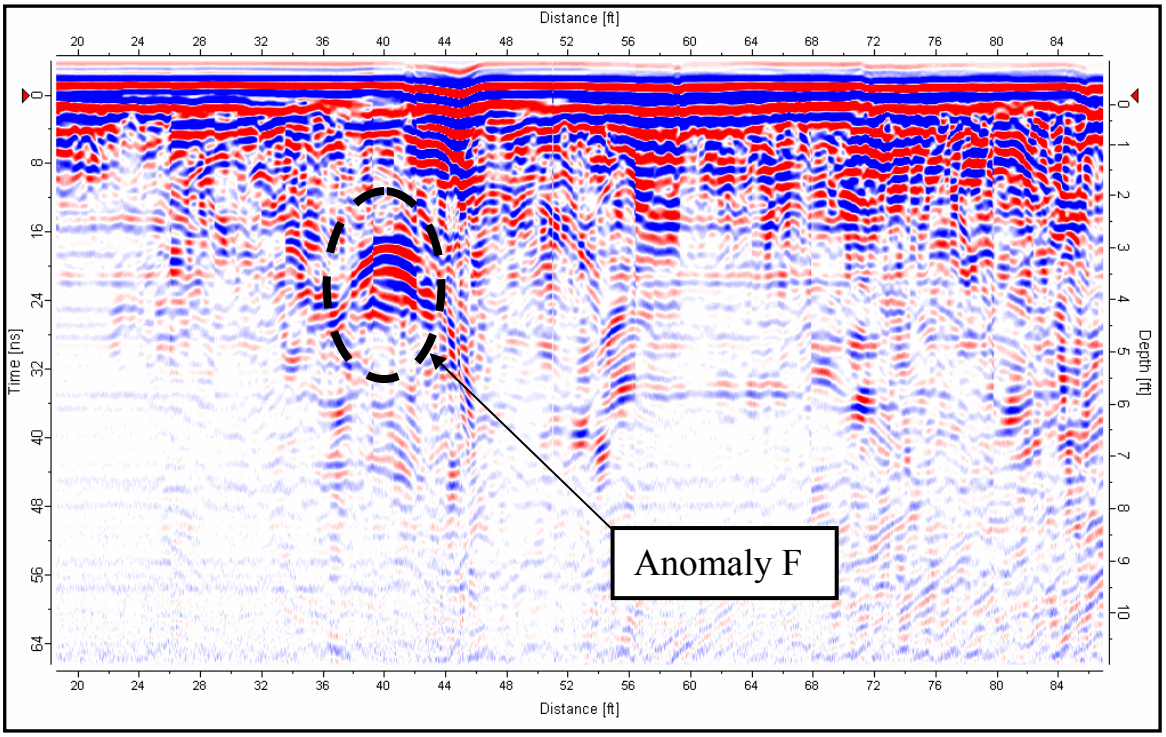


GPR Data Transect 10 across GPR Anomaly A



GPR Data Transect 103 across GPR Anomaly F

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BUILDING 140

BUILDING 100

CONCRETE STEPS

REPORTED APPROXIMATE LOCATION OF FORMER DRAIN (DRYH-A)

REPORTED APPROXIMATE LOCATION OF FORMER DRAIN (DRH-A)

FENCE

METAL COVER

WATER DRAINAGE VAULTS (TYP.)

ELECTRIC LINE AND BOLLARDS

METAL PLATE

CONCRETE RAMP

REINFORCED CONCRETE

LOADING DOCK

CONCRETE BARRIER

CONCRETE RAMP

STEEL FRAME OF CANOPY

REINFORCED CONCRETE

SCRAP METAL

GAS LINE

FENCE

REINFORCED CONCRETE CURB

FENCE

UTILITY CORRIDOR

JERSEY BARRIER AND METAL RACK

GAURD HOUSE

GAS VALVE

DUMPSTER

REPORTED LOCATION OF FORMER DRAIN (DRH-B)

FENCE POST

POWER POLE WITH GUY WIRES

REINFORCED CONCRETE (REPORTED LOCATION OF LPH-A)

POSSIBLE LOCATIONS OF FORMER LEACH POOL (LPH-B)

POSSIBLE FORMER DRYWELL (DRY-B)

STEEL FRAME OF CANOPY

REINFORCED CONCRETE CURBS

REINFORCED CURBS

REINFORCED CURBS

FLAG POLE

FENCE

UTILITY

CUT IN ASPHALT

REINFORCED CONCRETE CURBS

GARAGE DOORS AND BOLLARDS

FENCE

EM-61 ANOMALY POSSIBLY ASSOCIATED WITH FORMER 1-STORY BUILDING

GAURD HOUSE

PIPE

BOLLARDS

LIGHT POST

FENCE GAURD RAIL

STEEL PIPE

INSTRUMENT RESPONSE ASSOCIATED WITH BURIED OR SURFACE METAL

100 90 80 70 60 50 45 38 34 30 26 23 19 16 13 10 7 5 3 0 -12

VARIABLE CONTOUR INTERVAL

SQUARE ROOT OF EM-61 RESPONSE IN MILLI-VOLTS

NORTH

SCALE (IN FEET)

0 25 50

EXPLANATION

- 20 — CONTOUR OF EM RESPONSE (IN MILLI-VOLTS)
- 1 — EM DATA STATION
- A — EM-61 ANOMALY INDICATING AN AREA OF POSSIBLE BURIED METALLIC DEBRIS (WITH DESIGNATION)
- GPR ANOMALY INDICATING AN AREA OF POSSIBLE BURIED DEBRIS (WITH DESIGNATION)
- MH/D/CO — MANHOLE/DRAIN/CLEAN OUT
- EM-61 ANOMALY INDICATING A POSSIBLE BURIED METALLIC UTILITY

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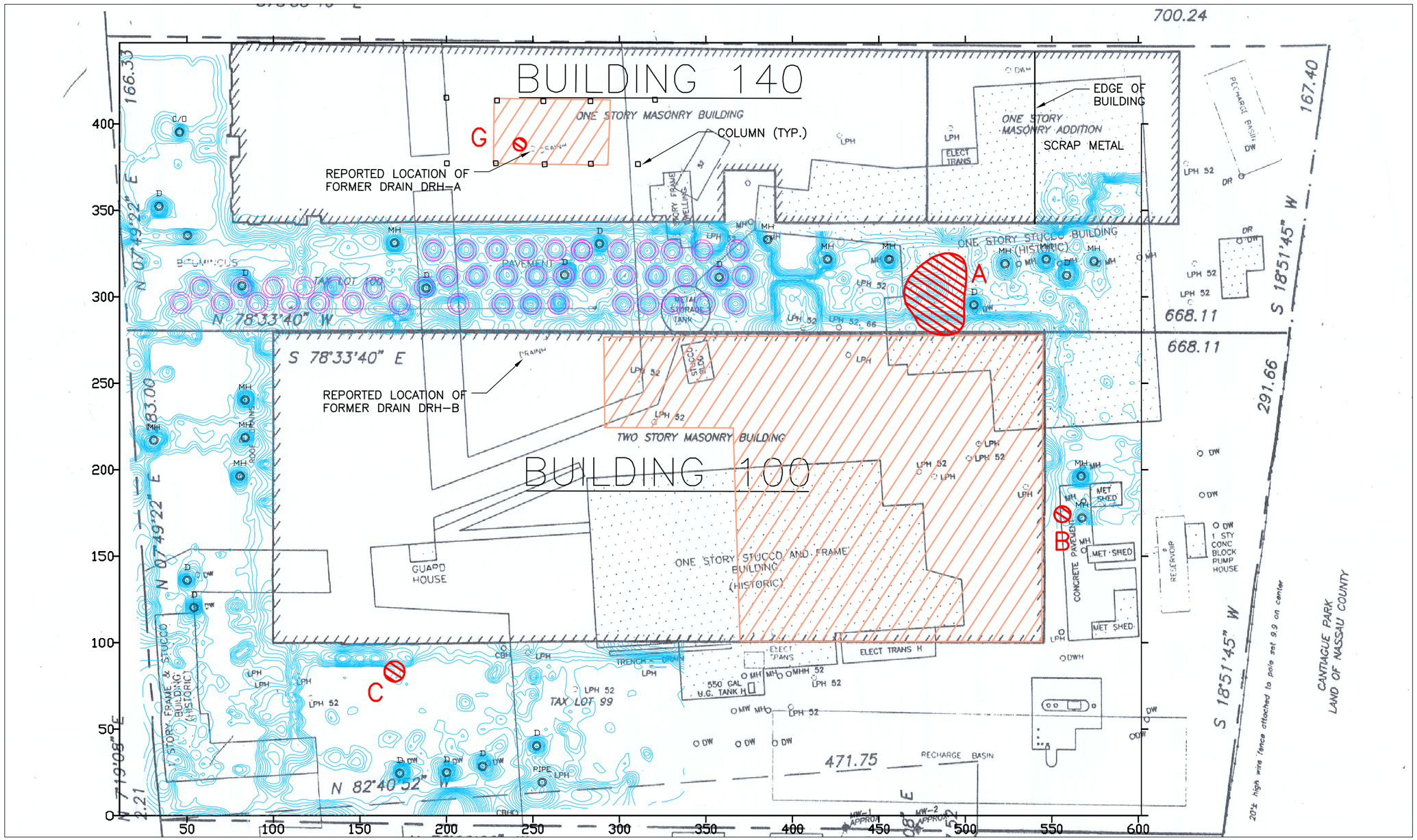
FIGURE 1

CONTOUR MAP OF EM-61 RESPONSE BUILDINGS 100 AND 140

SYLVANIA CORNING FUSRAP SITE
CANTIAGUE ROCK ROAD
HICKSVILLE, NEW YORK

ECOLOGY AND ENVIRONMENT, INC.
LANCASTER, NEW YORK

PROJECT: 3376
DATE: 11/15/06



LEGEND

- CONTOUR OF EM-61 RESPONSE
- MH/D — LOCATION OF MANHOLE OR DRAIN
- APPROXIMATE LOCATION OF INTERIOR GPR SURVEY
- LOCATION OF SUSPECTED DRAINAGE STRUCTURE INSTALLED DURING PREVIOUS EXCAVATION ACTIVITIES
- A — APPROXIMATE LOCATION OF GPR ANOMALY WITH DESIGNATION

Geo View

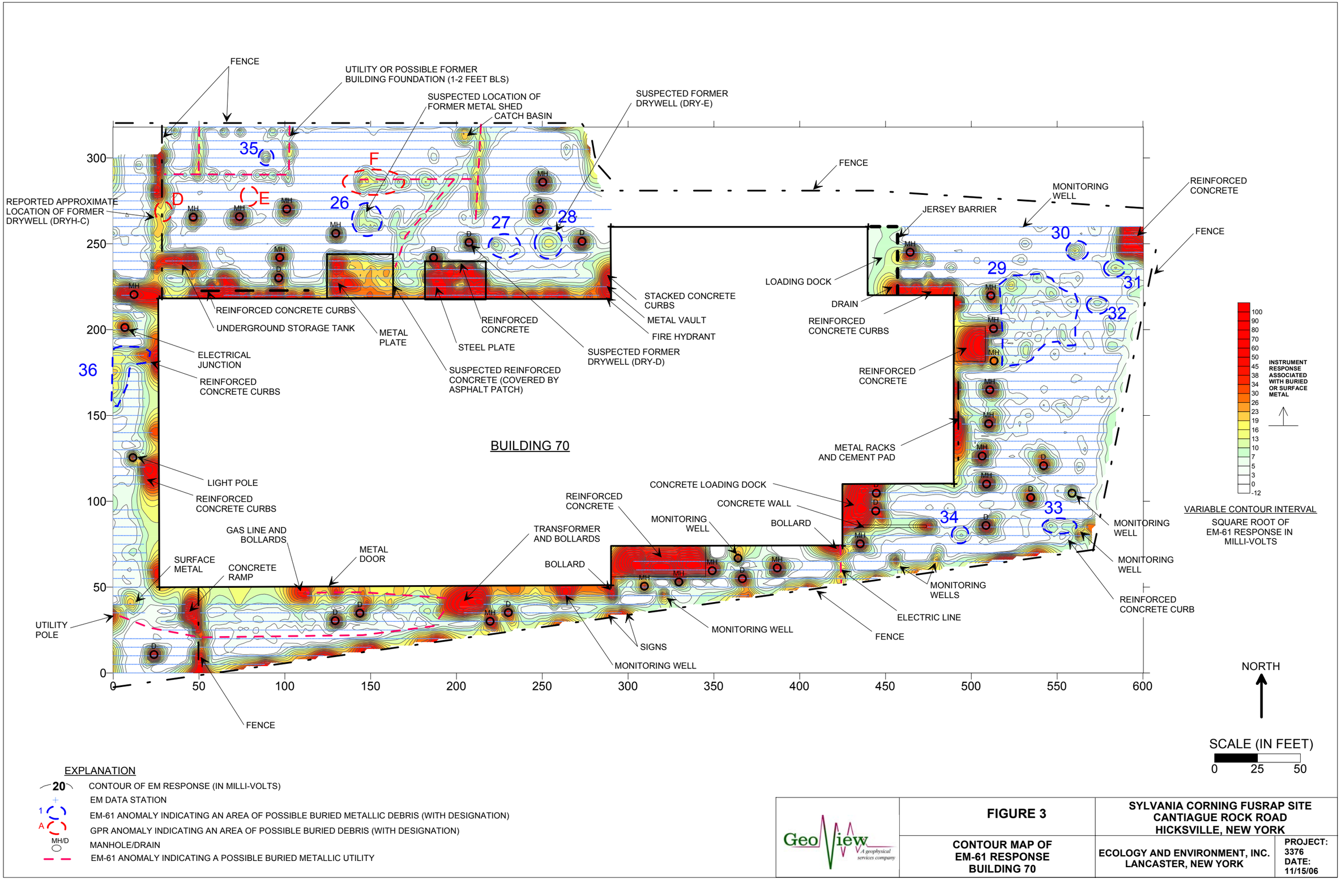
FIGURE 2
SITE MAP SHOWING
RESULTS OF EM-61
AND GPR SURVEY
BUILDINGS 100 AND 140

SYLVANIA CORNING FUSRAP SITE
CANTIAGUE ROCK ROAD
HICKSVILLE, NEW YORK

PROJECT: 3376

ECOLOGY AND ENVIRONMENT, INC.
LANCASTER, NEW YORK

DATE: 11/15/06



EXPLANATION

- 20 — CONTOUR OF EM RESPONSE (IN MILLI-VOLTS)
- EM DATA STATION
- 1 — EM-61 ANOMALY INDICATING AN AREA OF POSSIBLE BURIED METALLIC DEBRIS (WITH DESIGNATION)
- A — GPR ANOMALY INDICATING AN AREA OF POSSIBLE BURIED DEBRIS (WITH DESIGNATION)
- MH/D — MANHOLE/DRAIN
- EM-61 ANOMALY INDICATING A POSSIBLE BURIED METALLIC UTILITY

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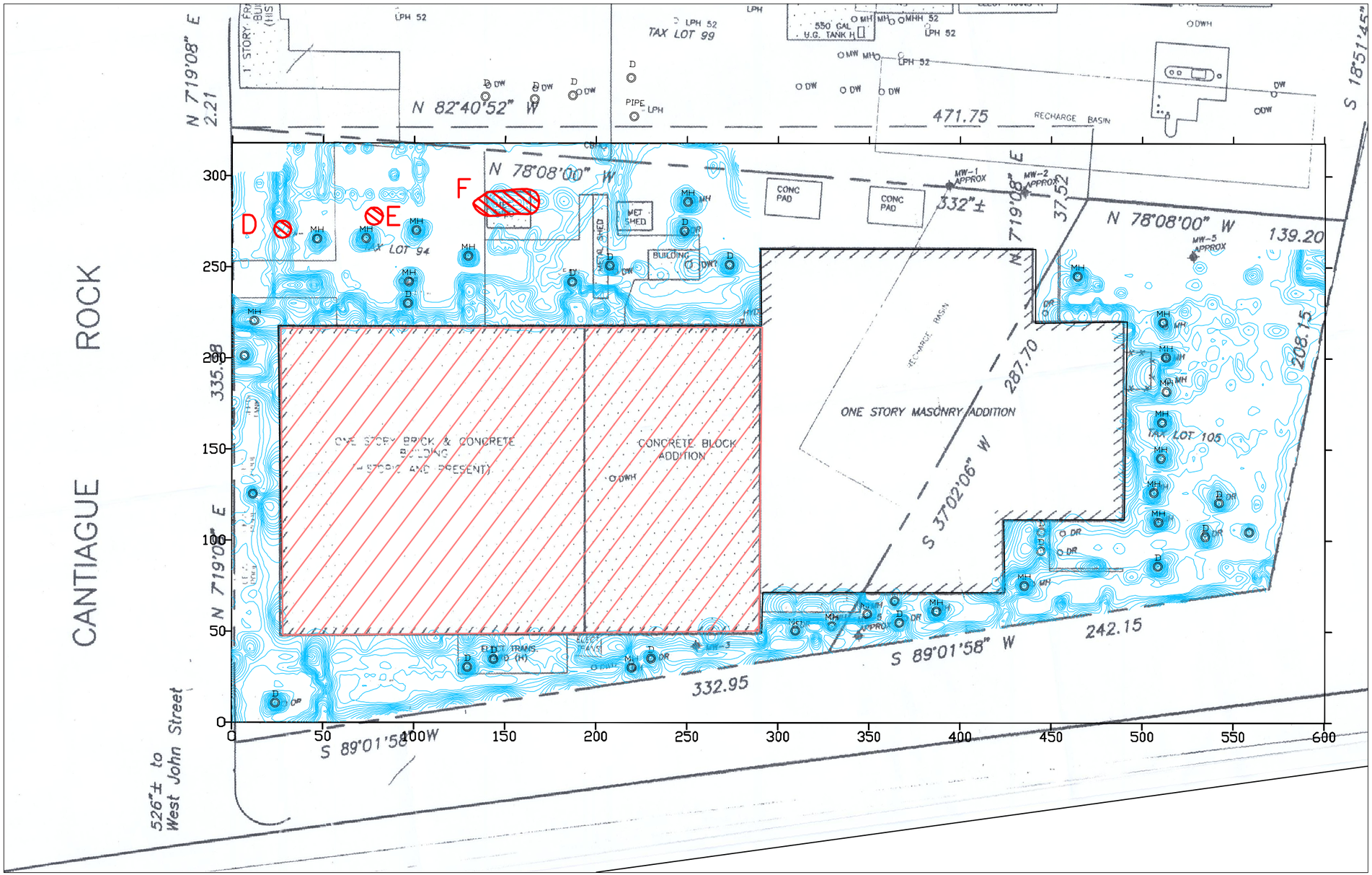
FIGURE 3

CONTOUR MAP OF EM-61 RESPONSE BUILDING 70

SYLVANIA CORNING FUSRAP SITE
CANTIAGUE ROCK ROAD
HICKSVILLE, NEW YORK

ECOLOGY AND ENVIRONMENT, INC.
LANCASTER, NEW YORK

PROJECT: 3376
DATE: 11/15/06



LEGEND

- CONTOUR OF EM-61 RESPONSE
- MH — LOCATION OF MANHOLE
- D — LOCATION OF DRAIN
- LOCATION OF INTERIOR GPR SURVEY
- A — APPROXIMATE LOCATION OF GPR ANOMALY

0 60'

SCALE: 1"=60' APPROX.

Geo View

FIGURE 4
SITE MAP SHOWING
EM-61 AND GPR RESULTS
OF GEOPHYSICAL SURVEY
BUILDING 70

SYLVANIA CORNING FUSRAP SITE
CANTIAGUE ROCK ROAD
HICKSVILLE, NEW YORK

PROJECT: 3376

ECOLOGY AND ENVIRONMENT, INC.
LANCASTER, NEW YORK

DATE: 11/15/06

APPENDIX 2
DESCRIPTION OF GEOPHYSICAL METHODS, SURVEY METHODOLOGIES AND LIMITATIONS

A2.1 On Site Measurements

The measurements that were collected and used to create the site map were made using a fiberglass measuring tape. The degree of accuracy of such an approach is typically +/-5% for lengths and +/-2.5 degrees for angles.

A2.2 Time Domain Electromagnetics

The TDEM (EM-61) method evaluates the magnitude of an induced (secondary) electromagnetic (EM) field caused by a primary EM field after that primary field is suddenly shut off.

During a TDEM (EM-61) sounding, an electrical current is caused to flow in a horizontal transmitter coil located near the ground. The current is maintained until a static magnetic field is established. The current in that coil is then rapidly terminated. This produces a strong electromotive force that induces eddy (secondary) currents in the ground. The eddy currents are caused by the presence of subsurface conductors. With increasing time, the strength of the eddy currents diminishes. The eddy currents, when they are still present induce a voltage in the receiver coil that is proportional to eddy current strength. The eddy current strength also depends on the amount of metal in the subsurface. The more metal present, the longer the eddy currents persist. Field measurement consists of reading the output voltage from the receiver coil registered at a particular time after field shut-off. If no metal is present near the coil, then there are no eddy currents at a late time and the reading is near zero. If metal is present near the coil, then the eddy currents persist for a longer time, and the reading is some positive number. By sensing only the response from the buried metal, the method is capable of detecting targets in highly conductive environments. For TDEM surveys the Geonics Ltd. Model EM-61 metal detection (EM-61) system is used. The EM-61 instrument response is recorded on field-portable computerized data logger (Polycorder Digital Data Recorder) for subsequent data processing and contouring.

The EM-61 survey is performed along predetermined transect lines. The transect lines are typically uni-directional and oriented parallel to the long axis of the site. The spacing between transects ranges from 2 to 5 ft, depending upon the desired size of the target to be identified. Approach is typically +/-5% for both lengths and angles in degrees.

A2.3 Ground Penetrating Radar

Ground Penetrating Radar (GPR) consists of a set of integrated electronic components that transmits high frequency (200 to 1500 megahertz [MHz]) electromagnetic waves into the ground and records the energy reflected back to the ground surface. The GPR system consists of an antenna, which serves as both a transmitter and receiver, and a profiling recorder that both processes the incoming signal and provides a graphic display of the data. The GPR data can be reviewed as both printed hard copy output or recorded on the profiling recorder's hard drive for later review. GeoView uses a Mala GPR system.

A GPR survey provides a graphic cross-sectional view of subsurface conditions. This cross-sectional view is created from the reflections of repetitive short-duration electromagnetic (EM) waves that are generated as the antenna is pulled across the ground surface. The reflections occur at the subsurface contacts between materials with differing electrical properties. The electrical property contrast that causes the reflections is the dielectric permittivity that is directly related to conductivity of a material. The GPR method is commonly used to identify such targets as underground utilities, underground storage tanks or drums, buried debris, voids, rebar or geological features.

The greater the electrical contrast between the surrounding materials (earth or concrete) and target of interest, the greater the amplitude of the reflected return signal. Unless the buried object is metal, only part of the signal energy will be reflected back to the antenna with the remaining portion of the signal continuing to propagate downward to be reflected by deeper features. If there is little or no electrical contrast between the target interest and surrounding earth materials it will be very difficult if not impossible to identify the object using GPR.

A GPR survey is conducted along survey lines (transects) which are measured paths along which the GPR antenna is moved. Electronic marks are placed in the data by the operator at designated points along the GPR transects. These marks allow for a correlation between the GPR data and the position of the GPR antenna on the ground.

For buried debris surveys, the GPR survey is conducted along a set of perpendicularly orientated transects. The survey is conducted in two directions. This is because the most definitive GPR signal response indicating the presence of a buried object is obtained when the GPR antenna is passed perpendicular to the long axis of the buried object.

Depth estimates to the top of the debris is determined by dividing the time of travel of the GPR signal from the land surface to the top of the GPR signal

reflection associated with the debris by the velocity of the GPR signal. The velocity of the GPR signal is usually obtained from published tables of the GPR signal traveling through unsaturated soils (4 to 6 nano-seconds per foot two-way travel time). The accuracy of GPR-derived depths typically ranges from 20 to 40 percent of the total depth.

The analysis and collection of GPR data is both a technical and interpretative skill. The technical aspects of the work are learned from both training and experience. Interpretative skills for debris studies are developed by having the opportunity to compare GPR data collected in numerous settings to the results from confirmatory studies performed at the same locations.

The ability of GPR to collect interpretable information at a project site is limited by the attenuation (absorption) of the GPR signal within subsurface soil materials. Once the GPR signal has been attenuated at a particular depth, information regarding deeper features will not be obtained. GeoView can make no warranties or representations of geological conditions that may be present beyond the depth of investigation or resolving capability of the GPR equipment or in areas that were not accessible to the geophysical investigation.

GeoView can make no warranties or representations of the conditions that may be present beyond the depth of investigation or resolving capability of the TDEM or GPR equipment or in areas that were not accessible to the geophysical investigation.

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Radiation Surveys Inside Building 70

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Sylvania Corning FUSRAP Site – Phase I RI

Radiation Surveys Inside Building 70

This technical memorandum addresses the results of the radiation surveys performed inside Building 70.

1.0 SURVEY METHODOLOGY

1.1 Overview

Radiation surveys inside Building 70 were performed September 11 through 15, 2006. Surveys included verification measurements at locations with elevated radiation levels identified during a radiological characterization survey performed in 2003 and as new surveys in the rear warehouse (not previously surveyed) and within building drains and other floor penetrations in Building 70.

All surveys were performed in accordance with safety procedures as outlined in the September 2006 *Site Safety and Health Plan – Remedial Investigation Phase I for the Sylvania Corning FUSRAP Site*. Surveys included surface scans and static measurements for alpha, beta, and gamma radiation at specific locations and direct gamma measurements within accessible drains. Radiation dose rates were also measured throughout the building.

1.2 Equipment

Equipment used to perform radiological surveys included the following:

- Ludlum Model- 2360 portable ratemeter/scaler with Ludlum Model 43-93 alpha/beta scintillation detector
- Ludlum Model 14C portable ratemeter with Ludlum Model 44-9 geiger-mueller (GM) detector.
- Bicron MicroRem dose ratemeter.
- Ludlum Model 2221 ratemeter/scaler with a Model 44-10-5, 2-inch by 2-inch sodium iodide (NaI) scintillation detector.

1.3 Quality Control Measures

Quality control (QC) measurements for field instrumentation included initial response to a radioactive source and daily operability checks. All instruments were calibrated within the last twelve months by the instrument vendor, a certified calibration laboratory, using sources traceable to the National Institute of Standards and Technology (NIST). Calibration certificates for each instrument are provided in Attachment 1. Prior to commencing any surveys, ten initial readings were collected on each detector using technicium-99 (^{99}Tc), thorium-230 (^{230}Th), and cesium-137 (^{137}Cs) sources to establish control charts for each unit to determine daily

operability. The bases for the daily operability of these instruments are ± 20% of the average for the initial ten measurements for the 44-9 and 44-10-5 probes and ±3-sigma of the average for the initial ten measurements for the 43-93. These data are included in Attachment 1.

All field instruments satisfactorily passed the daily QC checks, with one exception. During post-job review of the instrument QC data, it was observed that the Ludlum 2360/43-93 combination was found to be outside of ±3-sigma on 9/14/06. The field technician inadvertently applied a 'qualitative' ±20% criterion to the daily QC data for this instrument, which showed a passing result. However, when applying the more stringent ±2 and ±3 sigma criteria used for quantitative field instruments, the daily alpha source check failed. If the technician had known that the count failed, the count would have been repeated in accordance with CABRERA procedures. Further inspection of the data by the CABRERA project Health Physicist shows that this particular count was 13 counts per minute (cpm) above the +3-sigma control line, corresponding to a 3.2 sigma result. Since this value does not appear to represent a severe instrument deficiency or malfunction, it was determined that the survey data performed on 9/14/06 does not need to be disqualified.

1.4 Acceptable Levels of Surface Contamination

Table 1 provides acceptable surface contamination limits for various radionuclides as applied to surface contamination measurements. The most conservative values (transuranics) were used because the predominant radiological contaminants of potential concern are thorium and uranium. The alpha removable contamination limit is 20 disintegrations per minute per 100 square centimeters (dpm/100cm^2), while the maximum and average contamination limit is 300 and 100 dpm/100cm^2, respectively. The beta-gamma removable contamination limit is 1,000 dpm/100cm^2.

It should be noted that surveys of the drains within Building 70 were not compared with the surface contamination levels in Table 1. Since the drain surveys were performed for gamma radiation, technicians were advised to be cognizant of readings that exceeded twice the observed background levels in unaffected areas within Building 70.

Table 1: Acceptable Levels of Surface Contamination

Radionuclide[a]	Acceptable Surface Contamination Levels (DPM/100 cm^2)		
	Removable[b, e]	Average[b, c]	Maximum[b, d]
Transuranics, ^{226}Ra, ^{227}Ra, ^{230}Th, ^{228}Th, ^{231}Pa, ^{221}Ac, ^{125}I, ^{129}I	20	100	300
Th-Natural, ^{232}Th, ^{90}Sr, ^{223}Ra, ^{224}Ra, ^{232}U, ^{126}I, ^{131}I, ^{133}I	200	1,000	3,000
U-Natural, ^{235}U, ^{238}U, and associated decay products	1,000 α	5,000 α	15,000 α
Beta-Gamma emitters (radionuclides with decay modes other than alpha emission or spontaneous fission) except ^{90}Sr and others noted above.	1,000 β γ	5,000 β γ	15,000 β γ

Taken from Table 6-4 of USACE Radiation Protection Manual EM-385-1-80.

a Where surface contamination by both alpha- and beta-gamma emitting nuclides exists, the limits established for alpha- and beta-gamma emitting nuclides should apply independently.
b As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.
c Measurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each object.
d The maximum contamination level applies to an area not more than 100 cm^2.
e The amount of removable radioactive material per 100 cm^2 of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionately and the entire surface should be wiped.

2.0 RESULTS

The results of all contamination surveys are provided in Attachment 2. All surveys were labeled using the same grid system for Building 70 developed and used during the previous scoping efforts in 2003. For reference, a map of the scoping survey results performed in 2003 is provided as Figure 1. The grids are referenced by the building support beams located throughout all of the survey areas, e.g., F6, E9, etc. Multiple points within a given grid node are sequentially numbered.

Results of the verification measurements are summarized on Figure 2. The locations of all of the previously identified surface contamination areas were reconfirmed with either the alpha/beta scintillation detector or the gamma scintillation detector. Only beta and gamma radiation were measured, which confirmed the original survey findings that the contamination is contained underneath surface coatings or within the expansion joints of the concrete floors. At the F3

location, although readings were elevated, the spot identified originally is believed to be underneath a new divider wall installed since the original survey.

The results of the drain and penetration gamma surveys are illustrated in Attachment 2, Figure 3. All measurements were consistent with ambient background levels. The walkover gamma radiation survey around the perimeter of the eastern warehouse and over the footprint of the former recharge basin yielded background radiation levels. All radiation dose rates, measured at a height of approximately 1 meter above the ground, were at background levels.

Attachment 1

INSTRUMENT QC INFORMATION AND CALIBRATION CERTIFICATES

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CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 5)

Counting Instrument:	L 2360			Detector:	43-93		Calibration Date:	6/25/2006										
Serial #:	202398			Serial #:	PR211706		12 month calibration:	OK										
Detector Active Area or Area Covered by Smear (cm^2):					100		NRC 6 Mo Cal. Due Date?	OK										

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA ($DPM/100cm^2$)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.1079	Th-230	1905-04	41,200	3/30/2004	7.54E+04	41,199	100	1	1	1.60	1.71	5438.2	62.38
Beta	0.1203	Tc-99	1904-04	45,200	3/30/2004	2.13E+05	45,200	1000	1	1	93.10	9.02	4444.0	114.18

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
9/11/2006	1	87	5495	4493	1.0	87.0	5494.0	4406.0	PASS	PASS	PASS	PASS	70.95	386	Yes	Yes	JJW	JJW
9/12/2006	0	90	5341	4576	0.0	90.0	5341.0	4486.0	PASS	PASS	PASS	PASS	27.81	392	Yes	Yes	JJW	JJW
9/13/2006	3	87	5559	4871	3.0	87.0	5556.0	4784.0	PASS	PASS	PASS	*QUESTION*	102.52	386	No	Yes	JJW	JJW
9/14/2006	0	87	5640	4749	0.0	87.0	5640.0	4662.0	PASS	PASS	**FAIL**	PASS	27.81	386	Yes	Yes	DEA	DEA
9/15/2006	0	96	5358	4748	0.0	96.0	5358.0	4652.0	PASS	PASS	PASS	PASS	27.81	404	Yes	Yes	DEA	DEA

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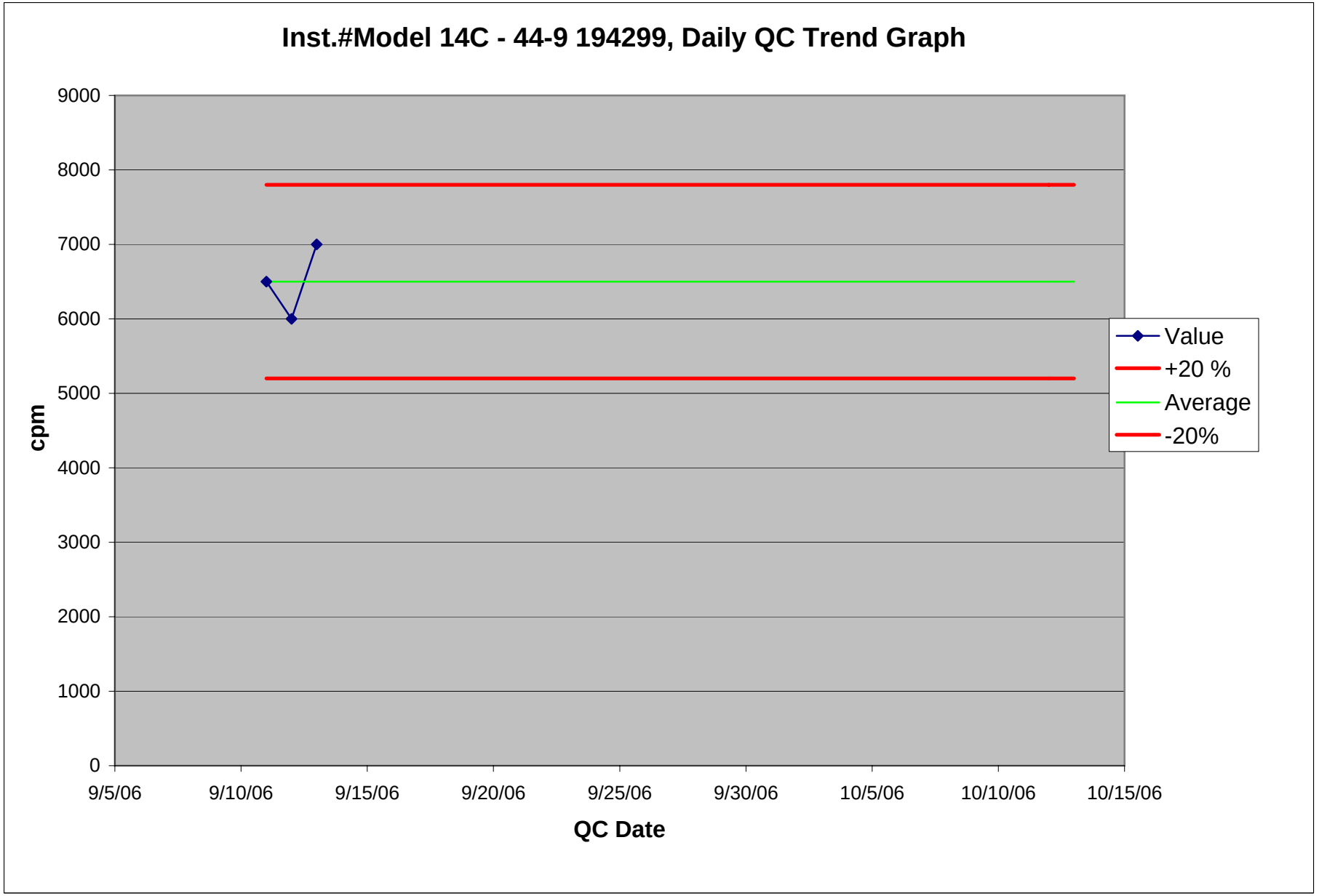
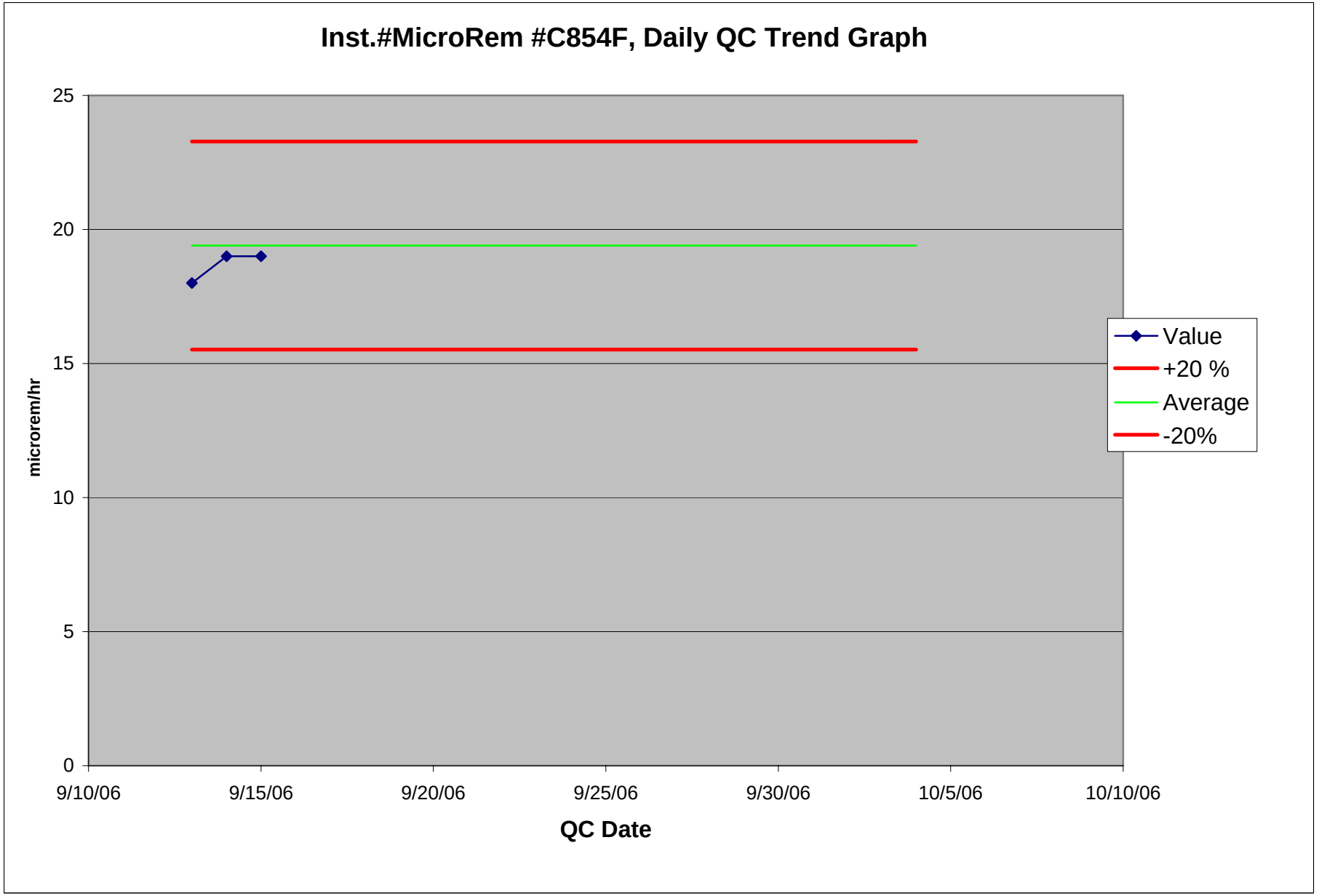
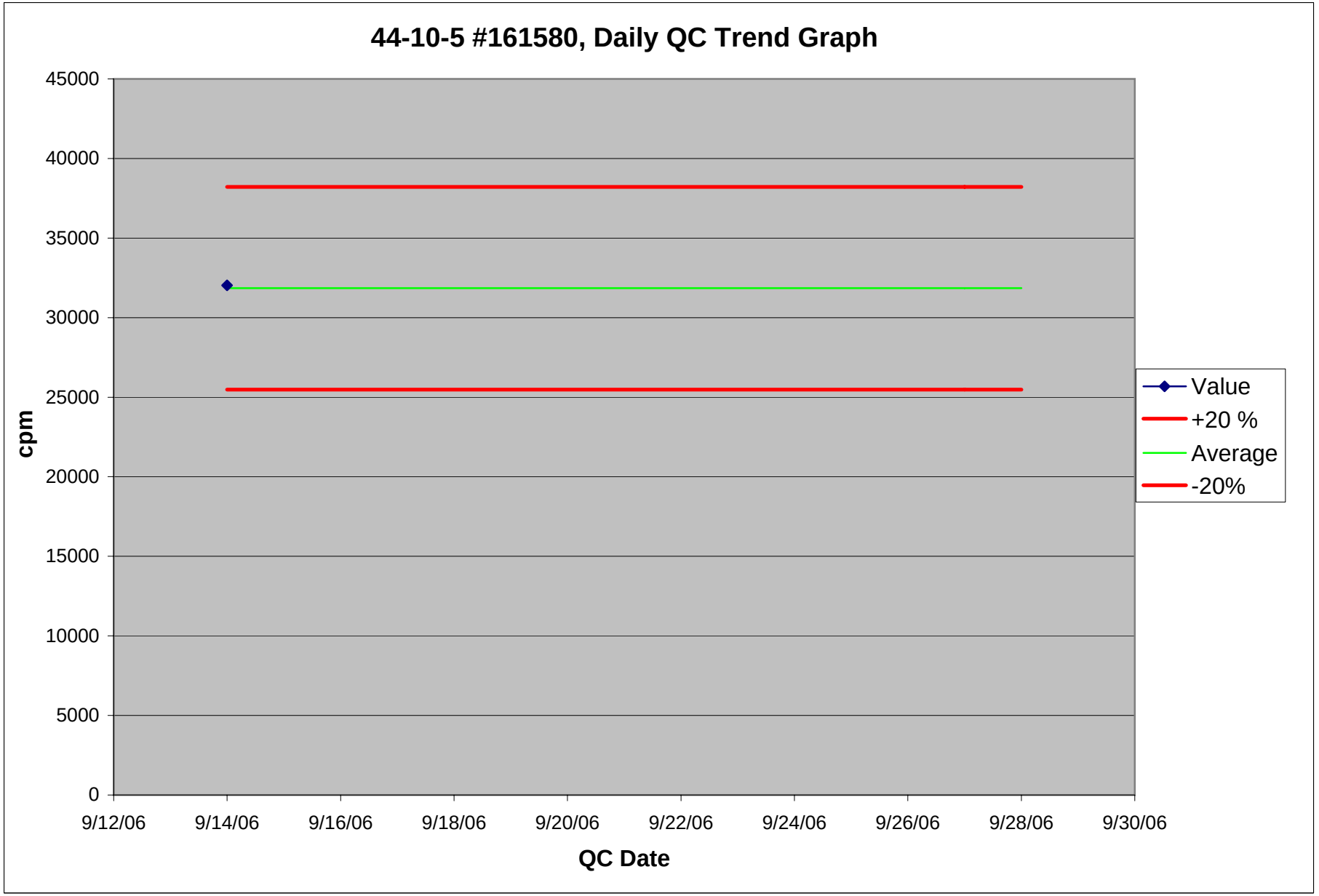

Inst.#Model 14C - 44-9 194299, Daily QC Trend Graph
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
cpm
9/5/06
9/10/06
9/15/06
9/20/06
9/25/06
9/30/06
10/5/06
10/10/06
10/15/06
QC Date
Value
+20 %
Average
-20%


Inst.#MicroRem #C854F, Daily QC Trend Graph
25
20
15
10
5
0
microrem/hr
9/10/06
9/15/06
9/20/06
9/25/06
9/30/06
10/5/06
10/10/06
QC Date
Value
+20 %
Average
-20%


44-10-5 #161580, Daily QC Trend Graph
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
cpm
9/12/06
9/14/06
9/16/06
9/18/06
9/20/06
9/22/06
9/24/06
9/26/06
9/28/06
9/30/06
QC Date
Value
+20 %
Average
-20%

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Calibration Technology
A Division of RSCS, Inc.

Calibration Certificate
ID Number: C854F5134-0

Customer: Hank Siegrist
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument
Bicron Model MicroRem

Serial Number
C854F

Precision Check				
Test 1	Test 2	Test 3	Mean	Results
4.00 mrem/hr	**4.00 mrem/hr**	**4.00 mrem/hr**	**4.00 mrem/hr**	**Satisfactory**

Accuracy Check			
Range	Target Value	As Found	As Left
X1000	160 mrem/hr	160 mrem/hr	160 mrem/hr
X1000	40 mrem/hr	40 mrem/hr	40 mrem/hr
X100	16 mrem/hr	13.5 mrem/hr	16 mrem/hr
X100	4 mrem/hr	3.5 mrem/hr	4 mrem/hr
X10	1.6 mrem/hr	1.6 mrem/hr	1.6 mrem/hr
X10	0.4 mrem/hr	0.4 mrem/hr	0.4 mrem/hr
X1	160 µrem/hr	160 µrem/hr	160 µrem/hr
X1	40 µrem/hr	40 µrem/hr #	40 µrem/hr #
X0.1	16 µrem/hr	17.5 µrem/hr #	16 µrem/hr #
X0.1	4 µrem/hr	5 µrem/hr # *	4 µrem/hr #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges where pulser was used.

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500 SN: 134720	08/16/2006

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Calibrated by: _____ QA Review: _____

Calibration Date: 05/25/2006
Expires: 05/25/2007

Atmospheric Conditions - Temperature: 72°F Humidity: 42% Barometric Pressure: 29.63"hg
This calibration was performed by RSCS Inc. using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4. This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

Designer and Manufacturer of Scientific and Industrial Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CERTIFICATE OF CALIBRATION

CUSTOMER CABRERA SERVICES ORDER NO. 246337/297322

M[illegible] Ludlum Measurements, Inc. Model 14C Serial No. 194299

M[illegible] Ludlum Measurements, Inc. Model 44-38 Serial No. PR 198885

Cal. Date 23-Nov-05 Cal Due Date 23-Nov-06 Cal. Interval 1 Year Meterface 202-241

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 77 °F RH 20 % Alt 697.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC
☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 900 V Input Sens. 34 mV Det. Oper. 900 V at 34 mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. _____ / _____ V Ref./Inst. _____ / _____ V

COMMENTS:
Instrument calibrated with 6' "c" cable.

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X 1000	1500 mR/hr	1.49	1.5
X 1000	500 mR/hr	0.5	0.55
X 100	150 mR/hr	1.5	1.5
X 100	50 mR/hr	0.5	0.5
X 10	15 mR/hr	1.5	1.5
X 10	5 mR/hr	0.5	0.5
X 1	1.5 mR/hr = 1740 cpm	1.5	1.5
X 1	1.0mR/hr	1.0	1.0
X 0.1	174 cpm	1.5	1.5
X 0.1	58 cpm	0.5	0.5

*Uncertainty within ± 10% C.F. within ± 20%

X 0.1 **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout			

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☑ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☑ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

m 500 S/N 94940 ☐ Oscilloscope S/N _____ ☑ Multimeter S/N 78401031

Calibrated By: _____ Date 23-NOV-05

Reviewed By: _____ Date 28 NOV 05

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed: _____

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CONVERSION CHART

Customer CABRERA SERVICES Date 23-Nov-05 Order #. 246337/297322

Model 14C Serial No. 194299 Detector Model 44-9 Serial No. PR 201558

Source Cs-137 194.6 mCi Cs-137 20 mCi High Voltage 900 V

Input Sensitivity 34 mV

Reference Point	"As Found" Readings (CPM): Meter Reading	Range/Scale	After Adjustment Readings (CPM): Meter Reading	Range/Scale
150 mR/hr	NA	NA	NA	NA
50 mR/hr	1.55 K	X100	1.55 K	X100
15 mR/hr	0.55 K	X100	0.55 K	X100
5 mR/hr	1.65 K	X10	1.65 K	X10
1.5 mR/hr	0.5 K	X10	0.5 K	X10
1.0 mR/hr	0.35 K	X10	0.35 K	X10

Signature: S Cecil S Thomas Date 23-NOV-05

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER CABRERA SERVICES ORDER NO. 257191/303228

Mfr Ludlum Measurements, Inc. Model 2360 Serial No. 202398

Mfg. Ludlum Measurements, Inc. Model 43-93 Serial No. PR 211706

Cal. Date 25-Jun-06 Cal Due Date 25-Jun-07 Cal. Interval 1 Year Meterface 202-855

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 76 °F RH 42 % Alt 700.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

nstrument Volt Set 725 V

☑ HV Readout (2 points) Ref./Inst. 500 / 503 V Ref./Inst. 1500 / 1510 V

Firmware Version: 39010m25
Alpha Threshold: 120 mV
Beta Threshold: 3.5 mV
Beta Window: 30 mV
Overload SET TO SIMULATE LIGHT LEAK
Instrument calibrated with a 5' cable.
High voltage set with detector CONNECTED

(EEPROM Settings)
User Time: 1.0
Alpha Alarm: 50000
Beta Alarm: 50000
A/B Alarm: 50000
Model 2360 Date: 6/25/~~07~~06
Calibration Date Due: 6/25/07

COMMENTS:
Efficiency Formula:
Source Count - Bkgrd=? /source size (dpm)=? x100 = %
4 pi efficiencies for Th230, Tc99, Sr90Y90, and Ni63 are as follows:
Th230≈20%,Tc99≈16%,Sr90Y90≈25%,Ni63≈0.06%

* SEE PLATEAU SHEETS FOR ALL

Gam libration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
x1000	400kcpm	400	400
x1000	100kcpm	100	100
x100	40kcpm	400	400
x100	10kcpm	100	100
x10	4kcpm	400	400
x10	1kcpm	100	100
x1	400kcpm	400	400
x1	100kcpm	100	100

*Uncertainty within ± 10% C.F. within ± 20% ALL Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400kcpm	39993(0)	39993(0)	Log Scale			
	40kcpm	3995	3995				
	4kcpm	400	400				
	400cpm	40	40				
	40cpm	4	4				

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ S-394 ☐ 1122 ☐ 781
Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☑ Alpha S/N Th230/E121495 ☑ Beta S/N Tc99/NI-EV,Sr90Y90/4016,Ni63/4017 ☐ Other

☐ 500 S/N 189496 ☐ Oscilloscope S/N ☑ Multimeter S/N 83750186

Calibrated By: Michael Jones Date 25 June 06

Reviewed By: [signature] Date 26 June 06

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed:

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 43-93 Serial No. PR 211706 Order #. 257191/303228

Customer CABRERA SERVICES Alpha Input Sensitivity 120 mV

Counter 2360 Serial No. 202398 Beta Input Sensitivity 3.5 mV

Count Time 1Minute Beta Window 30 mV

Other _____ Distance Source to Detector Surface

High Voltage	Background		Isotope Th 230 Size ≈ 19800 dpm		Isotope _____ Size _____		Isotope _____ Size _____	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
700	1	124	3918	505				
725	1	213	4047	568				
750	0	554	4132	1153				

☐ Gas Proportional detector count rate decreased ≤ 10% after 15 hour static test using 39" cable.

☐ Gas proportional detector count rate decreased ≤ 10% after 5 hour static test using 39" cable and alpha/beta counter.

Signature Michael Torres Date 25 June 06

FORM C4B 04/09/2003

Calibration Certificate
ID Number: 1615806817-0

Calibration Technology
A Division of RSCS, Inc.

Customer: Hank Siegrist
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument	Serial Number
Ludlum Model 2221	161580

Probe Model	Serial Number
Ludlum 44-10-5	182508

Precision Check

Test 1	Test 2	Test 3	Mean	Results
399.00 cpm	**400.00 cpm**	**399.00 cpm**	**399.33 cpm**	**Satisfactory**

Accuracy Check

Range	Target Value	As Found	As Left
X1000	400 Kcpm	400 Kcpm #	400 Kcpm #
X1000	100 Kcpm	100 Kcpm #	100 Kcpm #
X100	40 Kcpm	40 Kcpm #	40 Kcpm #
X100	10 Kcpm	10 Kcpm #	10 Kcpm #
X10	4 Kcpm	3.997 Kcpm #	3.997 Kcpm #
X10	1 Kcpm	0.998 Kcpm #	0.998 Kcpm #
X1	400 cpm	399 cpm #	399 cpm #
X1	100 cpm	100 cpm #	100 cpm #

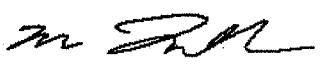
Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
44-10-5 182508	Cs-137	0.1040 C/D	Cs-137 (SN: 14290)	On Contact

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/03/2007

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**905 Volts**	**995 Volts**
Low Level Discriminator #1	**10.1 mV**	**2.5 mV**
Window	**Out**	**Out**

Calibrated by: 
QA Review: 

Date: 08/15/2006
Expires: 08/15/2007

Atmospheric Conditions - Temperature: 78° F Humidity: 40 % Barometric Pressure: 29.54 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

Attachment 2

FIGURES (SURVEY RESULTS)

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Areas with Elevated Measurements

Figure 3 - Locations of Elevated Readings Found During 2004 Scoping Surveys within Building 70

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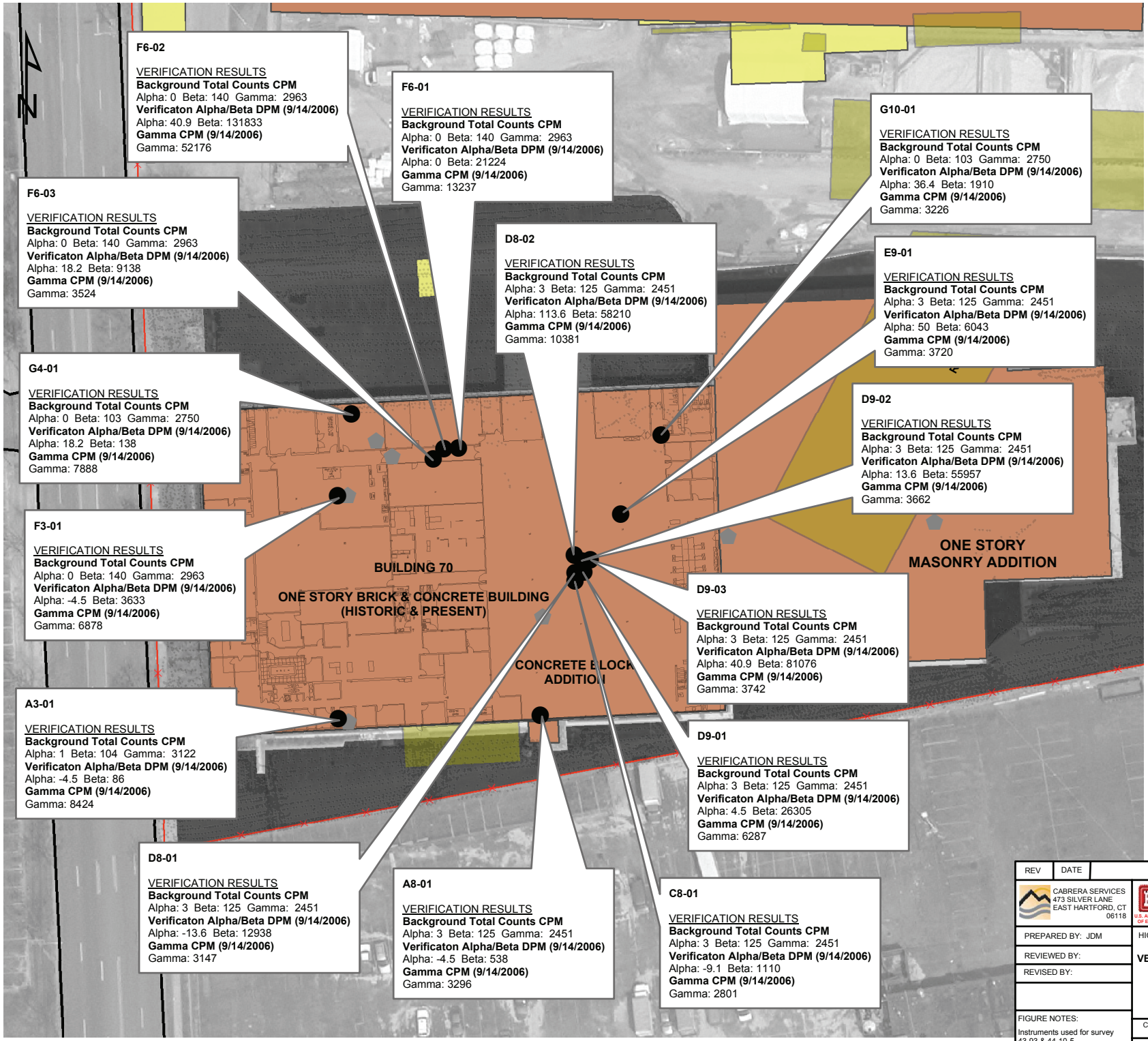


REV	DATE	DESCRIPTION	BY

CABRERA SERVICES
473 SILVER LANE
EAST HARTFORD, CT
06118

U.S. ARMY ENGINEER DISTRICT, BALTIMORE
CORPS OF ENGINEERS
KANSAS CITY, KANSAS

PREPARED BY: JDM
REVIEWED BY:
REVISED BY:

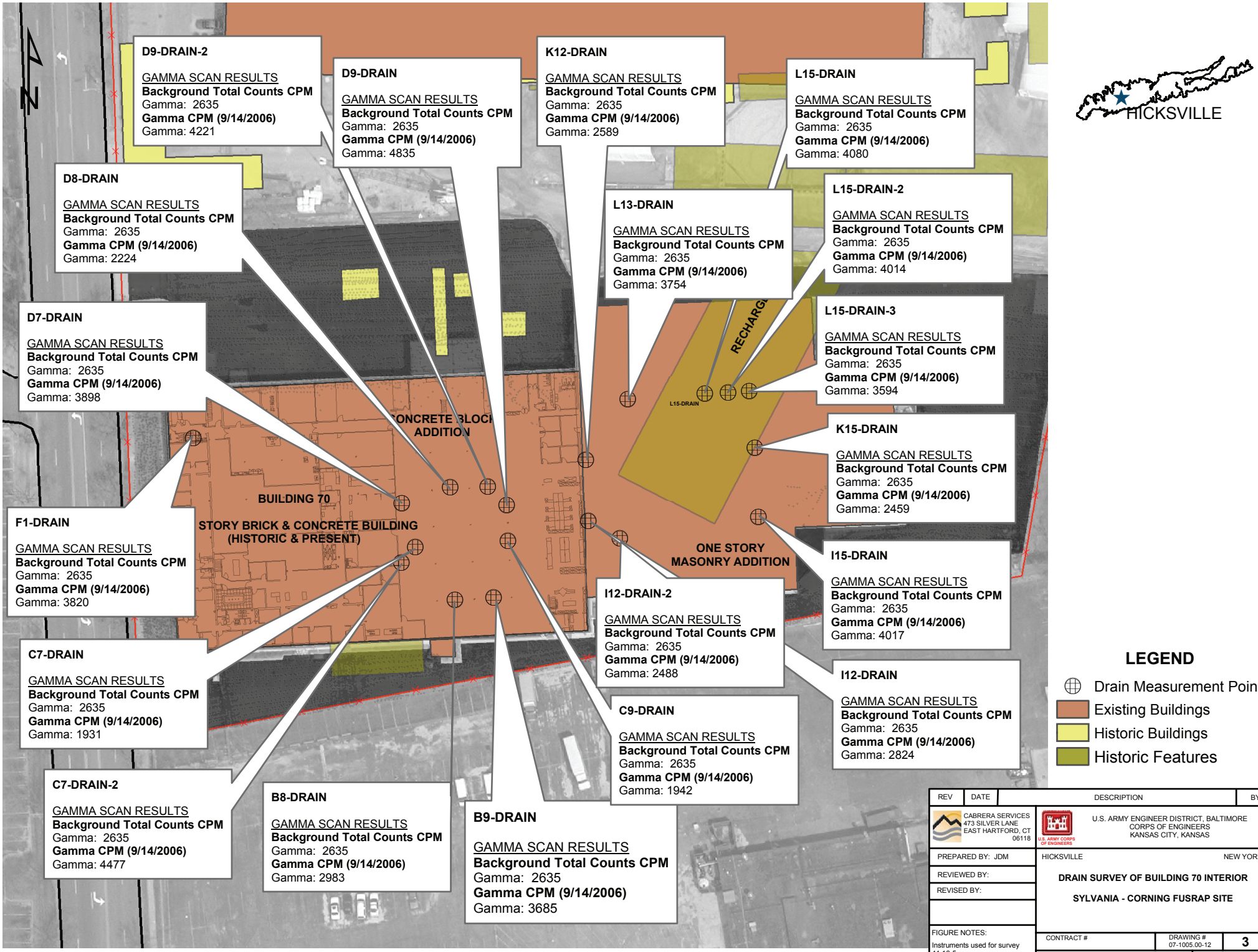
HICKSVILLE NEW YORK

VERIFICATION SURVEY OF BUILDING 70 INTERIOR

SYLVANIA - CORNING FUSRAP SITE

FIGURE NOTES:
Instruments used for survey
43-93 & 44-10-5

CONTRACT #
DRAWING # 07-1005.00-11
2
SCALE:
DATE: 10/03/2006


D9-DRAIN-2
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 4221
D9-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 4835
K12-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 2589
L15-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 4080
D8-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 2224
L13-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 3754
L15-DRAIN-2
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 4014
D7-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 3898
L15-DRAIN-3
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 3594
K15-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 2459
F1-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 3820
I15-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 4017
I12-DRAIN-2
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 2488
C7-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 1931
I12-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 2824
C9-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 1942
C7-DRAIN-2
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 4477
B8-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 2983
B9-DRAIN
GAMMA SCAN RESULTS
Background Total Counts CPM
Gamma: 2635
Gamma CPM (9/14/2006)
Gamma: 3685
BUILDING 70
STORY BRICK & CONCRETE BUILDING
(HISTORIC & PRESENT)
ONE STORY
MASONRY ADDITION
L15-DRAIN
RECHARGE
HICKSVILLE
LEGEND
Drain Measurement Point
Existing Buildings
Historic Buildings
Historic Features
REV
DATE
DESCRIPTION
BY
CABRERA SERVICES
473 SILVER LANE
EAST HARTFORD, CT
06118
U.S. ARMY ENGINEER DISTRICT, BALTIMORE
CORPS OF ENGINEERS
KANSAS CITY, KANSAS
PREPARED BY: JDM
REVIEWED BY:
REVISED BY:
HICKSVILLE
NEW YORK
DRAIN SURVEY OF BUILDING 70 INTERIOR
SYLVANIA - CORNING FUSRAP SITE
FIGURE NOTES:
Instruments used for survey
44-10-5
CONTRACT #
DRAWING #
07-1005.00-12
3
SCALE:
DATE: 10/03/2006

Walkover Gamma Radiation Survey for Exterior Areas of Building 70

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Sylvania Corning FUSRAP Site – Phase I RI

Walkover Gamma Radiation Survey

Building 70 Exterior Areas

This technical memorandum addresses the results of the Building 70 exterior walkover gamma radiation survey.

1.0 WALKOVER GAMMA RADIATION SURVEY

The Building 70 walkover gamma radiation survey (walkover survey) was performed to assess the potential for elevated radiological contaminants of potential concern for the Sylvania Corning FUSRAP Site, specifically isotopes of thorium and uranium. The survey was performed over 100% of reasonably accessible areas surrounding Building 70. A total of 6771 square meters (or 1.67 acres) were surveyed. Approximately 70% of the total area had an asphalt surface, while the remainder was grass. Several small concrete areas were also surveyed, but the overall area was very small.

1.1 Equipment

The walkover survey was performed using a Ludlum Model 2221 ratemeter connected to a 3-inch by 3-inch sodium iodide (NaI) gamma scintillation detector. NaI detectors are well suited for exterior surveys of uranium and thorium isotopes.

The ratemeter/detector combination was connected to a Trimble Pro XRS global positioning system (GPS) receiver and configured such that correlated gamma count rate and geospatial location were recorded once every second during the survey. The GPS was operated such that positional accuracy to 1 meter was maintained throughout the survey. The minimum detectable concentration (MDC) capabilities of the system are outlined in Attachment 1.

1.2 Quality Control Measures

Quality control (QC) measurements for field instrumentation included initial response to a radioactive source and daily operability checks. All instruments were calibrated within the last twelve months by the instrument vendor, a certified calibration laboratory, using sources traceable to the National Institute of Standards and Technology (NIST). Calibration certificates for each instrument are provided in Attachment 2. Prior to commencing the walkover survey, ten initial readings were collected on each detector using a cesium-137 (^{137}Cs) source to establish a control chart for each unit to determine daily operability. The basis for daily operability for instruments of this type is ± 20% of the average for the initial ten measurements. These data are included in Attachment 2.

The GPS system was configured using the North American Datum 1983 (NAD83), State Plane coordinate system for New York Long Island (3104) in units of meters. Operability of the GPS was determined by the available satellite coverage and associated position dilution of precision (PDOP) reported by the GPS handset. If the PDOP was observed to rise above 6, the surveyor immediately paused and waited for the PDOP to improve. PDOP increases are a direct result of line-of-sight interference between the GPS satellites and the receiver.

1.3 Survey Methodology

The walkover survey was performed in accordance with the CABRERA project procedure provided in Attachment 1. The ratemeter, detector, and GPS were all mounted on a converted walk behind a 'baby-jogger' platform. The GPS receiver was placed inside the seat of the baby jogger with the antenna protruding vertically directly over the detector. This method served to improve the quality of the walkover survey data by eliminating variations in detector height and position and reducing operator errors due to fatigue. The walkover survey was performed by walking straight parallel paths over the designated areas. Survey passes were approximately 1 meter apart (the distance between the rear wheels). The operator used orange traffic cones or other markers to help maintain consistent path spacing between passes. While walking the survey paths, the surveyors visually observed the GPS signal reception status. In the event of GPS signal loss, the surveyors paused until signal was regained.

Data from the ratemeter/scaler was automatically logged into the GPS until the desired survey area was completed.

1.4 Data Processing

All field GWS data was forward to the CABRERA project Health Physicist for review and evaluation. The data compiled during the Building 70 GWS was verified to be complete and usable without qualification. The reviewed survey data was then imported into a geographic information system (GIS) software program for post-processing and imaging. Post-processing of the data included calculation of descriptive statistics including mean, standard deviation, and z-scores. A z-score is the difference of the count rate in counts per minute (cpm) from each acquisition and the mean of the count population divided by the standard deviation of the population, as shown in Equation 1 below.

$$Z = \frac{(L_{cr}) - (M_{ds})}{(STDEV)} \qquad \text{(Eq 1)}$$

where: Z = Z-score

L_{cr} = Count rate, in gross cpm, of local acquisition

M_{ds} = Mean of the data set, in gross cpm

STDEV= Standard deviation of the dataset

Imaging of the prepared data displayed spatial coordinates (plotted on the X and Y axes) and Z-scores of the gamma readings (plotted on the Z axis). The software generated a spatially

interpolated contour map depicting calculated Z-scores of the composite dataset. Locations with Z-scores greater than 3 were investigated as candidates for additional sampling and characterization activities.

2.0 RESULTS

During the course of the walkover survey, a total of 28,003 data points were collected from three ratemeter detector combinations. Meter SN 176952 collected 15,317 data points, having an average of 14,753 cpm, a standard deviation of 2,598 cpm, and a maximum of 35,196 cpm. Meter SN 1183465 collected 3,860 data points, having an average of 16,040 cpm, a standard deviation of 1,561 cpm, and a maximum of 21,351 cpm. Detector SN 132861 collected 8,825 data points, having an average of 16,483 cpm, a standard deviation of 2,341 cpm, and a maximum of 29,259 cpm. The overall average was found to be 15,346 cpm with a standard deviation of 2,531 cpm. Z-scores of the complete dataset ranged from -2.46 to 6.39.

The graphical representation of the dataset is shown on the Z-score contour plot in Attachment 3. A majority of the area surrounding Building 70 was found to be below one z-score, suggesting that there is little variability in the radiological constituents over the survey area.

Four general areas were found to have Z-scores greater than 3, shown as orange on the contour plot. These areas are summarized in Table 1.

Table 1. Summary of Walkover Survey Area with Z-Score > 3

Location	Description
1	Grass area to the northwest of Building 70 near gate to Cantiague Rock Road
2	Northwest corner of parking lot near north entrance door
3	Grass area between west boundary of Building 70 and Cantiague Rock Road
4	Small grass area at the southwestern property boundary

None of the above areas are believed to be real sources of residual contamination from former Sylvania operations. The following points support this conclusion:

- The elevated Z-scores shown for Areas 2 and 3 are most likely being biased by contributions from the brick facing used on the outside of Building 70 and, possibly, the concrete walkway. The NaI detectors used to perform the walkover survey were not shielded or collimated to eliminate contributions from sources beyond what is found directly below the detector face. Biases of this type are relatively easy to characterize and eliminate once they are understood and accounted for. Follow-up surveys in Areas 2 and 3 with shielded NaI detectors could be performed during Phase II of the RI, with

results compared with the unshielded detector. Several soil samples are already planned for these areas as part of the Building 70 characterization.

- The Z-score plot shows gross gamma count rates for multiple surfaces (asphalt, concrete, and grass). Each of these surfaces has a representative natural background range associated with it. Combining multiple areas into a single dataset can sometimes draw attention to one of these areas as a potential residual contamination area. Areas 1 and 4 are both grassy areas within a larger asphalt data set having lower average count rates. The grassy areas had count rates only 5,000 cpm above the larger data set. If the walkover survey is performed in the future, reference area surveys will be performed on similar surfaces to obtain gamma signatures for each type of surface.

Attachment 1

GWS PROCEDURE AND SCAN MINIMUM DETECTABLE CONCENTRATION CALCULATIONS

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CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

Cabrera Services, Inc.

Gamma Walkover Survey
General Procedure

Sylvania-Corning FUSRAP Site
Proj.#: 07-1005.00

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Gamma Walkover Surveys

Purpose

The purpose of the GWS is to identify areas of elevated radioactivity. Surficial scans, where possible, are particularly effective at identifying spatial trends in surficial contamination and potential $DCGL_{emc}$ concerns. These types of surveys have been used with considerable success at other USACE FUSRAP sites with similar radiological contaminants of concern.

Equipment

Equipment required for performing the GWS survey includes the following:

- Trimble Pathfinder Pro - XRS (or equivalent)
- 2x2 or 3x3 NaI detector and associated rate-meter/scaler, equipped with RS-232 or USB download port;
- Hardware: IBM-compatible Pentium (minimum) personal computer, color printer, large capacity data storage device (e.g., CD-ROM), large format plotter, (note that some hardware may not be site-based).
- Software: Trimble Pathfinder Office, GIS software (ArcGIS or equivalent) with coordinate geometry capability.

Methods

The survey will be performed following MARSSIM protocol by walking straight parallel lines over an area while moving the detector in a serpentine motion, 0.05 to 0.10 m (2 to 4 in) above the ground surface. Survey passes will be approximately one meter apart. Data from the ratemeter/scaler will be automatically logged into the GPS unit once per second. After completion of the survey, the raw data will be downloaded from the GPS and sent to a data processing specialist for export into a geospatial software program. After completion of data processing, an electronic file with the contoured results of the survey will be returned to the FSM for evaluation.

The GWS data will then be forwarded to the CABRERA Technical Lead for evaluation after field data processing. Gamma walkover survey data will be delivered to E&E and USACE in graphical format (maps of count rate contours by easting and northing in US State Plane feet, New York Long Island, NAD83). This evaluation will determine if any GWS anomalies exist that warrant further investigation by collecting biased surface soil samples for laboratory radioanalysis. Anomalies identified will be reported to the CABRERA PM, or designee, for evaluation and concurrence. Anomaly locations will be forwarded to the field team, and will be physically marked for follow-up.

Before a detection system is utilized for surveys, it is necessary to perform an *a priori* calculation of the Scan Minimum Detectable Concentration (Scan MDC) for the system. The nominal Scan MDC for a Ludlum Model 44-20 3x3 NaI detector for U-238 has been calculated to be approximately 4 pCi/g.

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Estimation of Scan Minimum Detectable Concentrations (MDCs) for Gamma Walkover Surveys at the Sylvania-Corning FUSRAP Site

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1. Introduction

A MARSSIM based scoping survey plan was implemented by Cabrera Services, Inc. (CABRERA), under contract to Ecology & Environment (E&E) for properties in Hicksville, NY to determine whether they have been affected by the former operations conducted by Sylvania-Corning. The purpose of this document is to estimate gamma walkover scan sensitivities for the Radionuclides of Concern (ROCs), particularly Natural Uranium with Short-Lived Progeny and Uranium-235 (U-235). The specific objective is to estimate the scan sensitivity of a gamma walkover survey performed using a 3-in by 3-in sodium iodide (NaI) scintillation detector to measure ROCs at the Site. The method is first demonstrates for Cesium-137 (Cs-137), as this is the nuclide to which the NaI detectors are calibrated.

2. Estimation of Minimum Detectable Concentrations (MDC)

This document utilizes the methodology and approach documented in MARSSIM (Section 6.7.2.2, Table 6.7) for a 2-in x 2-in NaI scintillation detector. MARSSIM calculations for the 2-in x 2-in detectors are based on NRC NUREG-1507, *Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Conditions* (NRC 1997). MARSSIM Table 6.7 does not provide scan MDCs for 3-in x 3-in NaI detectors; thus scan MDCs are derived using MARSSIM/NUREG-1507 methods. Factors included in this analysis are the surveyor scan efficiency, index of sensitivity, the natural background of the surveyed area, scan rate, detector to source geometry, areal extent of the potential hot spot(s), and energy and yield of gamma emissions.

The computer code Microshield was used to model the presence of a normalized 1 pCi/g of Cs-137, total uranium and short-lived progeny, and U-235 in soil with the assumption that the activity was uniformly distributed to a depth of 15 cm and spread over a disk shaped area with a diameter of 56 cm. This is consistent with the NUREG-1507 methodology and provides for a count rate to exposure ration (CPM/μR/hr) to be calculated. As the Site consists of paved areas, the model includes attenuation and energy loss through asphalt. Activity concentrations must be entered into Microshield in units of $\mu Ci/cm^3$ with consideration to the density of soil at 1.6 g/cm^3. Therefore, activity concentrations for Cs-137, total uranium with short-lived progeny, and U-235 were entered into Microshield as 1.6E-6 $\mu Ci/cm^3$ with decay times sufficient to allow in-growth of progeny activities.

$$1\ pCi/g \times 1E\text{-}6\ \mu Ci/pCi \times 1.6\ g/cm^3 = 1.6E\text{-}6\ \mu Ci/cm^3$$

The Microshield exposure rate output is included as an attachment to this Appendix.

Two scenarios were considered for estimating the uranium scan MDC. Fully enriched uranium metal (i.e. 100% U-235) and natural uranium ore with short-lived progeny. When uranium is extracted from ore, it disrupts the equilibrium between the parent and

daughter nuclides. Because some of the daughter radionuclides in both the U-235 and U-238 decay chains have large half-lives (~10^4 yr), it takes several years for the equilibrium to be reestablished. For the case where equilibrium with short lived progeny, U-235 was assumed to be in equilibrium with only Th-231, and U-238 was assumed to be in equilibrium with Th-234, and Pa-234/234m. U-234, U-235, and U-238 are assumed to exist at natural activity fractions (i.e. 0.489, 0.022, and 0.489, respectively). Therefore, isotopic uranium activity concentrations of 7.83E-7 μCi/cm^3, 3.47E-8 μCi/cm^3, and 7.83E-7 μCi/cm^3, respectively, to represent 1 pCi/g of total uranium.

For the fully enriched case, U-235 was used at a concentration of 1.6E-6 μCi/cm^3 to represent a total activity of 1 pCi/g.

A set of tables are attached, based upon the NUREG-1507 methodology as applied toward a 3-in x 3-in NaI scintillation detector. Additional details and discussion describing the NUREG analysis methodology are described in that publication.

2.1. Fluence Rate to Exposure Rate (FRER)

The fluence rate to exposure rate (FRER) may be approximated by:

$$FRER \approx \frac{1\mu R/hr}{(E_\gamma)(\mu_{en}/\rho)_{air}}$$

Where:

E_γ	=	energy of the gamma photon of concern, keV
(μ_{en}/ρ)	=	the mass energy absorption coefficient for air, cm^2/g

This can be represented in tabular form, as in Table 1.

2.2. Probability of Interaction (P) Through Detector End for a Given Energy

The probability, P, of a gamma ray interaction in the NaI scintillation crystal entering through the end of the crystal is given by:

$$\Pr obability(P) = 1 - e^{-(\mu/\rho)_{NaI}(X)(\rho_{NaI})}$$

Where:

$(\mu/\rho)_{NaI}$	=	the mass attenuation coefficient for NaI
X	=	the thickness through the end of the 3-in x 3-in NaI crystal, 7.62 cm
(ρ_{NaI})	=	the density of the NaI crystal, 3.67 g/cm^3

This can be represented in tabular form, as in Table 2.

2.3. Relative Detector Response (RDR)

The Relative Detector Response (RDR) as a function of energy is determined by multiplying the relative fluence rate to exposure rate (FRER) by the probability (P) of an interaction and is given by:

$$RDR = (FRER)(P)$$

This can be represented in tabular form, as in Table 3.

2.4. Determination of CPM per μR/hr as a Function of Energy

The equivalent FRER, P, and finally RDR may be calculated for the NaI scintillation detector at the Cesium-137 (Cs-137) energy of 662 keV. Manufacturers of this equipment typically provide an instrument response in terms of CPM and μR/hr at the Cs-137 energy. This point allows one to determine the CPM per μR/hr and ultimately activity concentration and minimum detection sensitivity level in terms of pCi/g for a specific instrument.

Based on a manufacturer's 3-in x 3-in NaI response specification (Ludlum 44-20) of 2,700 CPM/μR/hr, and using the same methodology as shown in the tables above, the FRER, P, and RDR are calculated. The mass energy absorption coefficient for air and the mass attenuation coefficient for NaI are interpolated from tables in the Radiological Health Handbook, Revised Edition January 1970, pages 139, and 140.

FRER	$Energy_{\gamma}$, keV	$(\mu_{en}/\rho)_{air}$, cm^2/g
0.0514	662	0.0294

$(\mu_{en}/\rho)_{NaI}$, cm^2/g
0.0780

P
0.89

And Cs-137 RDR (662 keV) = 0.0456

The detector response (CPM) to another energy is based upon the ratio of the RDR at a specific energy to the known CS-137 energy RDR:

$$CPM/\mu R/hr, E_i = \frac{(CPM/\mu R/hr_{Cs-137})(RDR_{E_i})}{(RDR_{Cs-137})}$$

This can be represented in tabular form, as in Table 4.

2.5. Minimum Detectable Count Rate

The minimum detectable count rate (MDCR) is calculated using the NUREG-1507 methodology where:

The average number of background counts in a one second interval, b_i = CPM/60

And for the Ludlum generic count rate to exposure rate ratio value of 2,700 CPMμR/hr and 10μR/hr measured background gives:

$$B_i = (10\mu R/hr)(2{,}700\ CPM/\mu R/hr)/(60) = 450\ counts$$

The background exposure rate of 10 μR/hr is used as a conservative estimate for the property. Background exposure rates vary but are typically less than 10 μR/hr.

The MDCR is therefore calculated as:

$$MDCR = (d')(b_i)^{0.5}(60sec/1min)$$

Where d' is from Table 6.1 of NUREG-1507 and represents the rate of detections at 95% and a false positive rate of 60%, and b_i is the background counts, giving:

$$MDCR = (1.38)(450)^{0.5}(60) = 1{,}756\ CPM$$

The MDCR for the surveyor is given as:

$$MDCR_{surveyor} = MDCR / (P)^{0.5}$$

Where P is the surveyor efficiency equal to 0.5 to 0.75 as given by NUREG-1507. 0.5 was chosen as a conservative estimate and

$$MDCR_{surveyor} = 1{,}756 / (0.5)^{0.5} = 2{,}483\ CPM$$

The count rate to exposure ratio for each of the Uranium with short-lived progeny and the U-235 gamma emissions and their contributions to the total exposure rate may be computed using the output of the Microshield runs and the count rate to exposure rate ratios from Table 4.

2.6. Estimate of Cs-137 Scan MDC

The Microshield runs are summarized in Table 5 for Cs-137. The minimum detectable exposure rate from Cs-137 is obtained from the $MDCR_{surveyor}$ divided by the Table 5 weighted count rate to exposure rate value of 3,003 CPM/μR/hr for a 1 pCi/g normalized concentration.

2,483 CPM / 3,003 CPM /μR/hr = 0.83 μR/hr

The scan MDC is then equal to the ratio of the Minimum Detectable Exposure Rate in the field to the exposure rate determined for the normalized 1 pCi/g concentration of Cs-137.

$$ScanMDC = \frac{(Normalized\_Cs_{conc})(ExposureRate_{surveyor})}{(ExposureRate_{normalized\_Cs\_conc})}$$

Scan MDC = (1 pCi/g)(0.83 μR/hr)/(0.131 μR/hr) = **6.34 pCi/g**

2.7. Estimate of Uranium with Short-lived Progeny Scan MDC

The Microshield runs are summarized in Table 6 for uranium with short-lived progeny. The minimum detectable exposure rate from uranium with short-lived progeny is obtained from the $MDCR_{surveyor}$ divided by the Table 6 weighted count rate to exposure rate value of 2,533 CPM/μR/hr for a 1 pCi/g normalized concentration.

2,483 CPM / 2,533 CPM /μR/hr = 0.98 μR/hr

The scan MDC is then equal to the ratio of the Minimum Detectable Exposure Rate in the field to the exposure rate determined for the normalized 1 pCi/g concentration for uranium and short-lived progeny.

$$ScanMDC = \frac{(Normalized\_U_{conc})(ExposureRate_{surveyor})}{(ExposureRate_{normalized\_U\_conc})}$$

Scan MDC = (1 pCi/g)(0.98 μR/hr)/(0.238 μR/hr) = **4.12 pCi/g**

2.8. Estimate of U-235 Scan MDC

The Microshield runs are summarized in Table 7 for uranium with short-lived progeny. The minimum detectable exposure rate from U-235 is obtained from the $MDCR_{surveyor}$ divided by the Table 7 weighted count rate to exposure rate value of 11,950 CPM/μR/hr for a 1 pCi/g normalized concentration.

2,483 CPM / 11,950 CPM /μR/hr = 0.208 μR/hr

The scan MDC is then equal to the ratio of the Minimum Detectable Exposure Rate in the field to the exposure rate determined for the normalized 1 pCi/g concentration for U-235.

$$ScanMDC = \frac{(Normalized\_U_{conc})(ExposureRate_{surveyor})}{(ExposureRate_{normalized\_U\_conc})}$$

Scan MDC = (1 pCi/g)(0.208 μR/hr)/(0.0224 μR/hr) = **9.28 pCi/g**

3. Summary

Using the NUREG-1507 methodology, the calculated scan MDCs for the 3-in x 3-in NaI scintillation detector employed for this radiological survey are as follows:

Radionuclide	Scan MDC (pCi/g)
Cs-137	6.34
Uranium with Short-lived Progeny	4.12
U-235	9.28

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Table 1

Fluence Rate to Exposure Rate

Gamma Energy (keV)	Mass Attenuation Coefficient - Air (cm^2/g)	FRER
40	0.0640	0.3906
50	0.0384	0.5208
60	0.0292	0.5708
80	0.0236	0.5297
100	0.0231	0.4329
150	0.0251	0.2656
200	0.0268	0.1866
300	0.0288	0.1157
400	0.0296	0.0845
500	0.0297	0.0673
600	0.0296	0.0563
800	0.0289	0.0433
1000	0.0280	0.0357
1500	0.0255	0.0261
2000	0.0234	0.0214
3000	0.0205	0.0163

Table 2

Probability (P) of Interaction Through Detector End

Gamma Energy (keV)	Mass Attenuation Coefficient - NaI (cm^2/g)	P
40	19.3000	1.00
50	10.7000	1.00
60	6.6200	1.00
80	3.1200	1.00
100	1.7200	1.00
150	0.6250	1.00
200	0.3340	1.00
300	0.1670	0.99
400	0.1170	0.96
500	0.0955	0.93
600	0.0826	0.90
800	0.0676	0.85
1000	0.0586	0.81
1500	0.0469	0.73
2000	0.0413	0.68
3000	0.0366	0.64

Table 3

Relative Detector Response (RDR)

Gamma Energy (keV)	FRER	P	RDR
40	0.3906	1.00	0.3906
50	0.5208	1.00	0.5208
60	0.5708	1.00	0.5708
80	0.5297	1.00	0.5297
100	0.4329	1.00	0.4329
150	0.2656	1.00	0.2656
200	0.1866	1.00	0.1866
300	0.1157	0.99	0.1147
400	0.0845	0.96	0.0813
500	0.0673	0.93	0.0627
600	0.0563	0.90	0.0507
800	0.0433	0.85	0.0367
1000	0.0357	0.81	0.0288
1500	0.0261	0.73	0.0191
2000	0.0214	0.68	0.0146
3000	0.0163	0.64	0.0104

Table 4

3-in x 3-in NaI Detector Response vs. Energy

Gamma Energy (keV)	RDR	CPM per microR/hr
40	0.3906	23129
50	0.5208	30839
60	0.5708	33796
80	0.5297	31362
100	0.4329	25632
150	0.2656	15727
200	0.1866	11046
300	0.1147	6789
400	0.0813	4811
500	0.0627	3711
600	0.0507	3003
800	0.0367	2174
1000	0.0288	1704
1500	0.0191	1131
2000	0.0146	867
3000	0.0104	617

Table 5

Weighted CPM per microR/hr vs. Energy for Cs-137

15 cm x 56 cm cylinder under asphalt

Gamma Energy (keV)	Microshield Exposure Rate for 1pCi/g (microR/hr w/buildup)	CPM per microR/hr Table C-4	CPM per microR/hr (weighted)
40	3.17E-08	23129	5.601E-03
50	0.00E+00	30839	0.000E+00
60	0.00E+00	33796	0.000E+00
80	0.00E+00	31362	0.000E+00
100	0.00E+00	25632	0.000E+00
150	0.00E+00	15727	0.000E+00
200	0.00E+00	11046	0.000E+00
300	0.00E+00	6789	0.000E+00
400	0.00E+00	4811	0.000E+00
500	0.00E+00	3711	0.000E+00
600	1.31E-01	3003	3.003E+03
800	0.00E+00	2174	0.000E+00
1000	0.00E+00	1704	0.000E+00
1500	0.00E+00	1131	0.000E+00
2000	0.00E+00	867	0.000E+00
3000	0.00E+00	617	0.000E+00
TOTAL	**1.31E-01**		**3.003E+03**

Table 6

Weighted CPM per microR/hr vs. Energy for Uranium + Short-Lived Progeny

15 cm x 56 cm cylinder under asphalt

Gamma Energy (keV)	Microshield Exposure Rate for 1pCi/g (microR/hr w/buildup)	CPM per microR/hr Table C-4	CPM per microR/hr (weighted)
40	2.06E-09	23129	1.998E-04
50	5.92E-08	30839	7.662E-03
60	1.27E-05	33796	1.797E+00
80	8.99E-05	31362	1.184E+01
100	1.69E-03	25632	1.816E+02
150	2.60E-03	15727	1.720E+02
200	3.63E-03	11046	1.682E+02
300	2.21E-03	6789	6.295E+01
400	2.72E-03	4811	5.502E+01
500	5.22E-03	3711	8.139E+01
600	2.75E-02	3003	3.468E+02
800	8.09E-02	2174	7.383E+02
1000	7.86E-02	1704	5.626E+02
1500	2.73E-02	1131	1.295E+02
2000	5.71E-03	867	2.079E+01
3000	0.00E+00	617	0.000E+00
TOTAL	**2.38E-01**		**2.533E+03**

Table 7

Weighted CPM per microR/hr vs. Energy for U-235

15 cm x 56 cm cylinder under asphalt

Gamma Energy (keV)	Microshield Exposure Rate for 1pCi/g (microR/hr w/buildup)	CPM per microR/hr Table C-4	CPM per microR/hr (weighted)
40	1.63E-09	23129	1.682E-03
50	7.29E-08	30839	1.004E-01
60	1.38E-07	33796	2.077E-01
80	6.97E-05	31362	9.766E+01
100	5.09E-04	25632	5.831E+02
150	2.62E-03	15727	1.840E+03
200	1.90E-02	11046	9.383E+03
300	7.83E-05	6789	2.374E+01
400	8.08E-05	4811	1.737E+01
500	1.04E-05	3711	1.728E+00
600	0.00E+00	3003	0.000E+00
800	2.14E-06	2174	2.075E-01
1000	0.00E+00	1704	0.000E+00
1500	0.00E+00	1131	0.000E+00
2000	0.00E+00	867	0.000E+00
3000	0.00E+00	617	0.000E+00
TOTAL	**2.24E-02**		**1.195E+04**

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Attachment 2

INSTRUMENT QC INFORMATION AND CALIBRATION CERTIFICATES

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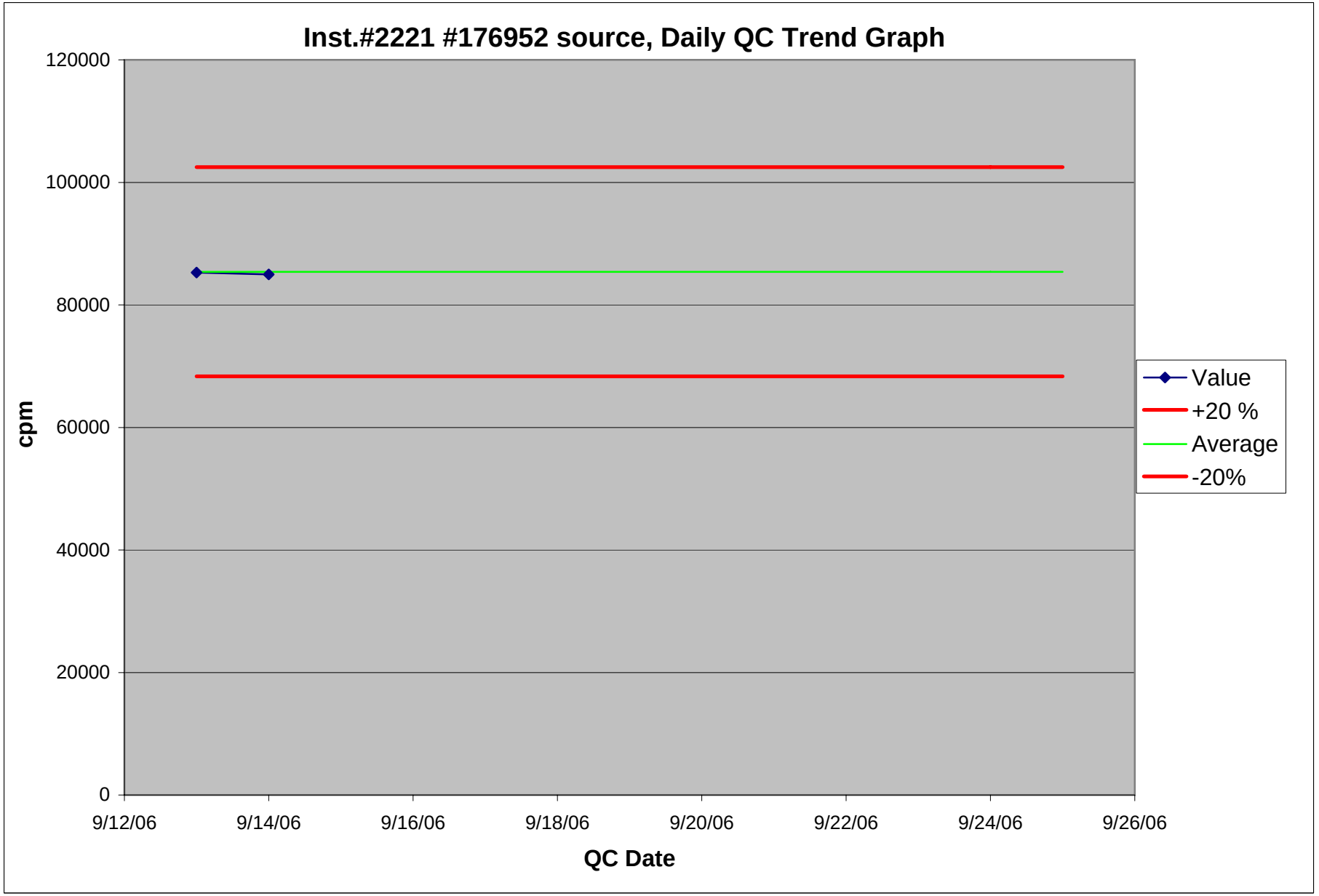
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Average
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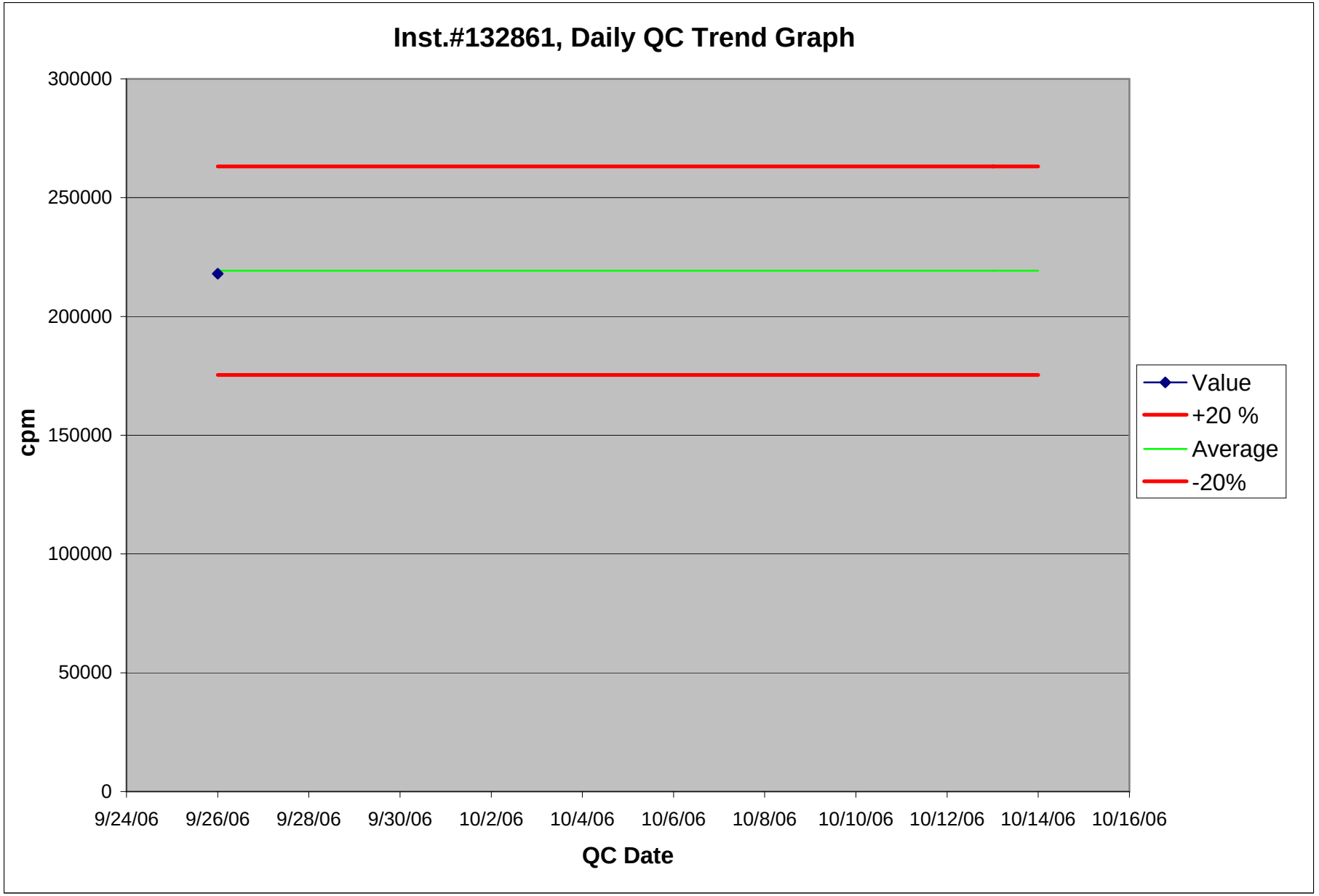
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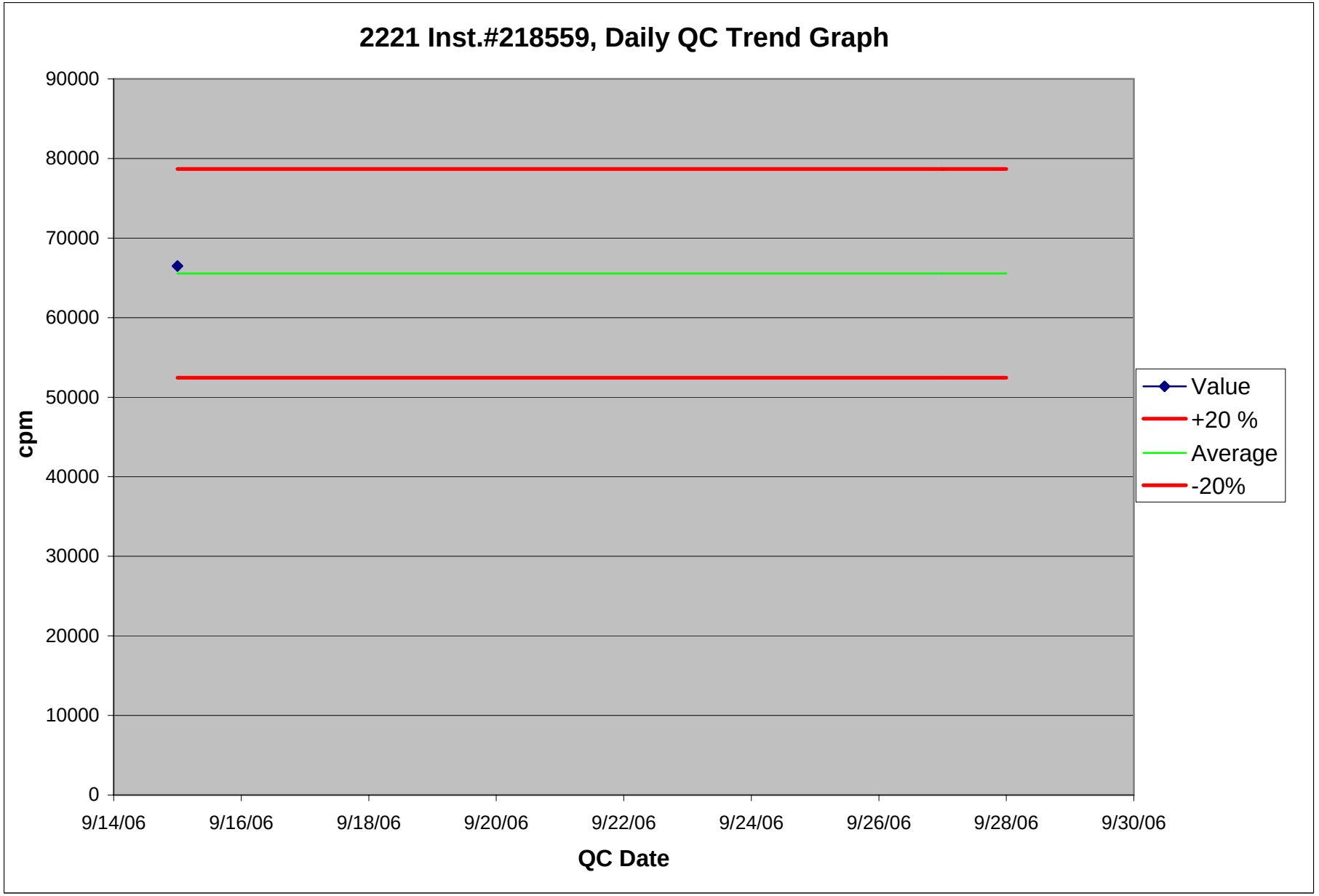
Value
+20 %
Average
-20%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9/22/06
9/24/06
9/26/06
9/28/06
9/30/06
QC Date
Value
+20 %
Average
-20%

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-46
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER CABRERA SERVICES ORDER NO. 253450 / 301183

Mfg. Ludlum Measurements, Inc. Model 2221 Serial No. 176952

Mfg. Ludlum Measurements, Inc. Model 44-20 Serial No. PR-183465

Cal. Date 10-Apr-06 Cal Due Date 10-Apr-07 Cal. Interval 1 Year Meterface 202-159

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 74 °F RH 23 % Alt 701.8 mm H

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☑ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 4.4 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set Comments V Input Sens. Comment mV Det. Oper. Comments V at Comment mV Threshold Dial Ratio 100 = 10 mV

☑ HV Readout (2 points) Ref./Inst. 500 / 499 V Ref./Inst. 2000 / 2002 V

COMMENTS:

	Peak Settings	Gross Counts	Firmware: 26 10 27
High Voltage:	840V	1150V	
Threshold Setting:	642	100(10mV)	Overload checked but not set.
Window Setting:	40	N/A	HV set w/detector connected.
Window Position:	"IN"	"OUT"	Calibrated using 6' C-cable.

Resolution for Cs137 ≈ 9.21%

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
x1K	400kcpm	400	400
x1K	100kcpm	100	100
x100	40kcpm	400	400
x100	10kcpm	100	100
x10	4kcpm	400	400
x10	1kcpm	100	100
x1	400cpm	400	400
x1	100cpm	100	100

*Uncertainty within ± 10% C.F. within ± 20%

ALL **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING
Digital Readout	400kcpm	399(0)	399(0)	Log Scale	500kcpm	450K	450K
	40kcpm	3998	3998		50kcpm	50K	50K
	4kcpm	400	400		5kcpm	5K	5K
	400cpm	40	40		500cpm	500	500
	40cpm	4	4		50cpm	55	55

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities o other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration technique
The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-19

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-3

☐ Alpha S/N ☐ Beta S/N ☑ Other Am241≈0.83 µCi

☑ m 500 S/N 81084 ☐ Oscilloscope S/N ☑ Multimeter S/N 78401030

Calibrated By: Sebastian Chacon Date 10-Apr-06

Reviewed By: Michael J Thomas Date 11-Apr-06

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.

AC Inst. ☐ Passed Dielectric (Hi-Pot) and Continuity Test
☐

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-46
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 44-20 Serial No. PR-183465

Customer CABRERA SERVICES Order #. 253450 / 301183

Counter 2221 Serial No. 176952 Counter Input Sensitivity 10 mV

Count Time 6 sec. Distance Source to Detector Surface

Other

High Voltage	Background	Isotope Am241 Size ≈0.83 μC	Isotope Size	Isotope Size	Isotope Size
900V	1,237	16,074			
950	1,285	16,977			
1000	1,296	20,184			
1050	1,365	20,652			
1100	1,300	21,086			
* 1150	1,355	21,059			
1200	1,383	21,015			
1250	1,441	21,049			
1300	1,491	21,406			
1350	1,477	21,203			
1400	1,814	21,759			

Signature Sebastk Caballe Date 10-Apr-06

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-46
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER CABRERA SERVICES ORDER NO. 254454 / 301728

Mfg. Ludlum Measurements, Inc. Model 2221 Serial No. 132861

Mfg. Ludlum Measurements, Inc. Model 44-20 Serial No. PR-183405

Cal. Date 28-Apr-06 Cal Due Date 28-Apr-07 Cal. Interval 1 Year Meterface 202-159

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 37 % Alt 698.8 mm H

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☑ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 4.4 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set Comments V Input Sens. Comment mV Det. Oper. Comments V at Comment mV Threshold Dial Ratio 100 = 10mV

☑ HV Readout (2 points) Ref./Inst. 500 / 499 V Ref./Inst. 2000 / 2004 V

COMMENTS:

	Peak Settings	Gross Counts
High Voltage:	674V	1000V
Threshold:	642	100(10mV)
Window:	40	N/A
WIN Position:	"IN"	"OUT"

Firmware: 26 10 27

Overload checked but not set.
HV set w/detector connected.
Instrument currently set for Gross Counts.

Resolution for Cs137 ≈ 9.52%

Calibrated using 6' C-cable.

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
x1K	400kcpm	400	400
x1K	100kcpm	100	100
x100	40kcpm	400	400
x100	10kcpm	100	100
x10	4kcpm	400	400
x10	1kcpm	100	100
x1	400cpm	400	400
x1	100cpm	100	100

*Uncertainty within ± 10% C.F. within ± 20%

ALL **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400kcpm	39953(0)	39953(0)
	40kcpm	3997	3997
	4kcpm	400	400
	400cpm	40	40
	40cpm	4	4

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING
Log Scale	500kcpm	475K	475K
	50kcpm	50K	50K
	5kcpm	5K	5K
	500cpm	500	500
	50cpm	50	50

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities o other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration technique The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978

State of Texas Calibration License No. LO-19

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-3

☐ Alpha S/N ☐ Beta S/N ☑ Other Am241≈0.83 µCi

☑ m 500 S/N 81084 ☐ Oscilloscope S/N ☑ Multimeter S/N 78401030

Calibrated By: Sebastian Cabrera Date 28-Apr-06

Reviewed By: Date 28-Apr-06

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.

AC Inst. ☐ Passed Dielectric (Hi-Pot) and Continuity Test

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-46
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 44-20 Serial No. PR-183405

Customer CABRERA SERVICES Order #. 254454 / 301728

Counter 2221 Serial No. 132861 Counter Input Sensitivity 10 mV

Count Time 6 sec. Distance Source to Detector Surface

Other

High Voltage	Background	Isotope Am241 Size ≈0.83μCi	Isotope Size	Isotope Size	Isotope Size
750V	1,455	16,061			
800	1,458	17,902			
850	1,556	20,875			
900	1,555	22,599			
950	1,611	23,152			
* 1000	1,547	23,535			
1050	1,542	23,636			
1100	1,572	23,427			
1150	1,649	24,166			
1200	1,652	24,762			
1250	1,823	24,170			

Signature Sebastian Caballero Date 28-Apr-06

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER CABRERA SERVICES ORDER NO. 257115/303187

Mfg. Ludlum Measurements, Inc. Model 2221 Serial No. 218559

Mfg. Ludlum Measurements, Inc. Model 44-20 Serial No. PR215468

Cal. Date 19-Aug-06 Cal Due Date 19-Aug-07 Cal. Interval 1 Year Meterface 202-159

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 43 % Alt 700.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☑ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 4.4 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set Comments V Input Sens Comments mV Det. Oper Comments V at Comments mV Threshold Dial Ratio 100 = 10 mV

☑ HV Readout (2 points) Ref./Inst. 500 / 500 V Ref./Inst. 2000 / 2008 V

COMMENTS:

	Peak settings	Gross Counts
High Voltage:	687V	1050V
Threshold dial:	642	100(10mv)
Window dial:	40	n/a
Window Position:	"IN"	"OUT"
Resolution for Cs137:	≈8.7%	n/a

Model 2221 currently set for Gross Counts
High voltage set with detector connected.

Firmware: 2.6 10 2 80 mTT

Calibrated with 5 foot cable.

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X 1K	400kcpm	400	400
X 1K	100kcpm	100	100
X 100	40kcpm	400	400
X 100	10kcpm	100	100
X 10	4kcpm	400	400
X 10	1kcpm	100	100
X 1	400cpm	400	400
X 1	100cpm	100	100

*Uncertainty within ± 10% C.F. within ± 20% ALL **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400kcpm	402 15(0)	402 15(0)	Log Scale	500kcpm	450 K	450K
	40kcpm	401 3(0)	401 3(0)		50kcpm	50 K	50K
	4kcpm	402(0)	402(0)		5kcpm	5 K	5K
	400cpm	40(0)	40(0)		500cpm	500	500
	40cpm	4(0)	4(0)		50cpm	55	55

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N ☐ Beta S/N ☐ Other

☑ m 500 S/N 57881 ☐ Oscilloscope S/N ☑ Multimeter S/N 56110559R

Calibrated By: Michael J Thomas Date 19-Aug-06

Reviewed By: [signature] Date 21 Aug 06

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.
FORM C22A 11/26/2003

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed:

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 44-20 Serial No. PR 215468

Customer CABRERA SERVICES Order #. 257115/303187

Counter 2221 Serial No. 218559 Counter Input Sensitivity 10 mV

Count Time 6 sec Distance Source to Detector Surface

Other

High Voltage	Background	Isotope Am-241 Size ≈0.79uCi	Isotope Size	Isotope Size	Isotope Size
700	1704	1745			
750	1823	14477			
800	2019	16053			
850	2008	18828			
900	2046	19983			
950	2024	21056			
1000	2020	20841			
→ 1050	2137	20868			
1100	2043	20941			
1150	2160	20636			
1200	2249	20971			
1250	2651	21456			

Signature Michael J Thomas Date 19-Aug-06

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Attachment 3

GAMMA Z-SCORE CONTOUR PLOT
SITE MAP

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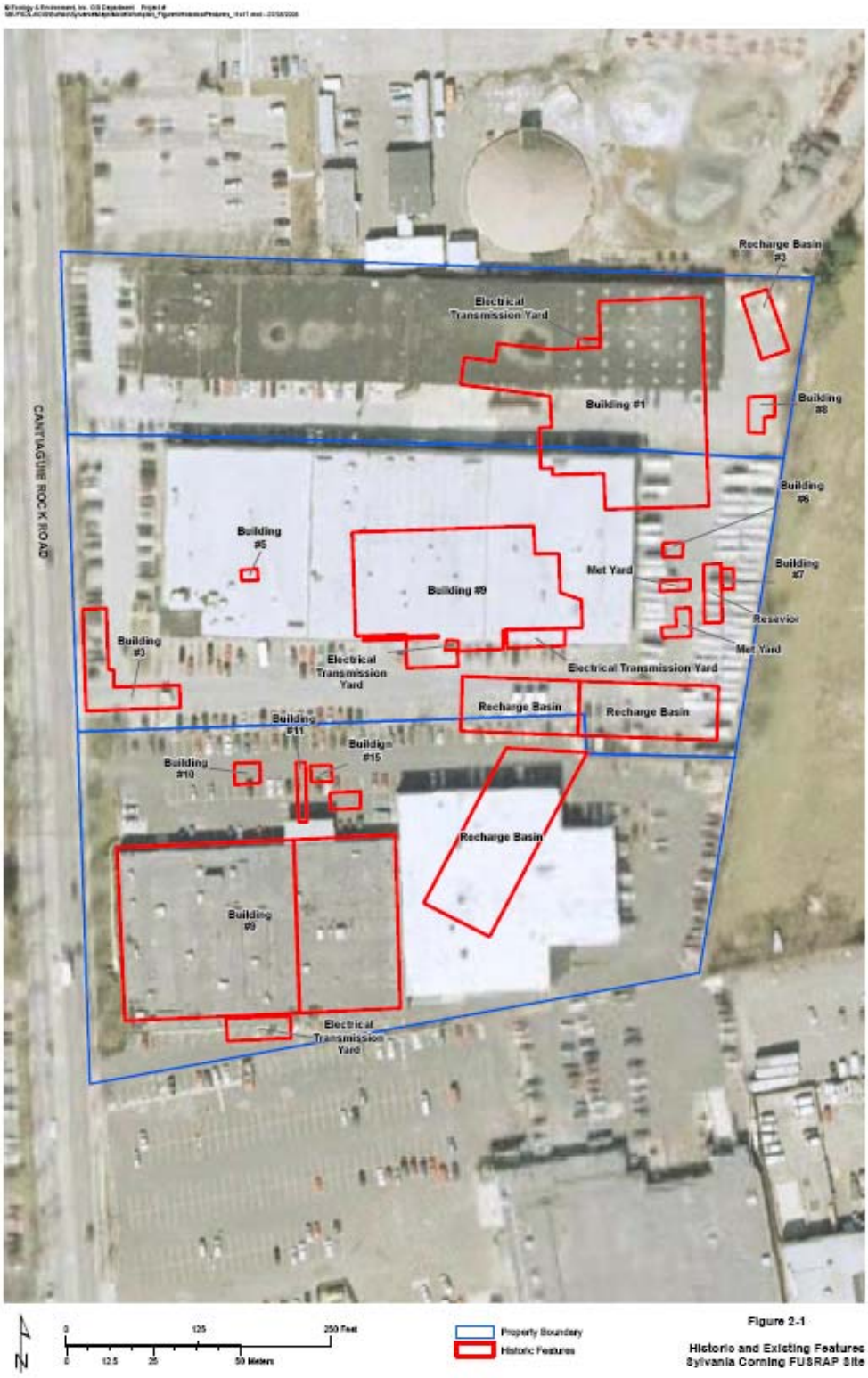
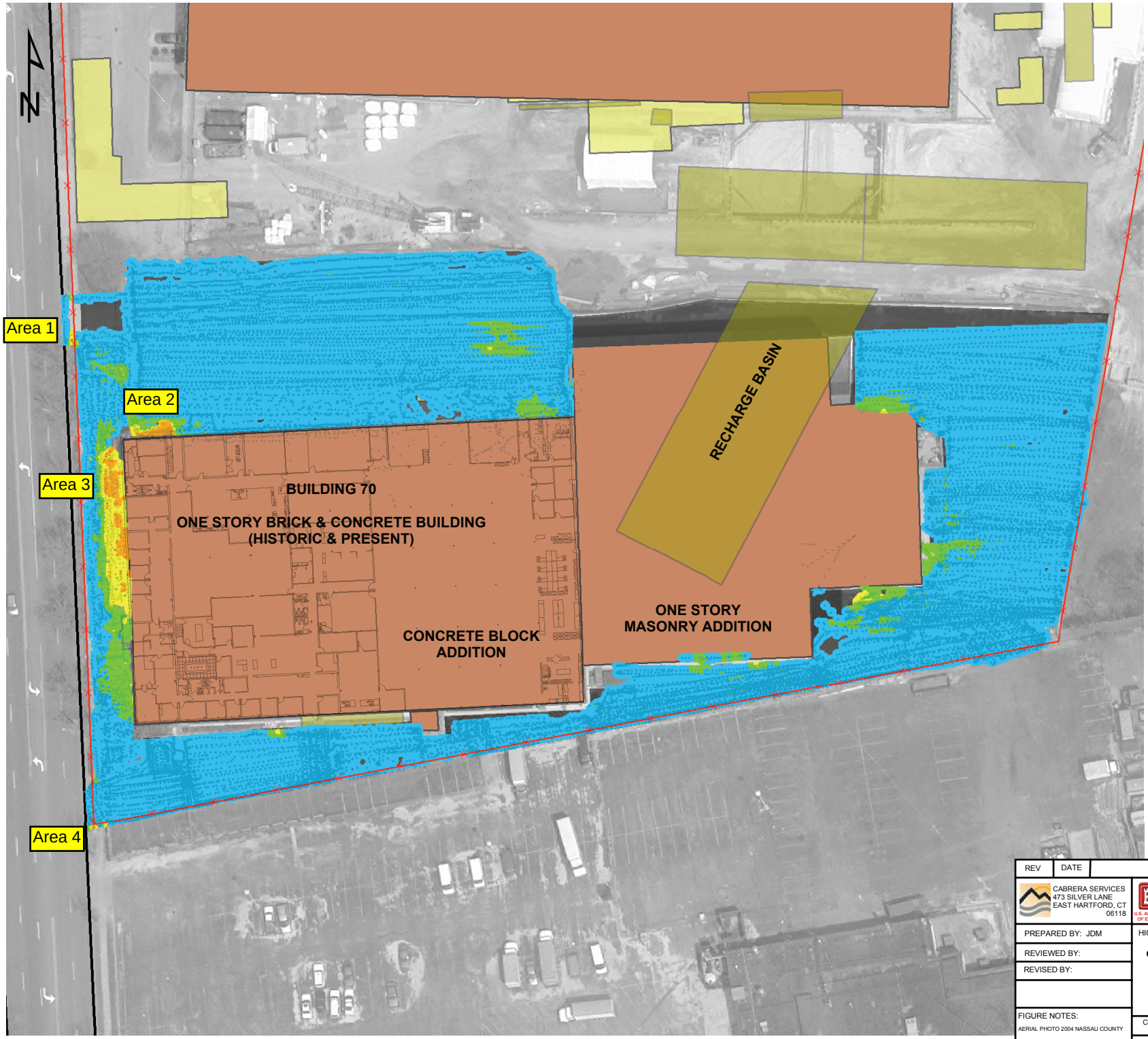


Figure 2-1
Historic and Existing Features
Sylvania Corning FUSRAP Site



HICKSVILLE

LEGEND

- Existing Buildings
- Historic Buildings
- Historic Features

Z Score 1m Radius Interpolation

- < 1
- 1 - 1.999
- 2 - 2.999
- > 3

REV	DATE	DESCRIPTION	BY

CABRERA SERVICES
473 SILVER LANE
EAST HARTFORD, CT
06118

U.S. ARMY ENGINEER DISTRICT, BALTIMORE
CORPS OF ENGINEERS
KANSAS CITY, KANSAS

PREPARED BY: JDM

REVIEWED BY:

REVISED BY:

FIGURE NOTES:
AERIAL PHOTO 2004 NASSAU COUNTY

HICKSVILLE NEW YORK

GAMMA WALK OVER SURVEY OF BUILDING 70
1m RADIUS Z SCORE INTERPOLATION

SYLVANIA - CORNING FUSRAP SITE

CONTRACT #

DRAWING # 07-1005.00-XX 1

SCALE: 0 30 60 Feet

DATE: 10/03/2006

Radiation Contamination Surveys

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Sylvania Corning FUSRAP Site – Phase I RI

Radiation Contamination Surveys

All Site Areas

This technical memorandum addresses the results of the radiation-contamination surveys performed during installation and retrieval of passive soil gas probes around the exterior of Buildings 70, 100, and 140, and active soil gas probes inside Building 70 at the Sylvania Corning FUSRAP site.

1.0 SURVEY METHODOLOGY

1.1 Overview

Radiation contamination surveys were performed September 11 through 15, 2006 and on September 25 and 26, 2006. Contamination surveys were performed on equipment and personnel to assess the potential for elevated radiological contaminants of potential concern, specifically, isotopes of thorium and uranium, during intrusive sampling activities. Surveys for fixed and removable contamination were performed during installation and retrieval of active and passive soil gas probes and during collection of samples at the Building 70 transformer area.

All surveys were performed in accordance with safety procedures as outlined in the September 2006 *Site Safety and Health Plan – Remedial Investigation Phase I for the Sylvania Corning FUSRAP Site*. Surveys included surface scans and static measurements for alpha and beta radiation, wipes for removable alpha and beta contamination, and collection of representative background measurements for all surveyed surfaces.

1.2 Equipment

Equipment used to perform contamination surveys included the following:

- Ludlum Model- 2360 and 2224-1 portable ratemeter/scaler with Ludlum Model 43-93 alpha/beta scintillation detectors.
- Ludlum Model 14C portable ratemeter with Ludlum Model 44-9 geiger-mueller (GM) detector.

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1.3 Quality Control Measures

Quality control (QC) measurements for field instrumentation included initial response to a radioactive source and daily operability checks. All instruments were calibrated within the last twelve months by the instrument vendor, a certified calibration laboratory, using sources traceable to the National Institute of Standards and Technology (NIST). Calibration certificates for each instrument are provided in Attachment 1. Prior to commencing any surveys, ten initial readings were collected on each detector using technicium-99 (^{99}Tc) and thorium-230 (^{230}Th) sources to establish a control chart for each unit to determine daily operability. The bases for the daily operability of these instruments are ± 20% of the average for the initial ten measurements for the 44-9 probe and ±3-sigma of the average for the initial ten measurements for the 43-93. These data are included in Attachment 1.

All field instruments satisfactorily passed the daily QC checks, with one exception. During post-job review of the instrument QC data, it was observed that the Ludlum 2360/43-93 combination was found to be outside of ±3-sigma on 9/14/06. The field technician inadvertently applied a 'qualitative' ±20% criterion to the daily QC data for this instrument, which showed a passing result. However, when applying the more stringent ±2 and ±3 sigma criteria used for quantitative field instruments, the daily alpha source check failed. If the technician had known that the count failed, the count would have been repeated in accordance with CABRERA procedures. Further inspection of the data by the CABRERA project Health Physicist shows that this particular count was 13 counts per minute (cpm) above the +3-sigma control line, corresponding to a 3.2 sigma result. Since this value does not appear to represent a severe instrument deficiency or malfunction, it was determined that the survey data performed on 9/14/06 does not need to be disqualified.

1.4 Acceptable Levels of Surface Contamination

Table 1 provides acceptable surface contamination limits for various radionuclides as applied to surface contamination measurements. The most conservative values (transuranics) were used because the predominant radiological contaminants of potential concern are thorium and uranium. The alpha removable contamination limit is 20 disintegrations per minute per 100 square centimeters (dpm/100cm^2), while the maximum and average contamination limit is 300 and 100 dpm/100cm^2, respectively. The beta-gamma removable contamination limit is 1,000 dpm/100cm^2.

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Table 1: Acceptable Levels of Surface Contamination

Radionuclide[a]	Acceptable Surface Contamination Levels (DPM/100 cm^2)		
	Removable[b, e]	Average[b, c]	Maximum[b, d]
Transuranics, ^{226}Ra, ^{227}Ra, ^{230}Th, ^{228}Th, ^{231}Pa, ^{221}Ac, ^{125}I, ^{129}I	20	100	300
Th-Natural, ^{232}Th, ^{90}Sr, ^{223}Ra, ^{224}Ra, ^{232}U, ^{126}I, ^{131}I, ^{133}I	200	1,000	3,000
U-Natural, ^{235}U, ^{238}U, and associated decay products	1,000 α	5,000 α	15,000 α
Beta-Gamma emitters (radionuclides with decay modes other than alpha emission or spontaneous fission) except ^{90}Sr and others noted above.	1,000 β γ	5,000 β γ	15,000 β γ

[a] Where surface contamination by both alpha- and beta-gamma emitting nuclides exists, the limits established for alpha- and beta-gamma emitting nuclides should apply independently.
[b] As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.
[c] Measurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each object.
[d] The maximum contamination level applies to an area not more than 100 cm^2.
[e] The amount of removable radioactive material per 100 cm^2 of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionately and the entire surface should be wiped.

2.0 RESULTS

The results of all contamination surveys are provided in Attachment 2. Individual data worksheets are provided for background measurements collected at the site, Building 70 soil gas support surveys, and exterior soil gas support surveys. A summary map of the Building 70 interior surveys is also provided.

Calculation of disintegrations per minute per 100 square centimeters (dpm/100cm^2) integrated a 300-cm survey area because all removable contamination surveys utilized large area, i.e., masselin, wipes instead of smaller, folder-type smears. Masselin surveys are advantageous for surveys of this kind because much larger areas can be surveyed for removable contamination, which increases the probability of detection.

The only data flags that occurred during the surveys were results of the alpha scans on wipes of the boring equipment at exterior soil gas locations 45 (84.1 dpm/100cm^2) and 81 (56

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dpm/100cm^2). However, it is unlikely that these events are true positives for removable alpha contamination, based on the supporting evidence. First, the flagged values are near or below the calculated alpha minimum detectable concentrations (MDC) for the model 43-93 detector. The lowest MDC achievable for the 43-93 is 27 dpm/100cm^2, given zero counts per minute background (see Attachment 1). MDC levels between 27 and 102 dpm/100cm^2 were calculated for the range of alpha background levels measured during the morning QC activities. Furthermore, both of these locations were shallow soil borings (6 inches) west and south of Building 70 and the beta results at these locations were both at background. It is more likely that the elevated alpha counts at these locations were due to natural background fluctuations.

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Attachment 1

INSTRUMENT QC INFORMATION AND CALIBRATION CERTIFICATES

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CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 5)

Counting Instrument:	L 2360			Detector:	43-93		Calibration Date:	6/25/2006										
Serial #:	202398			Serial #:	PR211706		12 month calibration:	OK										
Detector Active Area or Area Covered by Smear (cm^2):					100		NRC 6 Mo Cal. Due Date?	OK										

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA ($DPM/100cm^2$)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.1079	Th-230	1905-04	41,200	3/30/2004	7.54E+04	41,199	100	1	1	1.60	1.71	5438.2	62.38
Beta	0.1203	Tc-99	1904-04	45,200	3/30/2004	2.13E+05	45,200	1000	1	1	93.10	9.02	4444.0	114.18

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
9/11/2006	1	87	5495	4493	1.0	87.0	5494.0	4406.0	PASS	PASS	PASS	PASS	70.95	386	Yes	Yes	JJW	JJW
9/12/2006	0	90	5341	4576	0.0	90.0	5341.0	4486.0	PASS	PASS	PASS	PASS	27.81	392	Yes	Yes	JJW	JJW
9/13/2006	3	87	5559	4871	3.0	87.0	5556.0	4784.0	PASS	PASS	PASS	*QUESTION*	102.52	386	No	Yes	JJW	JJW
9/14/2006	0	87	5640	4749	0.0	87.0	5640.0	4662.0	PASS	PASS	**FAIL**	PASS	27.81	386	Yes	Yes	DEA	DEA
9/15/2006	0	96	5358	4748	0.0	96.0	5358.0	4652.0	PASS	PASS	PASS	PASS	27.81	404	Yes	Yes	DEA	DEA

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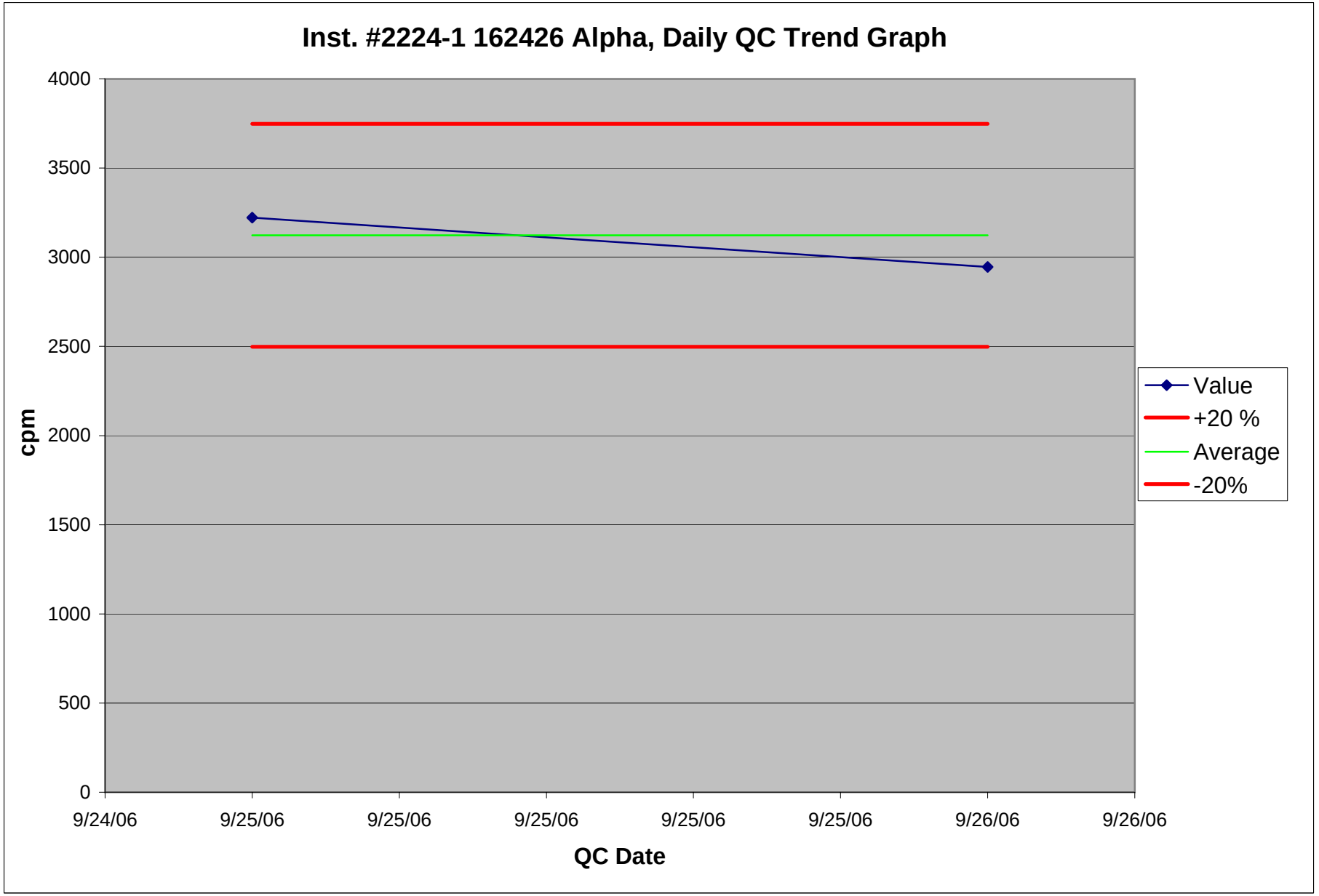
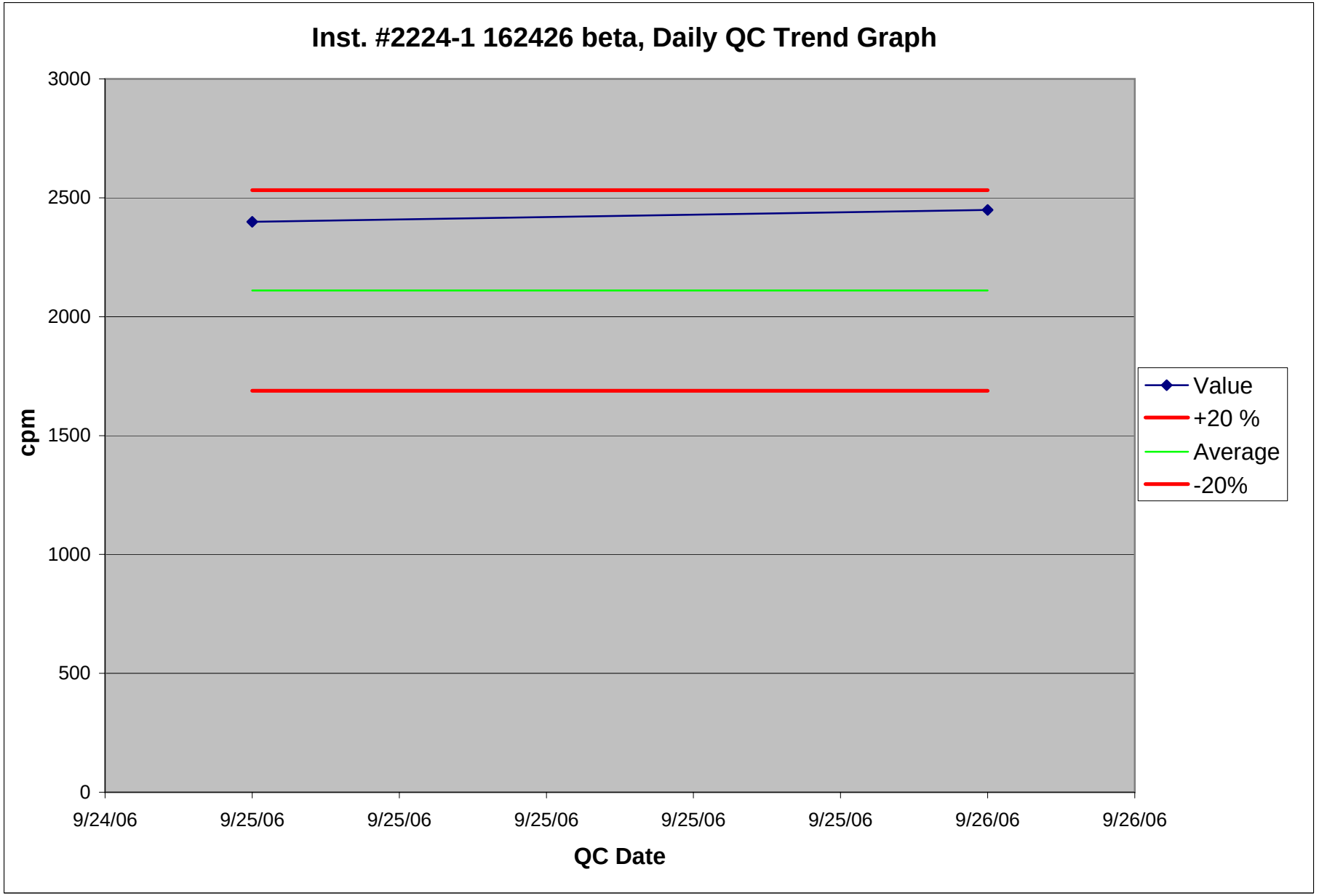
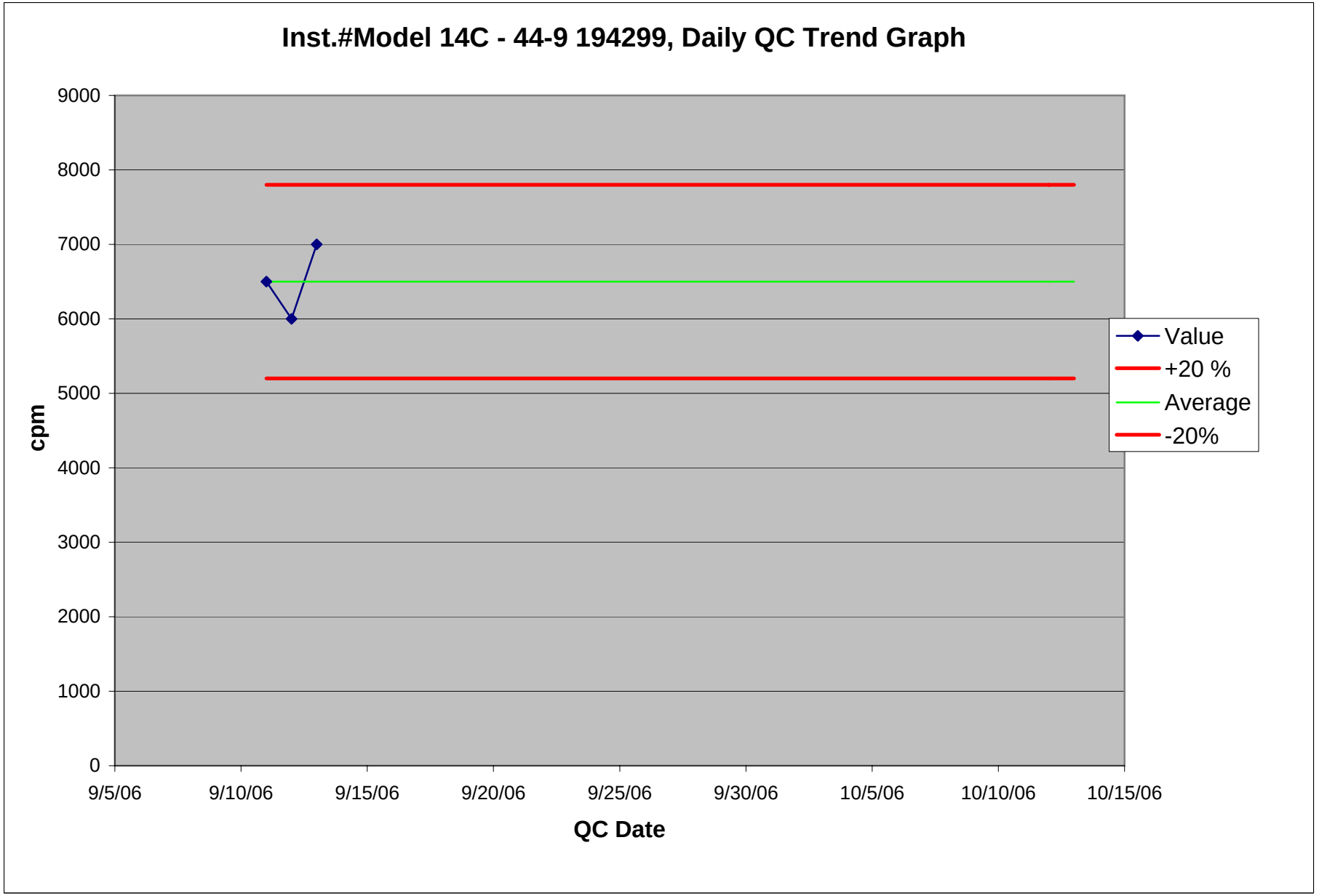
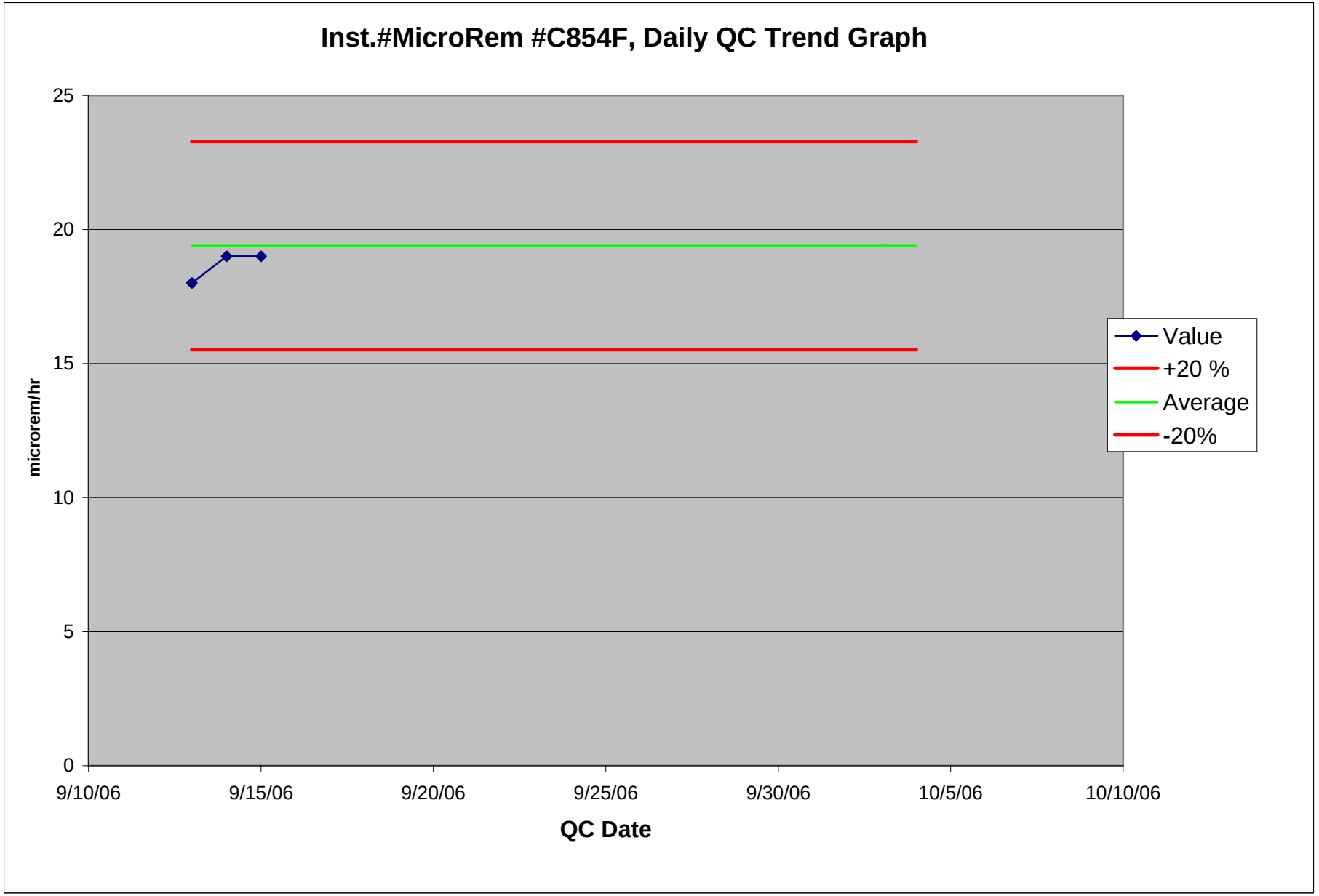

Inst. #2224-1 162426 Alpha, Daily QC Trend Graph
4000
3500
3000
2500
2000
1500
1000
500
0
cpm
9/24/06
9/25/06
9/25/06
9/25/06
9/25/06
9/25/06
9/26/06
9/26/06
QC Date
Value
+20 %
Average
-20%


Inst. #2224-1 162426 beta, Daily QC Trend Graph
3000
2500
2000
1500
1000
500
0
cpm
9/24/06
9/25/06
9/25/06
9/25/06
9/25/06
9/25/06
9/26/06
9/26/06
QC Date
Value
+20 %
Average
-20%


Inst.#Model 14C - 44-9 194299, Daily QC Trend Graph
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
cpm
9/5/06
9/10/06
9/15/06
9/20/06
9/25/06
9/30/06
10/5/06
10/10/06
10/15/06
QC Date
Value
+20 %
Average
-20%


Inst.#MicroRem #C854F, Daily QC Trend Graph
25
20
15
10
5
0
microrem/hr
9/10/06
9/15/06
9/20/06
9/25/06
9/30/06
10/5/06
10/10/06
QC Date
Value
+20 %
Average
-20%

Calibration Technology
A Division of RSCS, Inc.

Calibration Certificate
ID Number: C854F5134-0

Customer: Hank Siegrist
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument
Bicron Model MicroRem

Serial Number
C854F

Precision Check				
Test 1	Test 2	Test 3	Mean	Results
4.00 mrem/hr	**4.00 mrem/hr**	**4.00 mrem/hr**	**4.00 mrem/hr**	**Satisfactory**

Accuracy Check			
Range	Target Value	As Found	As Left
X1000	160 mrem/hr	160 mrem/hr	160 mrem/hr
X1000	40 mrem/hr	40 mrem/hr	40 mrem/hr
X100	16 mrem/hr	13.5 mrem/hr	16 mrem/hr
X100	4 mrem/hr	3.5 mrem/hr	4 mrem/hr
X10	1.6 mrem/hr	1.6 mrem/hr	1.6 mrem/hr
X10	0.4 mrem/hr	0.4 mrem/hr	0.4 mrem/hr
X1	160 µrem/hr	160 µrem/hr	160 µrem/hr
X1	40 µrem/hr	40 µrem/hr #	40 µrem/hr #
X0.1	16 µrem/hr	17.5 µrem/hr #	16 µrem/hr #
X0.1	4 µrem/hr	5 µrem/hr # *	4 µrem/hr #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges where pulser was used.

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500 SN: 134720	08/16/2006

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Calibrated by: _____ QA Review: _____

Calibration Date: 05/25/2006
Expires: 05/25/2007

Atmospheric Conditions - Temperature: 72°F Humidity: 42% Barometric Pressure: 29.63"hg
This calibration was performed by RSCS Inc. using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4. This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CONVERSION CHART

Customer CABRERA SERVICES Date 23-Nov-05 Order #. 246337/297322

Model 14C Serial No. 194299 Detector Model 44-9 Serial No. PR 201558

Source Cs-137 194.6 mCi Cs-137 20 mCi High Voltage 900 V

Input Sensitivity 34 mV

Reference Point	"As Found" Readings (CPM): Meter Reading	Range/Scale	After Adjustment Readings (CPM): Meter Reading	Range/Scale
150 mR/hr	NA	NA	NA	NA
50 mR/hr	1.55 K	X100	1.55 K	X100
15 mR/hr	0.55 K	X100	0.55 K	X100
5 mR/hr	1.65 K	X10	1.65 K	X10
1.5 mR/hr	0.5 K	X10	0.5 K	X10
1.0 mR/hr	0.35 K	X10	0.35 K	X10

Signature: S Cecil S Thomas Date 23-NOV-05

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER CABRERA SERVICES ORDER NO. 257191/303228

Mfr Ludlum Measurements, Inc. Model 2360 Serial No. 202398

Mfg. Ludlum Measurements, Inc. Model 43-93 Serial No. PR 211706

Cal. Date 25-Jun-06 Cal Due Date 25-Jun-07 Cal. Interval 1 Year Meterface 202-855

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 76 °F RH 42 % Alt 700.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

nstrument Volt Set 725 V

☑ HV Readout (2 points) Ref./Inst. 500 / 503 V Ref./Inst. 1500 / 1510 V

Firmware Version: 39010m25
Alpha Threshold: 120 mV
Beta Threshold: 3.5 mV
Beta Window: 30 mV
Overload SET TO SIMULATE LIGHT LEAK
Instrument calibrated with a 5' cable.
High voltage set with detector CONNECTED

(EEPROM Settings)
User Time: 1.0
Alpha Alarm: 50000
Beta Alarm: 50000
A/B Alarm: 50000
Model 2360 Date: 6/25/~~07~~06
Calibration Date Due: 6/25/07

COMMENTS:
Efficiency Formula:
Source Count - Bkgrd=? /source size (dpm)=? x100 = %
4 pi efficiencies for Th230, Tc99, Sr90Y90, and Ni63 are as follows:
Th230≈20%,Tc99≈16%,Sr90Y90≈25%,Ni63≈0.06%

* SEE PLATEAU SHEETS FOR ALL

Gam libration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
x1000	400kcpm	400	400
x1000	100kcpm	100	100
x100	40kcpm	400	400
x100	10kcpm	100	100
x10	4kcpm	400	400
x10	1kcpm	100	100
x1	400kcpm	400	400
x1	100kcpm	100	100

*Uncertainty within ± 10% C.F. within ± 20% ALL Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400kcpm	39993(0)	39993(0)	Log Scale			
	40kcpm	3995	3995				
	4kcpm	400	400				
	400cpm	40	40				
	40cpm	4	4				

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ S-394 ☐ 1122 ☐ 781
Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☑ Alpha S/N Th230/E121495 ☑ Beta S/N Tc99/NI-EV,Sr90Y90/4016,Ni63/4017 ☐ Other

☐ 500 S/N 189496 ☐ Oscilloscope S/N ☑ Multimeter S/N 83750186

Calibrated By: Michael Jones Date 25 June 06

Reviewed By: [signature] Date 26 June 06

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed:

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 43-93 Serial No. PR 211706 Order #. 257191/303228

Customer CABRERA SERVICES Alpha Input Sensitivity 120 mV

Counter 2360 Serial No. 202398 Beta Input Sensitivity 3.5 mV

Count Time 1Minute Beta Window 30 mV

Other _____ Distance Source to Detector Surface

High Voltage	Background		Isotope Th 230 Size ≈ 19800 dpm		Isotope _____ Size _____		Isotope _____ Size _____	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
700	1	124	3918	505				
725	1	213	4047	568				
750	0	554	4132	1153				

☐ Gas Proportional detector count rate decreased ≤ 10% after 15 hour static test using 39" cable.

☐ Gas proportional detector count rate decreased ≤ 10% after 5 hour static test using 39" cable and alpha/beta counter.

Signature Michael Torres Date 25 June 06

FORM C4B 04/09/2003

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER CABRERA SERVICES ORDER NO. 261531/305134

Mfg. Ludlum Measurements, Inc. Model 2224-1 Serial No. 162426

Mfg. Ludlum Measurements, Inc. Model 43-93 Serial No. PR 193921

Cal. Date 23-Aug-06 Cal Due Date 23-Aug-07 Cal. Interval 1 Year Meterface 202-848

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 46 % Alt 701.8 mm Hg

☐ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☑ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 825 V Input Sens. comments mV Det. Oper. 825 V at comments mV Threshold Dial Ratio = mV

☑ HV Readout (2 points) Ref./Inst. 500 / 501 V Ref./Inst. 1000 / 999 V

COMMENTS:

Alpha Sens.:120mv
Beta Sens.:3.5mv
Beta Window:30mv
H.V. set with detector disconnected.
Firmware;390096
instrument calibrated with 5' cable.
EFF. for: Th230=22%, Tc99=21%, Ni63=0.13%, Sr90Y90=36%
4 pi efficiencies (refer to plateau sheet for details).
Overload set to simulate light leak.

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
x1000	800k cpm	n/a	800
x1000	200k cpm		200
x100	80k cpm		800
x100	20k cpm		200
x10	8k cpm		800
x10	2k cpm		200
x1	800 cpm		800
x1	200 cpm		200

*Uncertainty within ± 10% C.F. within ± 20% ALL **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	800kcpm	n/a	79813
	80kcpm		79800
	8kcpm		7980
	800cpm		798
	80cpm		80

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques.
The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ S-394 ☐ 1122 ☐ 781
Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☑ Alpha S/N Th230:5020-04 ☑ Beta S/N Tc99:5279-04/Sr90Y90:5281- Ni63: 99NI220 ☐ Other

☑ m 500 S/N 949940 ☐ Oscilloscope S/N ~~S/N~~ ☑ Multimeter S/N 78401031

Calibrated By: Scott Date 23-Aug-06

Reviewed By: [signature] Date 23 Aug 06

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.
FORM C22A 06/02/2006

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed:

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 43-93 Serial No. PR 193921 Order #. 261531/305134

Customer CABRERA SERVICES Alpha Input Sensitivity 120 mV

Counter 2224-1 Serial No. 162426 Beta Input Sensitivity 3.5 mV

Count Time 1Minute Beta Window 30 mV

Other _____ Distance Source to Detector Surface

High Voltage	Background		Isotope Tc99 Size 28,800 dpm		Isotope Sr90Y90 Size 113,696 dpm		Isotope Ni63 Size 290,376 dpm	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
750	1	90	5	2665	8	21997	1	70
775	2	114	8	3811	4	29885	5	114
800	2	152	13	5022	1	36220	4	218
825	1	199	8	6109	1	41313	2	584
850	2	267	9	7169	2	44628	2	1309
875	1	326	5	8098	9	45677	1	2638

☐ Gas Proportional detector count rate decreased ≤ 10% after 15 hour static test using 39" cable.

☐ Gas proportional detector count rate decreased ≤ 10% after 5 hour static test using 39" cable and alpha/beta counter.

Signature _____ Date 23-Aug.06

Designer and Manufacturer
of
Scientific and Industrial
Instruments

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Bench Test Data For Detector

Detector 43-93 Serial No. PR193921 Order #. 261531/305134

Customer CABRERA SERVICES Alpha Input Sensitivity 120 mV

Counter 2224-1 Serial No. 162426 Beta Input Sensitivity 3.5 mV

Count Time 1Minute Beta Window 30 mV

Other _____ Distance Source to Detector Surface

High Voltage	Background		Isotope Th230 Size 4395 dpm		Isotope _____ Size _____		Isotope _____ Size _____	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
750	1	90	782	165				
775	2	114	843	206				
800	2	152	865	234				
825	1	199	944	328				
850	2	267	955	473				
875	1	326	947	501				

☐ Gas Proportional detector count rate decreased ≤ 10% after 15 hour static test using 39" cable.

☐ Gas proportional detector count rate decreased ≤ 10% after 5 hour static test using 39" cable and alpha/beta counter.

Signature _____ Date 23-Aug.06

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Attachment 2

SURVEY DATA WORKSHEETS
SURVEY DATA MAPS

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Instrument: Ludlum Model 2360 **Probe Active Area:** 100 cm2
Probe: Ludlum Model 43-93 **Units:** cpm

seq. #	Sample ID# and Description	Date	Background Total Counts* α	β
Building 70 Surface Backgrounds				
1	Concrete - Old Warehouse	9/11/2006	1	11
2		9/11/2006	6	124
3		9/11/2006	0	125
1	Concrete - New Warehouse	9/11/2006	0	90
2		9/11/2006	0	81
3		9/11/2006	0	96
1	Bldg 12 x 12 Floor Tiles	9/11/2006	3	155
2		9/11/2006	3	163
3		9/11/2006	2	133
1	Glazed Gray Tile - Lobby	9/11/2006	20	294
2		9/11/2006	10	265
3		9/11/2006	20	286
4		9/11/2006	15	334
5		9/11/2006	15	291
1	Brown Asbestos tile(12x12)	9/11/2006	2	116
2		9/11/2006	1	101
3		9/11/2006	2	110
4		9/11/2006	1	114
5		9/11/2006	2	119
Cantiague Park Soil Backgrounds				
1	Soil Cantiague Park set# 1	9/11/2006	1	175
2		9/11/2006	1	173
3		9/11/2006	2	178
4		9/11/2006	1	181
5		9/11/2006	5	187
1	Soil Cantiague Park set# 2	9/11/2006	3	158
2		9/11/2006	8	225
3		9/11/2006	3	190
4		9/11/2006	3	187
5		9/11/2006	2	170

Instrument:	Ludlum Model 2360
Probe:	Ludlum Model 43-93

Survey Area (cm^2)
300

α eff	β eff
0.2200	0.2100

Static Count Time (min)
1.0

Daily Background Count Time (min)
1.0

dpm/100 cm^2	
α Flag	β Flag
20	1000

* Morning Daily Count

seq. #	Sample ID# and Description	Date	Background Total Counts*		Sample Total Counts		Background (cpm)		Sample Counts (cpm)		Sample (dpm/100 cm^2)		> α flag	> β flag	Tech. Initial
			α	β	α	β	α	β	α	β	α	β			
Active Soil Gas Probe Install Surveys															
1	B70SSA-01	9/12/2006	3	150	0	NR	2.7	150.3	0.00	N/A	-4.0	N/A			DA
2	B70SSA-02	9/12/2006	3	150	3	NR	2.7	150.3	3.00	N/A	0.5	N/A			DA
3	B70SSA-03	9/12/2006	3	150	0	NR	2.7	150.3	0.00	N/A	-4.0	N/A			DA
4	B70SSA-04	9/12/2006	0	89	0	NR	0.0	89.0	0.00	N/A	0.0	N/A			DA
5	B70SSA-05	9/12/2006	2	140	6	154	2.0	140.0	6.00	154	6.1	22			DA
6	B70SSA-06	9/12/2006	2	140	2	172	2.0	140.0	2.00	172	0.0	51			DA
7	B70SSA-07	9/12/2006	2	110	0	121	2.0	110.0	0.00	121	-3.0	17			DA
8	B70SSA-08	9/12/2006	2	136	3	155	2.0	136.0	3.00	155	1.5	30			DA
9	B70SSA-09	9/12/2006	2	139	1	146	2.0	139.0	1.00	146	-1.5	11			DA
10	B70SSA-10	9/12/2006	1	124	5	155	1.0	124.0	5.00	155	6.1	49			DA
11	B70SSA-11	9/12/2006	4	139	0	140	4.0	139.0	0.00	140	-6.1	2			DA
12	B70SSA-12	9/12/2006	1	114	2	120	1.0	114.0	2.00	120	1.5	10			DA

Instrument:	Ludlum Model 3
Probe:	Ludlum Model 44-9

Detector Active Area (cm^2)
15

α eff	β eff
N/A	0.1000

Count Time (min)
Rate

Daily Background Count Time (min)
Rate

dpm/100 cm^2	
α Flag	β Flag
N/A	1000

seq. #	Sample ID# and Description	Date	Background Total Counts*		Sample Total Counts		Background (cpm)		Sample Counts (cpm)		Sample (dpm/100 cm^2)		> α flag	> β flag	Tech. Initial
			α	β	α	β	α	β	α	β	α	β			
Active Soil Gas Probe Removal Surveys															
1	B70SSA-01	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
2	B70SSA-02	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
3	B70SSA-03	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
4	B70SSA-04	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
5	B70SSA-05	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
6	B70SSA-06	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
7	B70SSA-07	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
8	B70SSA-08	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
9	B70SSA-09	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
10	B70SSA-10	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
11	B70SSA-11	9/13/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC
12	B70SSA-12	9/14/2006	NR	40	NR	40	N/A	40.0	N/A	40	N/A	0.0			JC

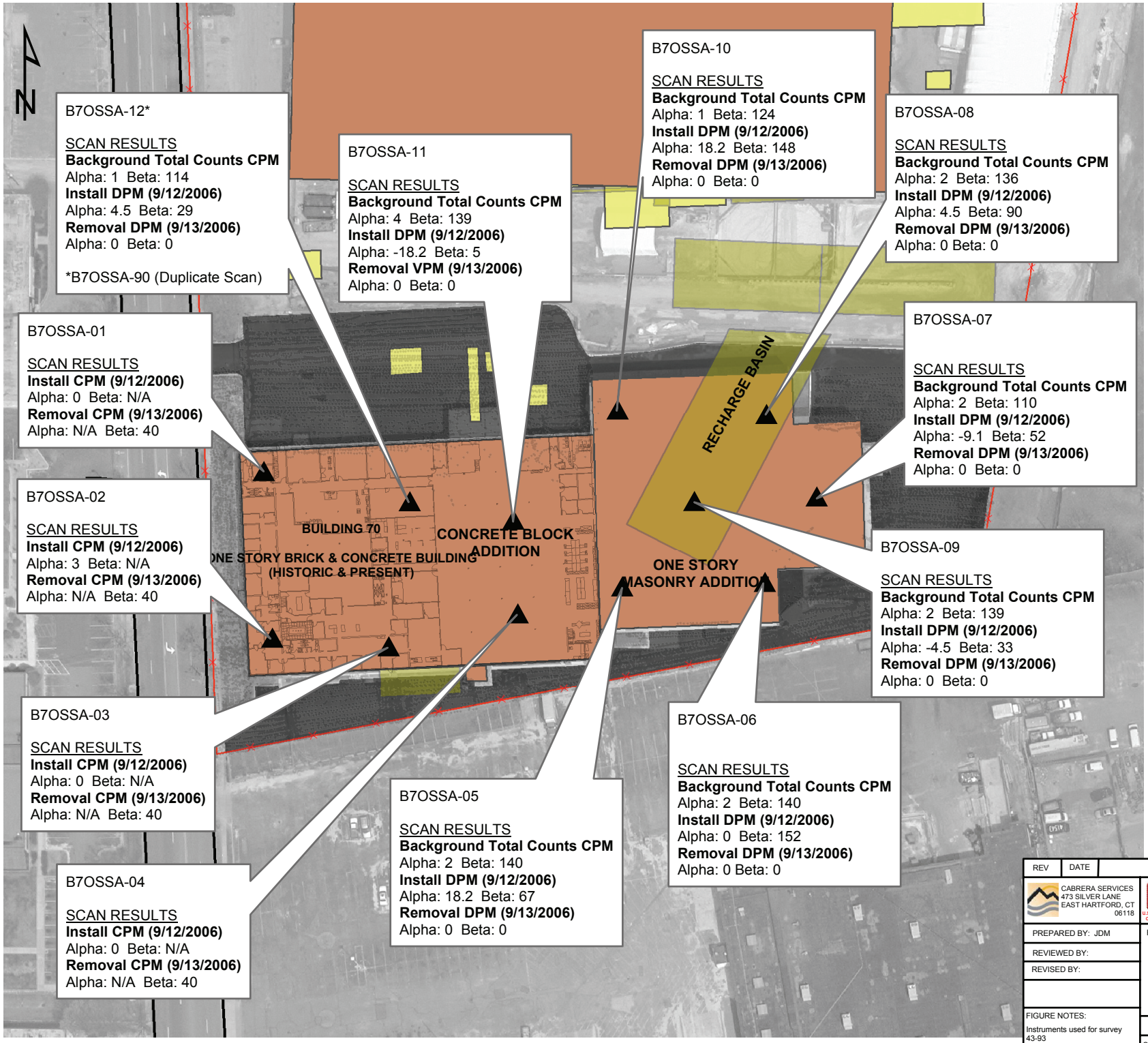
Exterior Passive Soil Gas Probe Installation Surveys

Detector No.	Probe	Survey Active Area (cm^2)	Alpha Efficiency	Beta Efficiency	Survey Type	Static Count Time (min)	Daily Background Count Time (min)	dpm/100 cm^2 Alpha Flag	dpm/100 cm^2 Beta Flag
1	44-9	300	n/a	10%	Count Rate	N/A	N/A	N/A	1000
2	43-93	300	10.7%	12.0%	Static Count	1.0	1.0	20	1000

Survey Location	Detector Number	Date	Background Count *(local at SG location or in general area)*		Sample Count		Background (cpm)		Sample Counts (cpm)		Sample Count (dpm/100 cm2)		> a flag	> b flag	Notes	Tech. Initial
			α	β	α	β	α	β	α	β	α	β				
SSG-001	2	9/13/2006	2	140	1	138	2	140	1	138	-3.1	-6				DA
SSG-002	2	9/13/2006	2	134	0	141	2	134	0	141	-6.2	19				DA
SSG-003	2	9/13/2006	2	140	0	158	2	140	0	158	-6.2	50				DA
SSG-004	2	9/13/2006	2	140	1	148	2	140	1	148	-3.1	22				DA
SSG-005	2	9/12/2006	2	140	6	154	2	140	6	154	12.5	39				JW
SSG-006	2	9/12/2006	2	140	2	171	2	140	2	171	0.0	86				JW
SSG-007	2	9/12/2006	2	110	0	121	2	110	0	121	-6.2	31				JW
SSG-008	2	9/13/2006	2	136	3	155	2	136	3	155	3.1	53				DA
SSG-009	2	9/13/2006	2	107	1	130	2	107	1	130	-3.1	64				DA
SSG-010	2	9/12/2006	1	124	5	155	1	124	5	155	12.5	86				JW
SSG-011	2	9/12/2006	4	139	0	140	4	139	0	140	-12.5	3				JW
SSG-012	2	9/12/2006	1	114	2	120	1	114	2	120	3.1	17				JW
SSG-013	2	9/13/2006	0	122	3	154	0	122	3	154	9.3	89				DA
SSG-014	2	9/13/2006	0	98	2	148	0	98	2	148	6.2	139				DA
SSG-015	2	9/13/2006	0	132	1	100	0	132	1	100	3.1	-89				DA
SSG-016	2	9/13/2006	2	136	0	135	2	136	0	135	-6.2	-3				DA
SSG-017	2	9/13/2006	2	136	1	149	2	136	1	149	-3.1	36				DA
SSG-018	2	9/13/2006	4	162	2	132	4	162	2	132	-6.2	-83				DA
SSG-019	2	9/13/2006	3	121	1	131	3	121	1	131	-6.2	28				DA
SSG-020	2	9/13/2006	1	134	0	113	1	134	0	113	-3.1	-58				DA
SSG-021	2	9/13/2006	1	90	0	120	1	90	0	120	-3.1	83				DA
SSG-022	2	9/13/2006	2	226	0	126	2	226	0	126	-6.2	-278				DA
SSG-023	2	9/13/2006	0	86	2	154	0	86	2	154	6.2	189				DA
SSG-024	2	9/13/2006	1	103	1	112	1	103	1	112	0.0	25				DA
SSG-025	2	9/13/2006	0	115	1	116	0	115	1	116	3.1	3				DA
SSG-026	2	9/13/2006	0	103	1	113	0	103	1	113	3.1	28				DA
SSG-027	2	9/13/2006	0	119	6	100	0	119	6	100	18.7	-53				DA
SSG-028	2	9/13/2006	1	98	2	118	1	98	2	118	3.1	56				DA
SSG-029	2	9/13/2006	1	100	3	110	1	100	3	110	6.2	28				DA
SSG-030	2	9/13/2006	0	109	2	100	0	109	2	100	6.2	-25				DA
SSG-031	2	9/13/2006	0	90	1	86	0	90	1	86	3.1	-11				DA
SSG-032	2	9/13/2006	1	96	3	113	1	96	3	113	6.2	47				DA
SSG-033	2	9/13/2006	1	111	0	106	1	111	0	106	-3.1	-14				DA
SSG-034	2	9/13/2006	0	134	0	120	0	134	0	120	0.0	-39				DA
SSG-035	2	9/14/2006	1	160	1	120	1	160	1	120	0.0	-111				DA
SSG-036	1	9/14/2006	N/A	50	N/A	60	N/A	50	N/A	60	N/A	34	N/A		Beta-only survey using GM tube	DA
SSG-037	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-038	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-039	2	9/14/2006	1	120	0	139	1	120	0	139	-9.3	158				DA
SSG-040	2	9/14/2006	0	139	0	122	0	139	0	122	0.0	-142				DA
SSG-041	2	9/14/2006	1	153	1	160	1	153	1	160	0.0	58				DA
SSG-042	1	9/14/2006	N/A	60	N/A	70	N/A	60	N/A	70	N/A	34	N/A		Beta-only survey using GM tube	DA
SSG-043	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-044	1	9/14/2006	N/A	50	N/A	70	N/A	50	N/A	70	N/A	68	N/A		Beta-only survey using GM tube	DA

Exterior Passive Soil Gas Probe Installation Surveys								dpm/100 cm^2	
Detector No.	Probe	Survey Active Area (cm^2)	Alpha Efficiency	Beta Efficiency	Survey Type	Static Count Time (min)	Daily Background Count Time (min)	Alpha Flag	Beta Flag
1	44-9	300	n/a	10%	Count Rate	N/A	N/A	N/A	1000
2	43-93	300	10.7%	12.0%	Static Count	1.0	1.0	20	1000

Survey Location	Detector Number	Date	Background Count (local at SG location or in general area)		Sample Count		Background (cpm)		Sample Counts (cpm)		Sample Count (dpm/100 cm2)		> a flag	> b flag	Notes	Tech. Initial
			α	β	α	β	α	β	α	β	α	β				
SSG-045	2	9/14/2006	0	139	9	162	0	139	9	162	84.1	192	FLAG			DA
SSG-046	2	9/14/2006	1	120	1	165	1	120	1	165	0.0	375				DA
SSG-047	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-048	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-049	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-050	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-051	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-052	2	9/14/2006	1	153	1	156	1	153	1	156	0.0	25				DA
SSG-053	2	9/14/2006	1	160	1	120	1	160	1	120		-408			Beta-only survey using GM tube	DA
SSG-054	1	9/14/2006	N/A	45	N/A	45	N/A	45	N/A	45	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-055	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-056	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-057	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-058	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-059	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-060	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-061	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-062	1	9/14/2006	N/A	60	N/A	70	N/A	60	N/A	70	N/A	34	N/A		Beta-only survey using GM tube	DA
SSG-063	1	9/14/2006	N/A	60	N/A	50	N/A	60	N/A	50	N/A	-34	N/A		Beta-only survey using GM tube	DA
SSG-064	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-065	1	9/14/2006	N/A	60	N/A	70	N/A	60	N/A	70	N/A	34	N/A		Beta-only survey using GM tube	DA
SSG-066	1	9/14/2006	N/A	60	N/A	70	N/A	60	N/A	70	N/A	34	N/A		Beta-only survey using GM tube	DA
SSG-067	1	9/14/2006	N/A	50	N/A	75	N/A	50	N/A	75	N/A	85	N/A		Beta-only survey using GM tube	DA
SSG-068	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-069	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-070	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-071	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-072	2	9/15/2006	0	107	1	109	0	107	1	109	9.3	17				DA
SSG-073	2	9/15/2006	0	160	2	180	0	160	2	180	18.7	167				DA
SSG-074	2	9/15/2006	0	116	0	127	0	116	0	127	0.0	92				DA
SSG-075	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-076	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-077	1	9/14/2006	N/A	50	N/A	50	N/A	50	N/A	50	N/A	0	N/A		Beta-only survey using GM tube	DA
SSG-078	2	9/15/2006	1	107	1	94	1	107	1	94	0.0	-108				DA
SSG-079	2	9/15/2006	0	124	0	106	0	124	0	106	0.0	-150				DA
SSG-080	2	9/15/2006	4	125	2	121	4	125	2	121	-18.7	-33				DA
SSG-081	2	9/15/2006	4	125	10	118	4	125	10	118	56.1	-58	FLAG			DA
SSG-082	2	9/15/2006	0	131	0	96	0	131	0	96	0.0	-292				DA
SSG-083	2	9/15/2006	5	128	0	111	5	128	0	111	-46.7	-142				DA
SSG-084	2	9/15/2006	1	117	1	122	1	117	1	122	0.0	42				DA
SSG-085	2	9/15/2006	0	110	1	111	0	110	1	111	9.3	8				DA
SSG-086	2	9/15/2006	1	121	3	117	1	121	3	117	18.7	-33				DA
SSG-087	2	9/15/2006	1	101	1	116	1	101	1	116	0.0	125				DA
SSG-088	2	9/15/2006	1	101	2	108	1	101	2	108	9.3	58				DA
SSG-089	2	9/15/2006	1	101	2	98	1	101	2	98	9.3	-25				DA


N
B7OSSA-12*
SCAN RESULTS
Background Total Counts CPM
Alpha: 1 Beta: 114
Install DPM (9/12/2006)
Alpha: 4.5 Beta: 29
Removal DPM (9/13/2006)
Alpha: 0 Beta: 0
*B7OSSA-90 (Duplicate Scan)
B7OSSA-11
SCAN RESULTS
Background Total Counts CPM
Alpha: 4 Beta: 139
Install DPM (9/12/2006)
Alpha: -18.2 Beta: 5
Removal VPM (9/13/2006)
Alpha: 0 Beta: 0
B7OSSA-10
SCAN RESULTS
Background Total Counts CPM
Alpha: 1 Beta: 124
Install DPM (9/12/2006)
Alpha: 18.2 Beta: 148
Removal DPM (9/13/2006)
Alpha: 0 Beta: 0
B7OSSA-08
SCAN RESULTS
Background Total Counts CPM
Alpha: 2 Beta: 136
Install DPM (9/12/2006)
Alpha: 4.5 Beta: 90
Removal DPM (9/13/2006)
Alpha: 0 Beta: 0
B7OSSA-01
SCAN RESULTS
Install CPM (9/12/2006)
Alpha: 0 Beta: N/A
Removal CPM (9/13/2006)
Alpha: N/A Beta: 40
B7OSSA-07
SCAN RESULTS
Background Total Counts CPM
Alpha: 2 Beta: 110
Install DPM (9/12/2006)
Alpha: -9.1 Beta: 52
Removal DPM (9/13/2006)
Alpha: 0 Beta: 0
RECHARGE BASIN
B7OSSA-02
SCAN RESULTS
Install CPM (9/12/2006)
Alpha: 3 Beta: N/A
Removal CPM (9/13/2006)
Alpha: N/A Beta: 40
BUILDING 70
ONE STORY BRICK & CONCRETE BUILDING
(HISTORIC & PRESENT)
CONCRETE BLOCK
ADDITION
ONE STORY
MASONRY ADDITION
B7OSSA-09
SCAN RESULTS
Background Total Counts CPM
Alpha: 2 Beta: 139
Install DPM (9/12/2006)
Alpha: -4.5 Beta: 33
Removal DPM (9/13/2006)
Alpha: 0 Beta: 0
B7OSSA-03
SCAN RESULTS
Install CPM (9/12/2006)
Alpha: 0 Beta: N/A
Removal CPM (9/13/2006)
Alpha: N/A Beta: 40
B7OSSA-06
SCAN RESULTS
Background Total Counts CPM
Alpha: 2 Beta: 140
Install DPM (9/12/2006)
Alpha: 0 Beta: 152
Removal DPM (9/13/2006)
Alpha: 0 Beta: 0
B7OSSA-05
SCAN RESULTS
Background Total Counts CPM
Alpha: 2 Beta: 140
Install DPM (9/12/2006)
Alpha: 18.2 Beta: 67
Removal DPM (9/13/2006)
Alpha: 0 Beta: 0
B7OSSA-04
SCAN RESULTS
Install CPM (9/12/2006)
Alpha: 0 Beta: N/A
Removal CPM (9/13/2006)
Alpha: N/A Beta: 40
HICKSVILLE
LEGEND
Soil Vapor Gas Sample
Existing Buildings
Historic Buildings
Historic Features
REV
DATE
DESCRIPTION
BY
CABRERA SERVICES
473 SILVER LANE
EAST HARTFORD, CT
06118
U.S. ARMY ENGINEER DISTRICT, BALTIMORE
CORPS OF ENGINEERS
KANSAS CITY, KANSAS
PREPARED BY: JDM
REVIEWED BY:
REVISED BY:
HICKSVILLE
NEW YORK
SOIL VAPOR GAS SURVEY OF BUILDING 70 INTERIOR
SYLVANIA - CORNING FUSRAP SITE
FIGURE NOTES:
Instruments used for survey
43-93
CONTRACT #
DRAWING #
07-1005.00-11
1
SCALE:
DATE: 10/03/2006

REMEDIAL INVESTIGATION REPORT

APPENDIX B

Phase II Reports

Sylvania Corning FUSRAP Site

Hicksville, Nassau County, New York

Prepared for:
UNITED STATES ARMY CORPS OF ENGINEERS
Kansas City District
And
New York District

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TECHNICAL MEMORANDUM

Results of Downhole Gamma Logging, Soil Core Scanning, and Radiological Support Surveys

Sylvania Corning FUSRAP Site
Hicksville, New York

Prepared for:
Ecology and Environment, Inc.
368 Pleasant View Drive
Lancaster, NY 14086

Prepared by:



CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

103 East Mount Royal Ave, Suite 2B
Baltimore, MD 21202

February 2008

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1.0 INTRODUCTION

The Sylvania Corning site (hereafter referred to as the 'Site') occupies 10.5 acres divided into three contiguous properties located at 70, 100, and 140 Cantiague Rock Road, in the westernmost portion of Hicksville, Long Island, approximately 30 miles east of lower Manhattan. Industrial and commercial properties adjoin the Site to the north (the Nassau County Department of Public Works), to the south (General Instruments' inactive waste disposal site, currently unoccupied), to the west by Cantiague Rock Road, and to the east by the golf driving range of Cantiague Park.

The Site was added to the Formerly Used Sites Remedial Action Program (FUSRAP) in 2006 to evaluate radioactive contamination resulting from former operations conducted under contract to the federal government. The US Army Corps of Engineers (USACE), Kansas City District has responsibility for the FUSRAP investigation of the Site. Ecology and Environment, Inc. (E & E) has been contracted by USACE to conduct a remedial investigation of uranium and thorium contamination at the Site.

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2.0 SCOPE OF WORK

Cabrera Services, Inc. (CABRERA) has been contracted by E & E to perform Health Physics (HP) support services for the second phase of the FUSRAP remedial investigation at the Site. These services included the performance of soil core scanning surveys, Downhole Gamma Logging (DGL) surveys, and providing radiological support for the following activities:

- Leach pool/drain/drywell investigations;
- Collection of confirmatory borings in remediation cells;
- Collection of borings in data gap areas of the Building 70 property;
- Collection of borings in the area between Building 100 and Building 140;
- Concrete coring investigations in Building 70;
- Test pit excavations to investigate geophysical anomalies at the Site.

The results of these activities were used to assist sample location efforts in the field, ensure worker health and safety, and to provide radiological data for the draft RI report.

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3.0 SURVEY METHODOLOGY

To accomplish the scope of work, CABRERA provided two teams of two personnel each. The first team consisted of Albert Craig and Kevin Andrews (Site Safety & Health Officer). The second team was comprised of Derrick Albert and Gordon Tannahill (Field Site Manager and Site Radiation Safety Officer). All work was performed in accordance with *Final Remedial Investigation Work Plan (Phase I & Phase II) for the Sylvania Corning FUSRAP Site, 2007* (WP) and CABRERA procedures.

3.1 Soil Core Scanning Surveys

Soil sample cores were scanned for ambient gross gamma radiation using a lead shielded Ludlum Model 44-10 sodium-iodide (NaI) probe connected to a Ludlum Model 2221 ratemeter/scaler. Soil cores were placed in a counting jig and scanned at a rate of one to two inches per second. Scanning results were recorded on data sheets in increments of one foot at the location of highest activity in that increment. Local background measurements were collected for the 44-10 detector within the jig at each borehole.

3.2 Downhole Gamma Logging

Sample boreholes were surveyed for gross gamma radiation using a Bicron Model G1 1x1 NaI probe connected to a Ludlum Model 2221 ratemeter/scaler. Once the target depth was reached by the drilling contractor, each sample borehole was sleeved with 1.5-in outside diameter (OD) poly-vinyl chloride (PVC) pipe. The pipe was used to maintain the integrity (i.e., prevent collapse) of the borehole once the sample barrel and drilling rods were removed from the hole. One-minute integrated measurements were collected in one foot increments within the borehole, relative to the bottom, and recorded on a data sheet. An integrated one minute reference measurement was performed at the surface of each borehole. All gamma logging surveys were performed in accordance with CABRERA procedures.

3.3 Radiological Support

3.3.1 Routine Radiological Monitoring

Radiological controls were maintained and contamination monitoring was performed by team members during all sampling and subsurface activities. Radiological controls included posting and implementation of exclusion zones (EZ) surrounding work areas, treating all equipment in work areas as if contaminated, and performing release surveys on all equipment and personnel exiting from an EZ. Contamination monitoring was performed throughout work activities to identify potential contamination as soon as possible. Routine contamination monitoring results were compared to the acceptable levels of surface contamination (See Section 3.4). All contamination monitoring was performed in accordance with CABRERA procedures and the approved WP (E & E, 2007).

Routine monitoring included the following:

- Ambient Gamma Monitoring (Ludlum Model 19 exposure rate meter)
- Masselin Cloth (Ludlum Model 2221 ratemeter/scaler with 43-93 α/β probe)

- Surface scans (Ludlum Model 12C with 44-9 β/γ probe and Ludlum Model 2221 with 43-93 probe)
- Frisking of Personnel and Equipment (Ludlum Model 12C with 44-9 β/γ probe and Ludlum Model 2221 with 43-93 α/β probe)
- Swipe Samples (Ludlum Model 2929)

In addition to routine contamination monitoring, surveys for free release of materials and equipment were performed for equipment leaving the site. Free release survey results were compared to the acceptable levels of surface contamination (See Section 3.4). All free release surveys were performed in accordance with CABRERA procedures and the WP (E & E, 2007).

3.3.2 Monitoring During Test Pitting

Exclusion zones were set up around the test pit work areas and pre-excavation surveys were performed with Ludlum Model 2221 ratemeter/scalers with 44-10 NaI probes and Ludlum Model 19 detectors. Plastic sheeting was laid over the asphalt so that the spoils could be surveyed. Soil was scanned using a Ludlum Model 44-10 probe and Ludlum Model 19 in the bucket before being placed on the spoils pile. Once a uniform depth of soil had been removed from the test pit, the spoils from that depth were spread out on the plastic, visually examined, and scanned again using a 44-10 probe and Model 19. Routine contamination monitoring was performed throughout the excavation process.

3.3.3 Building 70 Concrete Core Removal

The Phase I investigation identified seven floor locations in Building 70 with elevated surface activity. Cores from these seven locations were collected as part of the Phase II investigation. Cores were bored through the concrete to the soil below the slab. If an expansion joint was present at the location, the core was drilled such that the expansion joint ran the diameter of the bit.

Prior to drilling, sample locations were posted as EZ and sectioned off with yellow and magenta rope. Personnel inside the restricted area donned tyvek suits, rubber booties, and gloves for contamination control purposes. Four inch diameter concrete cores were drilled and removed under continuous HP coverage. Water use during boring operations was required for cooling and dust suppression, but was kept to a minimum. All water used during coring activities was collected via absorbent pads. Absorber pads, PPE, and materials used in restricted areas were collected and packaged as rad waste. Cores were placed in plastic bags during storage.

3.4 Acceptable Levels of Surface Contamination

Table 1 provides acceptable surface contamination limits for various radionuclides as applied to surface contamination measurements. The most conservative values (transuranics) were used since the predominant radionuclides of potential concern are thorium and uranium. The alpha removable contamination limit is 20 disintegrations per minute per 100 square centimeters (dpm/100cm^2), while the maximum and average contamination limit is 300 and 100 dpm/100cm^2, respectively. The beta-gamma removable contamination limit is 1000 dpm/100cm^2.

TABLE 1: ACCEPTABLE LEVELS OF SURFACE CONTAMINATION

Radionuclide[a]	Acceptable Surface Contamination Levels (DPM/100 cm^2)		
	Removable[b, e]	Average[b, c]	Maximum[b, d]
Transuranics, ^{226}Ra, ^{227}Ra, ^{230}Th, ^{228}Th, ^{231}Pa, ^{221}Ac, ^{125}I, ^{129}I,	20	100	300
Th-Natural, ^{232}Th, ^{90}Sr, ^{223}Ra, ^{224}Ra, ^{232}U, ^{126}I, ^{131}I, ^{133}I	200	1,000	3,000
U-Natural, ^{235}U, ^{238}U, and associated decay products	1,000 α	5,000 α	15,000 α
Beta-Gamma emitters (radionuclides with decay modes other than alpha emission or spontaneous fission) except ^{90}Sr and others noted above.	1,000 β γ	5,000 β γ	15,000 β γ

Taken from Table 6-4 of USACE Radiation Protection Manual EM-385-1-80.

a Where surface contamination by both alpha- and beta-gamma emitting nuclides exists, the limits established for alpha- and beta-gamma emitting nuclides should apply independently.

b As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

c Measurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each object.

d The maximum contamination level applies to an area not more than 100 cm^2.

e The amount of removable radioactive material per 100 cm^2 of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionately and the entire surface should be wiped.

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4.0 RESULTS

4.1 Soil Core Scanning Surveys

Sample core scan results were used to aid in the selection of biased samples. Each sample core was scanned and the area of highest activity was marked on the core and recorded on the data sheet. A total of 180 core scan surveys were performed at the Site. Core scan results ranged from a minimum of 1,100 cpm to a maximum of 9,000 cpm on the shielded 44-10 NaI detector. The median range for individual boreholes was 300 cpm. Four boreholes (i.e., F6-01, 100-11, 140-06, and SU-08-06) had core scan results with a range of 1,000 cpm or greater.

A summary of soil core scan results by borehole is presented in Attachment 1. Electronic copies of all Soil Core Scanning Survey data sheets are located on the attached Data compact disk (CD).

4.2 Downhole Gamma Logging Surveys

A total of 163 DGL surveys were performed at the Site. DGL results ranged from a minimum of 623 cpm to a maximum of 29,106 cpm. The median range of the DGL results within the boreholes was 1,895 cpm. A summary of DGL results by borehole is presented in Attachment 1. Electronic copies of all DGL data sheets are located in Attachment 2 on the attached Data CD.

4.3 Radiological Support

4.3.1 Contamination Monitoring

All sampling and subsurface activities were monitored for the presence of elevated radiological activity. Results of routine contamination monitoring were recorded in site log books. All of the routine removable contamination monitoring results were below the applicable limits in Table 1. Electronic copies of the site logbooks with routine contamination monitoring results are located in Attachment 2 on the attached Data CD. All routine contamination monitoring was performed in accordance with CABRERA procedures and the WP (E & E, 2007).

In addition to the sampling support activities, all equipment leaving the site was surveyed for free release. Equipment that was surveyed for free release included drilling rigs, backhoes, and all associated support equipment. Survey results for all release surveys were below the applicable removable release criteria in Table 1. Electronic copies of all radiological release surveys are located in Attachment 2 on the attached Data CD.

4.3.2 Test Pits

A total of ten test pits were excavated at the site. Soil scanning results ranged from 1,300 cpm to 6,500 cpm with a shielded Ludlum 44-10 NaI probe. Table 2 summarizes the survey results for each test pit. Five of the test pits (EM-3, EM-5, EM-15-1B, EM-29A, and GPR-F) identified elevated levels of radioactivity. Descriptions of the findings within each of these pits are provided in the following paragraphs. An electronic copy of the radiological survey forms of the test pits is located in Attachment 2 on the attached Data CD.

In Test Pit EM-3, approximately 20 linear feet of 3-in diameter pipe with internal contamination was identified at a depth of approximately 3’ 3-ft below ground surface (bgs). Exposure rate

measurements of the pipe were up to 20 μR/hr on contact and 5 μR/hr at one meter from the pipe with an ambient background of 5 μR/hr. The highest scan result from the end of a section of pipe was 3,000 β/γ cpm with a Ludlum Model 44-9 with an instrument background of 40 β/γ cpm. The exposure rate on a soil sampled pulled from the interior of the pipe was 35 μR/hr on contact. The lengths of pipe were bagged on both ends and placed inside a double bagged drum. The exposure rate on the drum was 10 μR/hr on contact and 5 μR/hr at one meter. Swipe measurements collected from the interior of the pipes and the work area were below the applicable limits in Table 1, indicating that the contamination is fixed.

In Test Pit EM-5, a four foot section of 3-in diameter pipe with internal contamination was identified at a depth of approximately 2 ft bgs. Exposure rate measurements of the pipe were background on contact. The highest scan result from the end of the pipe was 4,000 β/γ cpm with a Ludlum Model 44-9, relative to a local background count rate of 40 β/γ cpm. The exposure rate on a soil sampled pulled from the interior of the pipe was 35 μR/hr on contact. The pipe was double bagged and fitted into a drum to be disposed of as radioactive waste. Masselin results collected from the interior of the pipes and the work area were below the applicable limits in Table 1.

Test Pit EM-15-1B had elevated soil at a depth of 1-ft to 3-ft bgs. The elevated material was found to present in between two asphalt layers. Mixed in the soil was greenish salt like material that appeared to be the source of the elevated readings. Small amount (i.e., 0.5 grams) of the salt was collected and had a direct beta/gamma reading of 800 β/γ cpm with a Ludlum 44-9. On the face of the trench wall, the exposure rate was up to 70 μR/hr on contact and 5 μR/hr at one meter from the face of the trench. The elevated soil that was excavated from between the asphalt layers was loaded into three drums and labeled as radioactive waste. Each drum had an exposure rate of 10 μR/hr on contact and 5 μR/hr at one meter. Masselin results collected from the work area were all below the applicable limits in Table 1.

In Test Pit EM-29A, a small (e.g., 5-30 gallon) drum carcass or container was found at a depth of approximately 3-ft bgs. The remains of the crushed and rusted container was in two pieces with one piece measuring approximately 2-ft by 2-ft and the other piece being 1.5-ft by 1-ft. A survey of the drum identified elevated alpha and beta/gamma activity in the seams and folds of the carcass. The drum read 15 μR/hr on contact and 5 μR/hr at one meter. A static count of the drum bung with a Ludlum 43-93 was approximately 60 α dpm/100cm^2 and 17,450 β/γ dpm/100cm^2. Masselin results of the drum and general area were below the applicable limits in Table 1. The drum carcass appeared to have lead shielding associated with it. The carcass and surrounding soil were double bagged and placed in a separate drum for storage as suspect radioactive waste.

In Test Pit GPR-F, soil scanning identified a hardened "nugget" with elevated activity at a depth of approximately 3-ft bgs. The shielded Ludlum 44-10 reading on contact with the nugget was 60,000 γ cpm. The nugget was 70 μR/hr on contact and 5 μR/hr at one meter. The nugget had static alpha/beta count rates of 42 dpm/100cm^2 and 350 dpm/100cm^2 with the Ludlum 43-93, respectively and 80,000 β/γ dpm/100cm^2 with the Ludlum 44-9. The nugget and immediate soil were double bagged and placed in a drum as radioactive waste along with the with the drum carcass from EM-29A.

TABLE 2: TEST PIT SURVEY RESULTS

Date	Location ID	Total Depth (ft)	Minimum 44-10 Result (cpm)	Maximum 44-10 Result (cpm)	Maximum Exposure Rate (µR/hr)
6/14/07	EM-2	4	1,600	3,000	6
6/14/07	EM-3	7	1,900	3,000	6
6/14/07	EM-5	4	1,800	2,400	6
6/13/07	EM-15-1A	3	1,600	3,000	10
6/13/07	EM-15-1B	7	1,000	6,500	70
6/12/07	EM-21	7	1,200	1,800	5
6/11/07	EM-26	4	1,800	2,600	6
6/11/07	EM-29A	7	2,100	6,500	15
6/11/07	EM-29B	4	2,000	2,400	5
6/12/07	GPR-F	4	1,800	2,500	70

4.3.3 Building 70 Concrete Core Removal

Initial surveys were performed at locations G4-01, F3-01, F6-01, F6-02, D9-01, A3-01 and D8-02. Elevated activity was confirmed on surface areas and in the expansion joints of the concrete slabs. Ambient exposure rates at sample locations ranged from 5 to 50 µR/hr on contact. Static measurements of surface activity ranged up to 127 α dpm/100cm^2 and 235,860 β/γ dpm/100cm^2 with the Ludlum Model 43-93. No removable activity above the applicable limits in Table 1 was identified at these sample locations.

At location D9-01, elevated activity was identified in the top 3-in of the expansion joint. The highest reading on the core was 1,500 cpm β/γ with the Ludlum Model 44-9 and a surface exposure rate of 5 µR/hr. Elevated activity was present in the expansion joint on both sides of the hole after the core was removed. At the bottom of the hole, a 1-min integrated result with the shielded Ludlum 44-10 was 14,000 cpm. No removable activity above the applicable limits in Table 1 was found after sampling was completed.

At boring location A6-01, elevated activity was identified the throughout the expansion joint (i.e., 4-in). Elevated activity was also identified on the soil below the slab. The core sample had a surface count rate of 35,000 β/γ cpm with the Ludlum Model 44-9 and an exposure rate of 20 µR/hr on contact. Soil at the bottom of the hole appeared elevated with a shielded Ludlum 44-10 result of 20,000 γ cpm in contact with the soil. Given these levels, the Geoprobe unit was brought in to collect subsurface soil samples at this location. Soil core screening identified elevated activity in the first 2 to 3 ft of soil with results of up to 9,000 cpm on the shielded 44-10. The Geoprobe hit refusal at approximately 7-ft bgs. Soil core screening results returned to background levels (~2,100 cpm) between 4-ft and 7-ft bgs.

For boreholes A3-01, D8-02, F6-02, A3-01, and G4-01, core readings ranged from 100 to 35,000 cpm β/γ with a Ludlum Model 44-9. Instrument readings at the bottom of the boreholes ranged from 2,730 cpm to 4,746 γ cpm with the shielded Ludlum 44-10.

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5.0 QUALITY CONTROL

5.1 Quality Control Measures

Quality control (QC) measurements for field instrumentation included initial response to a radioactive source and daily operability checks. All instruments were calibrated within the last twelve months by the instrument vendor, a certified calibration laboratory, sources traceable to the National Institute of Standards and Technology (NIST). Calibration certificates for each instrument are provided on the attached Data CD.

Prior to commencing any surveys, ten (10) initial readings were collected on each detector using Technicium-99 (^{99}Tc) and Thorium-230 (^{230}Th) sources to establish a control chart for each unit to determine daily operability. The bases for the daily operability of these instruments are ± 20% of the average for the initial ten measurements for the Ludlum Model 44-9 probe, Ludlum Model 44-10 probe, Bicron G1 probe, and Ludlum Model 19 detector and ±3-sigma of the average for the initial ten measurements for the Ludlum Model 43-93 probe and Ludlum 2929 detector. These data are included in Attachment 2. All field instruments satisfactorily passed the daily QC checks.

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6.0 REFERENCE

(E & E, 2007) *Final Remedial Investigation Work Plan (Phase I & Phase II) for the Sylvania Corning FUSRAP Site, Environment and Ecology, Inc. March 2007*

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ATTACHMENT 1

SUMMARY OF SOIL CORE SCANNING SURVEY AND DOWNHOLE GAMMA LOGGING SURVEY RESULTS

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Date	Location ID	Soil Core Scanning Survey Results (Shielded 44-10 NaI)			DGL Survey Results (1x1 NaI)			Ambient Exposure Rate Result (µR/hr)
		Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	
6/13/07	100-01	11’	1,200	1,500	9’	1,971	2,765	5
6/18/07	100-02	12’	1,400	1,700	11’	1,228	3,151	6
6/18/07	100-03	10’	1,350	1,550	10’	1,475	3,237	5
6/13/07	100-04	8’	1,200	1,400	8’	1,404	2,912	5
6/13/07	100-05	12’	1,300	1,600	12’	1,434	4,377	5
6/7/07	100-07	16’	1,850	2,000	17’	788	3,395	5
6/7/07	100-08	16’	1,775	2,050	17’	985	3,542	5
6/7/07	100-09	16’	1,725	2,025	17’	816	2,492	5
6/8/07	100-10	16’	1,850	2,250	15’	1,022	2,977	5
6/15/07	100-10	15’	1,150	1,275	N/A	N/A	N/A	N/A
6/7/07	100-11	16’	2,000	3,700	13’	1,232	7,833	7
6/18/07	140-01	9’	1,750	2,100	5’	1,601	2,759	5
6/14/07	140-02	11’	1,125	1,450	6’	1,485	2,892	4
6/13/07	140-03	9’	1,200	1,550	5’	1,499	2,638	4
6/14/07	140-04	11’	1,100	1,300	10’	1,659	2,887	4
6/13/07	140-05	11’	1,225	1,450	11’	2,285	4,557	4
6/12/07	140-06	16’	1,450	2,550	16’	1,176	3,564	6
6/12/07	140-08	16’	1,450	1,800	16’	1,141	8,464	5
6/18/07	140-09	11’	1,550	2,000	11’	1,262	3,110	6
6/7/07	140-10	16’	1,725	2,000	17’	966	3,604	4
6/7/07	140-11	16’	1,750	2,300	17’	960	3,357	5
5/18/07	A3-01	8’	1,800	2,000	8’	1,490	2,380	5
6/5/07	DRA-2	16’	1,500	1,950	10’	1,529	5,757	6
6/1/07	DR-C	20’	1,200	1,500	18’	1,015	2,540	5
6/1/07	DR-D	8’	1,250	1,375	N/A	N/A	N/A	5
6/1/07	DR-E	16’	1,250	1,900	11’	1,121	2,675	4
6/6/07	DR-F	20’	1,200	1,450	20’	751	2,986	4
6/5/07	DR-G	20’	1,200	1,500	20’	831	3,108	4
6/1/07	DR-H	16’	1,400	1,650	14’	1,099	2,788	5
6/6/07	DRH-A1	15’	1,475	2,000	12	1,124	5,236	5
6/6/07	DRH-B	20’	1,650	2,000	15	1,097	2,877	5
6/1/07	DR-I	20’	1,375	1,750	16’	919	2,838	5
5/31/07	DR-J	16’	2,050	2,300	15’	1,328	4,046	5
5/31/07	DR-K	20’	2,150	2,800	17’	900	3,461	5
5/31/07	DR-L	16’	2,000	2,300	15’	1,038	2,867	6
6/1/07	DR-M	12’	1,600	1,800	N/A	N/A	N/A	5
6/4/07	DR-N	15’	1,250	2,075	11’	1,372	2,534	4
6/4/07	DR-O	20’	1,300	1,780	20’	939	2,368	4
6/6/07	DR-P	20’	1,250	1,600	18’	872	2,623	4
6/7/07	DR-R1/R2	8’	1,450	1,550	7’	1,386	2,785	4
6/1/07	DR-U	16’	1,450	1,790	14’	1,124	3,757	5
6/5/07	DR-V	16’	1,550	1,800	14’	1,202	3,315	6

Date	Location ID	Soil Core Scanning Survey Results (Shielded 44-10 NaI)			DGL Survey Results (1x1 NaI)			Ambient Exposure Rate Result (µR/hr)
		Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	
6/5/07	DRY-B	16’	1,925	2,050	16’	1,082	1,862	7
6/5/07	DRY-D	32’	1,900	2,450	32’	750	2,645	5
6/4/07	DRY-E	16’	1,450	1,650	15’	907	1,978	5
6/5/07	DRYH-A	16’	2,000	2,450	15’	1,171	3,501	7
5/23/07	DRY-HC	16’	1,700	1,900	16’	1,154	2,318	7
6/6/07	DRYH-F	20’	1,250	1,600	20’	879	3,207	4
5/17/07	F6-01	7’	1,900	9,000	6’	1,560	2,910	5
6/5/07	LPH-B	16’	2,000	2,150	16’	921	2,548	6
6/12/07	SBRI-SU08-01	16’	1,350	1,700	16’	1,183	2,148	5
6/11/07	SBRI-SU08-03	16’	1,250	1,500	16’	979	3,683	5
6/11/07	SBRI-SU08-04	12’	1,250	1,450	12’	1,306	2,198	5
6/11/07	SBRI-SU08-05	16’	1,350	1,400	16’	1,009	2,503	5
6/11/07	SBRI-SU08-06	16’	1,400	2,450	16’	846	2,075	8
6/8/07	SBRI-SU08-07	16’	2,350	2,850	16’	719	2,383	5
6/14/07	SBRI-SU08-07	16'	1,150	1,325	N/A	N/A	N/A	7
6/8/07	SBRI-SU08-08	16’	2,150	2,625	16’	869	2,382	5
6/15/07	SBRI-SU08-08	15’	1,200	1,350	N/A	N/A	N/A	N/A
6/6/07	SBRI-SU08-09	20’	2,050	2,500	20	758	2,559	5
6/6/07	SBRI-SU08-10	20’	2,050	2,425	19	785	2,795	5
6/15/07	SBRI-SU08-10	4’	1,275	1,400	N/A	N/A	N/A	N/A
6/8/07	SBRI-SU08-12	16’	2,250	2,750	16’	722	3,679	6
6/15/07	SBRI-SU08-12	15’	1,125	1,600	N/A	N/A	N/A	N/A
6/6/07	SBRI-SU08-13	20’	2,025	2,450	20	892	3,102	5
6/7/07	SBRI-SU08-15	16’	1,700	2,000	17’	967	3,468	6
5/23/07	SBRI-SU09-01	24’	1,655	2,000	23’	927	3,135	7
5/16/07	SBRI-SU09-02	16'	1,200	1,400	15'	1,055	3,275	5
6/12/07	SBRI-SU09-02	0’ - 5’	1,450	1,700	N/A	N/A	N/A	5
5/16/07	SBRI-SU09-03	16'	1,225	1,350	16'	764	3,697	6
6/12/07	SBRI-SU09-03	10' - 13'	1,400	1,500	N/A	N/A	N/A	5
5/15/07	SBRI-SU09-04	15'	1,500	1,850	7'	1,538	2,908	5
5/15/07	SBRI-SU09-05	17'	1,500	1,700	17'	662	3,883	5
5/21/07	SBRI-SU09-06	20’	1,300	1,550	20’	728	4,257	5
5/15/07	SBRI-SU09-07	15'	1,300	1,800	8'	1,583	2,980	7
5/15/07	SBRI-SU09-08D	50'	1,350	2,175	35'	759	4,203	6
5/16/07	SBRI-SU09-09	14'	1,450	1,650	7'	1,766	2,970	5
6/14/07	SBRI-SU09-09	14'	1,350	1,525	N/A	N/A	N/A	5
5/17/07	SBRI-SU09-10	55’	1,450	1,750	27’	747	3,120	5
5/17/07	SBRI-SU09-11	16’	1,400	1,750	10’	1,140	2,180	5
5/21/07	SBRI-SU09-12	16’	1,850	2,000	16’	789	2,567	7
5/16/07	SBRI-SU09-13	16'	1,200	1,450	10'	1,210	3,077	5
6/12/07	SBRI-SU09-13	10' - 15'	1,400	1,500	N/A	N/A	N/A	5
5/15/07	SBRI-SU09-14	15'	1,500	1,950	10'	1,651	3,044	5
5/29/07	SBRI-SU10-01	9’	1,400	1,550	6’	1,317	2,069	5
6/7/07	SBRI-SU10-02	11’	1,300	1,500	9’	1,705	2,513	4

Date	Location ID	Soil Core Scanning Survey Results (Shielded 44-10 NaI)			DGL Survey Results (1x1 NaI)			Ambient Exposure Rate Result (µR/hr)
		Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	
6/8/07	SBRI-SU10-03	8’	1,825	2,000	6’	1,576	2,514	6
6/18/07	SBRI-SU10-03	8’	1,425	1,550	7’	1,519	2,484	5
5/25/07	SBRI-SU10-04	11.5’	1,400	1,650	16’	1,238	4,046	6
5/25/07	SBRI-SU10-05	11’	1,400	1,700	24’	1,818	3,652	6
5/29/07	SBRI-SU10-06	16’	1,300	1,800	13’	1,384	2,854	6
5/29/07	SBRI-SU10-07	12’	1,450	1,600	12’	1,887	4,182	6
5/29/07	SBRI-SU10-08	9’	1,400	1,700	7’	1,524	4,056	6
5/30/07	SBRI-SU10-09	6’	1,350	1,500	4’	1,993	2,478	6
5/30/07	SBRI-SU10-09	15’	1,350	1,525	N/A	N/A	N/A	5
5/31/07	SBRI-SU10-10	20’	1,150	1,500	16’	1,115	3,438	4
6/8/07	SBRI-SU10-11	11’	1,825	2,150	9’	1,868	3,809	6
6/14/07	SBRI-SU10-11	11’	1,450	1,675	N/A	N/A	N/A	4
5/30/07	SBRI-SU10-12	12’	1,375	1,650	12’	2,110	4,287	6
5/30/07	SBRI-SU10-13	9’	1,300	1,800	9’	1,918	4,064	6
6/4/07	SBRI-SU10-14	14’	1,675	2,075	13’	1,220	2,136	5
6/8/07	SBRI-SU10-15	10’	1,450	1,600	5’	2,027	2,489	5
6/14/07	SBRI-SU10-15	10’	1,800	2,150	N/A	N/A	N/A	4
6/4/07	SBRI-SU10-16	12’	1,750	1,900	10’	1,633	3,565	5
6/4/07	SBRI-SU10-17	9’	1,700	1,850	2’	1,608	1,680	5
5/31/07	SBRI-SU10-18	16’	1,350	1,500	14’	1,261	2,501	4
6/8/07	SBRI-SU10-19	11’	1,850	2,200	9’	1,280	3,392	6
6/14/07	SBRI-SU10-19	11’	1,375	1,550	N/A	N/A	N/A	5
6/4/07	SBRI-SU11-01	16’	1,450	1,875	15’	1,019	3,534	5
6/4/07	SBRI-SU11-02	12’	1,550	1,780	10’	1,430	3,251	4
6/7/07	SBRI-SU11-03	8’	1,300	1,625	8’	1,424	3,804	5
6/6/07	SBRI-SU11-04	20’	1,300	1,575	20’	872	2,734	5
6/6/07	SBRI-SU11-05	12’	1,350	1,550	12’	1,118	3,308	4
6/4/07	SBRI-SU11-06	9’	1,550	1,800	7’	1,421	3,829	5
5/30/07	SBRI-SU11-07	16’	1,300	1,600	12’	1,940	2,948	5
5/30/07	SBRI-SU11-08	16’	1,325	1,650	6’	1,483	3,103	5
6/6/07	SBRI-SU11-09	20’	1,250	1,500	20’	862	3,142	5
6/5/07	SBRI-SU11-10	14’	1,200	1,500	14’	972	3,001	4
6/6/07	SBRI-SU11-11	20’	1,200	1,600	20’	835	3,338	4
6/5/07	SBRI-SU11-12	20’	1,200	1,800	20’	878	3,141	4
6/4/07	SBRI-SU11-13	50'	1,300	1,500	50’	623	2,357	4
6/1/07	SBRI-SU11-14	10’	1,200	1,450	N/A	N/A	N/A	5
6/4/07	SBRI-SU11-14	32’	1,275	1,875	16’	1,085	3,299	4
6/1/07	SBRI-SU11-15	16’	1,250	1,475	13’	1,102	3,301	4
5/31/07	SBRI-SU11-16	20’	1,250	1,350	19’	969	3,526	4
6/5/07	SBRI-SU11-17	20’	1,300	1,600	20’	847	3,485	5
6/5/07	SBRI-SU11-18	18’	1,250	1,450	18’	837	3,472	4
5/31/07	SBRI-SU11-19	16’	1,250	1,600	15’	1,186	4,475	4
5/31/07	SBRI-SU11-20	16’	1,100	1,475	15’	992	3,223	4
6/5/07	SBRI-SU11-21	11’	1,250	1,600	11’	1,100	3,743	4

Date	Location ID	Soil Core Scanning Survey Results (Shielded 44-10 NaI)			DGL Survey Results (1x1 NaI)			Ambient Exposure Rate Result (µR/hr)
		Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	
6/7/07	SBRI-SU11-22	8’	1,260	1,500	7’	1,005	3,419	4
5/31/07	SBRI-SU12-02	20’	1,900	2,300	11'	1,359	3,528	5
5/31/07	SBRI-SU12-03	35’	2,000	2,350	28'	1,009	9,607	5
5/30/07	SBRI-SU12-05	16’	1,400	1,700	11’	1,267	3,555	4
5/30/07	SBRI-SU12-06	20’	1,350	1,650	13’	1,315	2,689	4
5/18/07	SBRI-SU12-09	12’	1,500	1,700	12'	1,260	2,670	5
5/24/07	SBRI-SU12-09	8' - 16'	1,600	1,750	12’	897	2,644	5
5/30/07	SBRI-SU12-10	16’	1,350	1,675	10’	1,162	3,053	4
5/24/07	SBRI-SU12-12	9’	1,500	1,700	N/A	N/A	N/A	5
5/24/07	SBRI-SU12-13	12’	1,625	1,750	12’	1,038	3,222	5
5/18/07	SBRI-SU12-14	12'	1,250	1,550	5'	1,494	3,214	6
5/29/07	SBRI-SU12-15	16’	1,450	1,700	12’	1,128	2,630	4
5/29/07	SBRI-SU12-16	13’	1,500	1,650	13’	1,455	3,087	4
5/29/07	SBRI-SU12-18	12’	1,550	1,750	8’	1,311	3,028	4
5/18/07	SBRI-SU12-19	10’	1,250	1,500	11’	1,460	3,160	6
5/18/07	SBRI-SU12-20	16’	1,700	1,900	13’	1,080	2,680	5
5/18/07	SBRI-SU12-21	12’	1,900	2,200	9’	1,480	3,870	5
5/21/07	SBRI-SU13-01	16’	1,450	1,950	11’	1,092	6,606	7
5/21/07	SBRI-SU13-02	16’	1,550	1,950	16’	911	2,186	7
5/21/07	SBRI-SU13-03	16’	1,550	1,700	16’	1,077	2,784	7
5/22/07	SBRI-SU13-04	16’	1,600	1,750	16’	909	3,750	7
5/22/07	SBRI-SU13-05	16’	1,600	1,750	16’	1,419	2,351	7
5/22/07	SBRI-SU13-06	16’	1,600	1,700	14’	1,088	3,508	6
5/22/07	SBRI-SU13-08	16’	1,600	1,800	16’	956	2,593	7
5/22/07	SBRI-SU13-09	16’	1,550	1,800	16’	835	2,662	7
5/22/07	SBRI-SU13-10	16’	1,550	1,800	15’	902	2,540	7
5/21/07	SBRI-SU13-11	16’	2,150	2,400	7’	1,481	2,469	7
5/21/07	SBRI-SU13-12	16’	2,400	2,650	15’	1,004	2,611	7
5/21/07	SBRI-SU13-13	16’	2,000	2,600	16’	911	2,125	7
5/21/07	SBRI-SU13-14	16’	1,900	2,300	7’	1,807	2,997	6
5/21/07	SBRI-SU13-15	16’	2,100	2,450	16’	867	3,397	5
5/23/07	SBRI-SU14-01	16’	2,200	2,500	12’	889	3,329	9
5/23/07	SBRI-SU14-02	16’	2,200	2,550	15’	995	2,571	9
5/24/07	SBRI-SU14-04	16’	2,200	2,350	16’	1,111	2,305	9
5/24/07	SBRI-SU14-05	24’	1,950	2,250	24’	915	2,823	8
5/24/07	SBRI-SU14-06	16’	1,900	2,200	16’	1,046	2,688	8
5/23/07	SBRI-SU14-07	16’	2,000	2,250	16’	920	3,313	6
5/24/07	SBRI-SU14-08	16’	1,550	1,900	14’	1,229	3,366	8
5/23/07	SBRI-SU14-09	16’	2,100	2,350	16’	965	3,313	5
5/23/07	SBRI-SU14-11	16’	1,950	2,200	15’	987	3,042	5
5/23/07	SBRI-SU14-12	16’	2,000	2,300	16’	937	2,822	5
5/22/07	SBRI-SU14-13	16’	1,700	1,950	16	1,106	2,429	4
5/22/07	SBRI-SU14-14	16’	1,950	2,100	16	986	2,525	7
5/22/07	SBRI-SU14-15	16’	2,000	2,150	16	776	2,854	5

Date	Location ID	Soil Core Scanning Survey Results (Shielded 44-10 NaI)			DGL Survey Results (1x1 NaI)			Ambient Exposure Rate Result (µR/hr)
		Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	
5/22/07	SBRI-SU14-16	16’	1,800	2,200	16	862	3,211	4
5/22/07	SBRI-SU14-17	16’	2,200	2,500	11	1,241	2,267	6
5/22/07	SBRI-SU14-18	16’	2,250	2,600	16	972	3,333	6
5/23/07	SBRI-SU14-19	16’	2,000	2,300	16’	869	3,428	5
5/23/07	SBRI-SU14-20	15’	1,850	2,200	15’	1,051	3,042	5
6/7/07	SMP-1	20’	1,300	1,475	20’	873	3,058	5

N/A- No DGL survey performed due to collapse of the borehole, archive sample collected, or recollection of sample.

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ATTACHMENT 2

INSTRUMENT QC CHECKS AND SWIPE RESULTS

(Included on compact disc)

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Calibration Technology
A Division of RSCS, Inc.

Calibration Certificate
ID Number: 1636858364-0

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument	Serial Number
Ludlum Model 2221	163685

Probe Model	Serial Number
Ludlum 44-10	166295

Precision Check

Test 1	Test 2	Test 3	Mean	Results
4.06 Kcpm	**4.07 Kcpm**	**4.06 Kcpm**	**4.06 Kcpm**	**Satisfactory**

Accuracy Check

Range	Target Value	As Found	As Left
X1000	400 Kcpm	406.999 Kcpm #	406.999 Kcpm #
X1000	100 Kcpm	101.555 Kcpm #	101.555 Kcpm #
X100	40 Kcpm	40.666 Kcpm #	40.666 Kcpm #
X100	10 Kcpm	10.101 Kcpm #	10.101 Kcpm #
X10	4 Kcpm	4.061 Kcpm #	4.061 Kcpm #
X10	1 Kcpm	1.010 Kcpm #	1.010 Kcpm #
X1	400 cpm	401 cpm #	401 cpm #
X1	100 cpm	101 cpm #	101 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
44-10 166295	Cs-137	0.1254 C/D	Cs-137 (SN: 14290)	On Contact

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/03/2007

Outer Physical Check: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**1119 Volts**	**550 Volts**
Low Level Discriminator #1	**44.9**	**2.5**
Window	**Out**	**Out**

Comments: All analog scales verified to read accurately when compared to digital ratemeter and scaler modes

Calibrated by: _____ QA Review: _____

Date: 10/27/2006
Expires: 10/27/2007

Atmospheric Conditions - Temperature: 74° F Humidity: 30 % Barometric Pressure: 29.97 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Calibration Certificate
ID Number: 1769418365-0

Calibration Technology
A Division of RSCS, Inc.

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument
Ludlum Model 2221

Serial Number
176941

Probe Model
Ludlum 44-10

Serial Number
174359

Precision Check				
Test 1	Test 2	Test 3	Mean	Results
4.00 Kcpm	**4.00 Kcpm**	**4.00 Kcpm**	**4.00 Kcpm**	**Satisfactory**

Accuracy Check			
Range	Target Value	As Found	As Left
X1000	400 Kcpm	399.987 Kcpm #	399.987 Kcpm #
X1000	100 Kcpm	99.995 Kcpm #	99.995 Kcpm #
X100	40 Kcpm	39.97 Kcpm #	39.97 Kcpm #
X100	10 Kcpm	9.998 Kcpm #	9.998 Kcpm #
X10	4 Kcpm	3.998 Kcpm #	3.998 Kcpm #
X10	1 Kcpm	0.999 Kcpm #	0.999 Kcpm #
X1	400 cpm	399 cpm #	399 cpm #
X1	100 cpm	100 cpm #	100 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
44-10 174359	Cs-137	0.1120 C/D	Cs-137 (SN: 14290)	On Contact

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/03/2007

Outer Physical Check: *Pass* Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**896 Volts**	**600 Volts**
Low Level Discriminator #1	**10.0 mV**	**2.5 mV**
Window	**Out**	**Out**

Comments: All analog scales verified to read accurately when compared to digital ratemeter and scaler modes
Adjusted mechanical zero.

Calibrated by: QA Review:

Date: 10/27/2006
Expires: 10/27/2007

Atmospheric Conditions - Temperature: 74° F Humidity: 30 % Barometric Pressure: 29.97 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

Calibration Certificate
ID Number: 19606211654-0

Calibration Technology
A Division of RSCS, Inc.

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument
Ludlum Model 2221

Serial Number
196062

Probe Model
Bicron G-1

Serial Number
C443E

Precision Check				
Test 1	Test 2	Test 3	Mean	Results
9.99 Kcpm	**9.99 Kcpm**	**9.99 Kcpm**	**9.99 Kcpm**	**Satisfactory**

Accuracy Check			
Range	Target Value	As Found	As Left
X1000	400 Kcpm	399.622 Kcpm #	399.622 Kcpm #
X1000	100 Kcpm	100.139 Kcpm #	100.139 Kcpm #
X100	40 Kcpm	39.987 Kcpm #	39.987 Kcpm #
X100	10 Kcpm	9.993 Kcpm #	9.993 Kcpm #
X10	4 Kcpm	4.007 Kcpm #	4.007 Kcpm #
X10	1 Kcpm	0.999 Kcpm #	0.999 Kcpm #
X1	400 cpm	401 cpm #	401 cpm #
X1	100 cpm	100 cpm #	100 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
G-1 C443E	Ba-133	0.1736 C/D	Ba-133 (SN: 380-39-1)	@1cm
G-1 C443E	Co-57	0.1515 C/D	Co-57 (SN: 14288)	@1cm
G-1 C443E	Cs-137	0.0450 C/D	Cs-137 (SN: 14290)	@1cm
G-1 C443E	I-129	0.0684 C/D	I-129 (SN: NES-186S)	@1cm

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/15/2008

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**880 Volts**	**880 Volts**
Low Level Discriminator #1	**3.4 mV**	**10 mV**
Window	**In**	**Out**

Comments: Analog and digital displays reflect appropriate congruence.

Calibrated by: [signature]

QA Review: [signature]

Date: 05/04/2007
Expires: 05/04/2008

Atmospheric Conditions - Temperature: 74° F Humidity: 21 % Barometric Pressure: 29.99 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

CTI
Calibration Technology
A Division of RSCS, Inc.

Calibration Certificate
ID Number: 21651211656-0

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument	Serial Number
Ludlum Model 2221	216512

Probe Model	Serial Number
Bicron G-1	C442E

Precision Check

Test 1	Test 2	Test 3	Mean	Results
4.00 Kcpm	**4.00 Kcpm**	**4.00 Kcpm**	**4.00 Kcpm**	**Satisfactory**

Accuracy Check

Range	Target Value	As Found	As Left
X1000	400 Kcpm	399.781 Kcpm #	399.781 Kcpm #
X1000	100 Kcpm	99.797 Kcpm #	99.797 Kcpm #
X100	40 Kcpm	39.978 Kcpm #	39.978 Kcpm #
X100	10 Kcpm	9.997 Kcpm #	9.997 Kcpm #
X10	4 Kcpm	3.998 Kcpm #	3.998 Kcpm #
X10	1 Kcpm	0.999 Kcpm #	0.999 Kcpm #
X1	400 cpm	400 cpm #	400 cpm #
X1	100 cpm	100 cpm #	100 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
G-1 C442E	Ba-133	0.1694 C/D	Ba-133 (SN: 380-39-1)	@1cm
G-1 C442E	Co-57	0.1493 C/D	Co-57 (SN: 14288)	@1cm
G-1 C442E	Cs-137	0.0435 C/D	Cs-137 (SN: 14290)	@1cm
G-1 C442E	I-129	0.0632 C/D	I-129 (SN: NES-186S)	@1cm

MTE Instrument Type	Model	CalDueDate
Pulser	Ludium 500-4SN: 66151	01/15/2008

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**895 Volts**	**895 Volts**
Low Level Discriminator #1	**10 mV**	**10 mV**
Window	**Out**	**Out**

Comments: Analog and digital displays reflect appropriate congruence.

Calibrated by: J. [signature]

QA Review: [signature]

Date: 05/04/2007
Expires: 05/04/2008

Atmospheric Conditions - Temperature: 74° F Humidity: 21 % Barometric Pressure: 29.99 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Calibration Certificate
ID Number: 21648211655-0

Calibration Technology
A Division of RSCS, Inc.

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument
Ludlum Model 2221

Serial Number
216482

Probe Model
Bicron G-1

Serial Number
C358C

Precision Check				
Test 1	Test 2	Test 3	Mean	Results
9.95 Kcpm	**9.96 Kcpm**	**9.96 Kcpm**	**9.95 Kcpm**	**Satisfactory**

Accuracy Check			
Range	Target Value	As Found	As Left
X1000	400 Kcpm	400.549 Kcpm #	400.549 Kcpm #
X1000	100 Kcpm	99.530 Kcpm #	99.530 Kcpm #
X100	40 Kcpm	40.016 Kcpm #	40.016 Kcpm #
X100	10 Kcpm	9.953 Kcpm #	9.953 Kcpm #
X10	4 Kcpm	4.010 Kcpm #	4.010 Kcpm #
X10	1 Kcpm	0.995 Kcpm #	0.995 Kcpm #
X1	400 cpm	400 cpm #	400 cpm #
X1	100 cpm	99 cpm #	99 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
G-1 C358C	Ba-133	0.1638 C/D	Ba-133 (SN: 380-39-1)	@1cm
G-1 C358C	Co-57	0.1404 C/D	Co-57 (SN: 14288)	@1cm
G-1 C358C	Cs-137	0.0427 C/D	Cs-137 (SN: 14290)	@1cm
G-1 C358C	I-129	0.0598 C/D	I-129 (SN: NES-186S)	@1cm

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/15/2008

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**945 Volts**	**945 Volts**
Low Level Discriminator #1	**10 mV**	**10 mV**
Window	**Out**	**Out**

Comments: Analog and digital displays reflect appropriate congruence.

Calibrated by: [signature]

QA Review: [signature]

Date: 05/04/2007
Expires: 05/04/2008

Atmospheric Conditions - Temperature: 74° F Humidity: 21 % Barometric Pressure: 29.99 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
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91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

CTI
Calibration Technology
A Division of RSCS, Inc.

Calibration Certificate
ID Number: 19020511653-0

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument	Serial Number
Ludlum Model 2221	190205

Probe Model	Serial Number
Bicron G-1	C436E

Precision Check

Test 1	Test 2	Test 3	Mean	Results
4.00 Kcpm	**4.00 Kcpm**	**4.00 Kcpm**	**4.00 Kcpm**	**Satisfactory**

Accuracy Check

Range	Target Value	As Found	As Left
X1000	400 Kcpm	399.133 Kcpm #	399.133 Kcpm #
X1000	100 Kcpm	98.969 Kcpm #	98.969 Kcpm #
X100	40 Kcpm	39.932 Kcpm #	39.932 Kcpm #
X100	10 Kcpm	9.912 Kcpm #	9.912 Kcpm #
X10	4 Kcpm	3.997 Kcpm #	3.997 Kcpm #
X10	1 Kcpm	0.992 Kcpm #	0.992 Kcpm #
X1	400 cpm	399 cpm #	399 cpm #
X1	100 cpm	100 cpm #	100 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

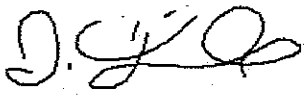
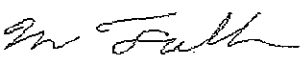
Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
G-1 C436E	Ba-133	0.1685 C/D	Ba-133 (SN: 380-39-1)	@1cm
G-1 C436E	Co-57	0.1439 C/D	Co-57 (SN: 14288)	@1cm
G-1 C436E	Cs-137	0.0425 C/D	Cs-137 (SN: 14290)	@1cm
G-1 C436E	I-129	0.0616 C/D	I-129 (SN: NES-186S)	@1cm

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/15/2008

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**850 Volts**	**850 Volts**
Low Level Discriminator #1	**10 mV**	**10 mV**
Window	**Out**	**Out**

Comments: Analog and digital displays reflect appropriate congruence.

Calibrated by: 
QA Review: 

Date: 05/04/2007
Expires: 05/04/2008

Atmospheric Conditions - Temperature: 74° F Humidity: 21 % Barometric Pressure: 29.99 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
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Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

Certificate of Calibration

2 Channel Scaler Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2929 Serial No.: 137620

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: 97743 ☐ 201932 ☑

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☐ ~~Meter Zeroed~~ ☐ ~~Geotropism ck.~~ ☐ ~~F/S Response ck.~~ ☑ Audio ck.

☐ ~~THR/WIN ck.~~ High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 170 mV Beta Threshold.: 4 mV Beta Window.: 50 mV

Voltage setting: 700 volts = 2.94 on HV Dial (Pot.)

Instrument found within tolerance (+/- 10%) ☐ Yes ☐ No

Reference Setting	Alpha Channel Digital Readout		Beta Channel Digital Readout	
	Instrument "As Found Reading"	Integrated Counts (1-minute count)	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/-10%	399556	+/-10%	399481
40 Kcpm		39956		39959
4 Kcpm		3995		3996
400 cpm		399		399

Calibrated By: [signature] Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: [signature] Date: 5/1/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-10-1 Serial No.: PR203054

Counter Mfg.: Ludlum Model: 2929 Serial No.: 137620

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 170 mV Beta Threshold: 4 mV Beta Window: 50 mV

Geometry / Distance to source: In planchett Cable Length: ☑ 39 inch ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts		Pot. Setting
	Alpha	Beta	Alpha	Beta	Alpha	Beta	
600	3413	312	4	955	0	16	2.52
650	4246	289	8	2251	1	46	2.74
700	4624	352	5	3296	1	56	2.94
750	4724	628	9	4423	0	67	3.20
800	4822	1145	5	5181	3	104	3.38

Comments: Recommended Operating High Voltage: 700 volts

Calibrated By: [signature] Calibration Date: 43007

Calibration Due: 430-08

Reviewed By: [signature] Date: 5/1/07

Certificate of Calibration

2 Channel Scaler Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2929 Serial No.: 147736

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: 97743 ☐ 201932 ☑

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ~~☐ Meter Zeroed.~~ ~~☐ Geotropism ck.~~ ~~☐ P/S Response ck.~~ ☑ Audio ck.

~~☐ THR/WIN ck.~~ High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 175 mV Beta Threshold.: 4 mV Beta Window.: 50 mV

Voltage setting: 700 volts = 380 on HV Dial (Pot.)

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Alpha Channel Digital Readout		Beta Channel Digital Readout	
	Instrument "As Found Reading"	Integrated Counts (1-minute count)	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/-10%	399587	+/-10%	399594
40 Kcpm		39961		39961
4 Kcpm		3997		3997
400 cpm		400		400

Calibrated By: _____ Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: _____ Date: 5/1/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-10-1 Serial No.: PR150788

Counter Mfg.: Ludlum Model: 2929 Serial No.: 147736

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 175 mV Beta Threshold: 4 mV Beta Window: 50 mV

Geometry / Distance to source: In planchett Cable Length: ☑ 39 inch ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts		Pot. Setting
	Alpha	Beta	Alpha	Beta	Alpha	Beta	
600	2639	464	1	658	2	12	3.40
650	3974	347	7	2027	1	50	3.60
700	4589	336	6	2898	0	72	3.80
750	4793	550	6	4187	0	89	4.04

Comments: Recommended Operating High Voltage: 700 volts

Calibrated By: [signature] Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: [signature] Date: 5/1/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2360 Serial No.: 184908

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☐ ~~F/S Response~~ ck. ☑ Audio ck.

☐ ~~THR/WIN~~ ck. High Voltage ck. ☑ ~~500v~~ ☑ ~~1000v~~ ☑ ~~1500v~~ ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 120 mV Beta Threshold.: 4 mV Beta Window.: 30 mV

Internal Calibration Date Reset ☑ Instrument found within tolerance (+/- 10%) Yes ☑ No ☐

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/-10%	400 Kcpm
100 Kcpm		100 Kcpm
40 Kcpm		40 Kcpm
10 Kcpm		10 Kcpm
4 Kcpm		4 Kcpm
1 Kcpm		1 Kcpm
400 cpm		400cpm
100 cpm		100cpm

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/-10%	398669
40 Kcpm		39869
4 Kcpm		3987
400 cpm		398

Calibrated By: [signature] Calibration Date: 5-7-07

Calibration Due: 5-7-08

Reviewed By: [signature] Date: 5-7-07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2360 Serial No.: 184920

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☐ ~~F/S Response~~ ck. ☑ Audio ck.

☐ ~~THR/WIN ck.~~ High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 120 mV Beta Threshold.: 3.5 mV Beta Window.: 30 mV

Internal Calibration Date Reset ☑ Instrument found within tolerance (+/- 10%) Yes ☑ No ☐

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm		100 Kcpm
40 Kcpm		40 Kcpm
10 Kcpm		10 Kcpm
4 Kcpm		4 Kcpm
1 Kcpm		1 Kcpm
400 cpm		400 cpm
100 cpm		100 cpm

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	400199
40 Kcpm		40020
4 Kcpm		4002
400 cpm		400

Calibrated By: _____ Calibration Date: 5-1-07

Calibration Due: 5-1-08

Reviewed By: _____ Date: 5-7-07

Certificate of Calibration

Voltage Plateau Form

Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-93 Serial No.: PR 199826

Counter Mfg.: Ludlum Model: 2360 Serial No.: 184908

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 126 mV Beta Threshold: 4 mV Beta Window: 36 mV

Detector geometry to source: ☑ Face, ☐ Side, ☐ Below, ☐ Other:

Distance to source: ☑ Contact, ☐ 6 Inches, ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
650	2304	288	4	979	4	69
700	2547	414	9	2026	0	173
725	2685	553	3	2865	1	245
750	2706	730	5	3270	3	315

Comments: Recommended Operating High Voltage: 725 volts

Calibrated By: _____ Calibration Date: 5-7-07

Calibration Due: 5-7-08

Reviewed By: _____ Date: 5-7-07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2360 Serial No.: 184903

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☐ Meter Zeroed ☑ Geotropism ck. ☐ ~~F/S Response~~ ck. ☑ Audio ck.

☐ ~~THR/WIN ck.~~ High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 120 mV Beta Threshold.: 3.5 mV Beta Window.: 80 mV

Internal Calibration Date Reset ☑ Instrument found within tolerance (+/- 10%) Yes ☑ No ☐

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400Kcpm
100 Kcpm		100Kcpm
40 Kcpm		40Kcpm
10 Kcpm		10Kcpm
4 Kcpm		4Kcpm
1 Kcpm		1Kcpm
400 cpm		400cpm
100 cpm		100cpm

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/-10%	399873
40 Kcpm		39989
4 Kcpm		3999
400 cpm		400

Calibrated By: _____ Calibration Date: 5-7-07

Calibration Due: 5-7-08

Reviewed By: _____ Date: 5-7-08 TM

Certificate of Calibration

Voltage Plateau Form

Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-93 Serial No.: PR 179868

Counter Mfg.: Ludlum Model: 2360 Serial No.: 184903

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 120 mV Beta Threshold: 3.5 mV Beta Window: 30 mV

Detector geometry to source: ☑ Face, ☐ Side, ☐ Below, ☐ Other:

Distance to source: ☑ Contact, ☐ 6 Inches, ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
700	1822	279	4	768	0	79
750	2699	458	4	2175	1	180
→ 775	2739	548	7	2513	0	233
800	2873	703	7	3170	3	290
850	2998	1617	7	3966	0	375

Comments: Recommended Operating High Voltage: >775 volts

Calibrated By: _____ Calibration Date: 5-7-07

Calibration Due: 5-7-08

Reviewed By: _____ Date: 5-7-07

ERG Form 1.03B

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2360 Serial No.: 168040

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☐ ~~F/S Response ck.~~ ☑ Audio ck.

☐ ~~THR/WIN ck.~~ High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 120 mV Beta Threshold.: 3.5 mV Beta Window.: 30 mV

Internal Calibration Date Reset ☑ Instrument found within tolerance (+/- 10%) Yes ☑ No ☐

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm		100 Kcpm
40 Kcpm		40 Kcpm
10 Kcpm		10 Kcpm
4 Kcpm		4 Kcpm
1 Kcpm		1 Kcpm
400 cpm		400 cpm
100 cpm		100 cpm

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398915
40 Kcpm		39894
4 Kcpm		3989
400 cpm		399

Calibrated By: [signature] Calibration Date: 5-1-07

Calibration Due: 5-1-08

Reviewed By: [signature] Date: 5-7-07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-93 Serial No.: PR179859

Counter Mfg.: Ludlum Model: 2360 Serial No.: ~~184926~~ BSH 184920

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 120 mV Beta Threshold: 3.5 mV Beta Window: 30 mV

Detector geometry to source: ☑ Face, ☐ Side, ☐ Below, ☐ Other:

Distance to source: ☑ Contact, ☐ 6 Inches, ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
700	1423	299	3	421	3	64
750	2547	361	4	1743	1	156
→ 800	2825	535	3	2685	2	244
850	2906	1022	11	3707	4	348

Comments: Recommended Operating High Voltage: 800 volts

Calibrated By: [signature] Calibration Date: 5-7-07

Calibration Due: 5-7-08

Reviewed By: [signature] Date: 5-7-07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-93 Serial No.: PR 197432

Counter Mfg.: Ludlum Model: 2360 Serial No.: 168040

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 120 mV Beta Threshold: 3.5 mV Beta Window: 30 mV

Detector geometry to source: ☑ Face, ☐ Side, ☐ Below, ☐ Other:

Distance to source: ☑ Contact, ☐ 6 Inches, ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
700	1971	304	1	523	0	74
750	2534	395	8	1549	1	181
→ 775	2623	469	1	2042	2	245
800	2700	583	4	2720	1	295

Comments: Recommended Operating High Voltage: 775 volts

Calibrated By: Calibration Date: 5-7-07

Calibration Due: 5-7-08

Reviewed By: Date: 5-7-07

ERG Form 1.03B

Certificate of Calibration

Ratemeter / Scaler Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2221 Serial No.: 149942

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck.: ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Threshold Setting: 10 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Calibration Point	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm		100 Kcpm
40 Kcpm		40 Kcpm
10 Kcpm		10 Kcpm
4 Kcpm		4 Kcpm
1 Kcpm		1 Kcpm
400 cpm		400 cpm
100 cpm		100 cpm

Reference Calibration Point	Integrated Counts (1-minute count)	Log Scale Count Rate	Instrument "As Found Reading"
400 Kcpm	+/- 10%	400 Kcpm	399543
40 Kcpm		40 Kcpm	39959
4 Kcpm		4 Kcpm	3996
400 cpm		400 cpm	400

Calibrated By: [signature] Calibration Date: 4/30/07

Calibration Due: 4/30/08

Reviewed By: [signature] Date: 5/1/07

Certificate of Calibration

Ratemeter / Scaler Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2221 Serial No.: 108862

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

☑ THR/WIN ck. High Voltage ck.: ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Threshold Setting: 10 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Calibration Point	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm		100 Kcpm
40 Kcpm		40 Kcpm
10 Kcpm		10 Kcpm
4 Kcpm		4 Kcpm
1 Kcpm		1 Kcpm
400 cpm		400 cpm
100 cpm		100 cpm

Reference Calibration Point	Integrated Counts (1-minute count)	Log Scale Count Rate	Instrument "As Found Reading"
400 Kcpm	399499	400 Kcpm	+/- 10%
40 Kcpm	39951	40 Kcpm	
4 Kcpm	3995	4 Kcpm	
400 cpm	399	400 cpm	

Calibrated By: _____ Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: _____ Date: 5/1/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-10 Serial No.: PR154615

Counter Mfg.: Ludlum Model: 2221 Serial No.: 105862

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Counter Threshold Setting: 10 mV Cable Length: ☐ 39 inch, ☐ 5 foot, ☑ Other: Cubly

Detector geometry to source: ☐ Face, ☑ Side, ☐ Below, ☐ Other: _____

Distance to source: ☐ Contact, ☑ 6 Inches, ☐ Other: _____

Source : ☐ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03

☑ Cs137 @ 5.84 µCi (3/07/07) sn: 4097-03 ☐ Other: _____

Count Time: 1 minute(s)

High Voltage	Gross Source Counts	Background Counts
700	12432	
800	41180	
900	65573	
1000	76520	
1100	81396	10098
1200	83866	

Comments: Recommended Operating High Voltage: 1100 volts

Calibrated By: _____ Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: _____ Date: 5/1/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-10 Serial No.: PR150783

Counter Mfg.: Ludlum Model: 2221 Serial No.: 149942

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Counter Threshold Setting: 10 mV Cable Length: ☐ 39 inch, ☐ 5 foot, ☑ Other: Cable

Detector geometry to source: ☐ Face, ☑ Side, ☐ Below, ☐ Other: _____

Distance to source: ☐ Contact, ☑ 6 Inches, ☐ Other: _____

Source : ☐ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03

☑ Cs137 @ 5.84 µCi (3/07/07) sn: 4097-03 ☐ Other: _____

Count Time: 1 minute(s)

	High Voltage	Gross Source Counts	Background Counts
	700	1022	
	800	38581	
	900	64904	
	1000	77389	
→	1100	81318	10286
	1200	86225	

Comments: Recommended Operating High Voltage: 1100 volts

Calibrated By: _____ Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: _____ Date: 5/1/07

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER ENVIRONMENTAL RESTORATION GRP ORDER NO. 264544/306669

Mfg. Ludlum Measurements, Inc. Model 19 Serial No. 221521

Mfg. _____ Model _____ Serial No. _____

Cal. Date 15-Oct-06 Cal Due Date 15-Oct-07 Cal. Interval 1 Year Meterface 202-1070

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 74 °F RH 57 % Alt 693.8 mm Hg

☐ New Instrument Instrument Received ☐ Within Toler. +-10% ☑ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☐ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 800 V Input Sens. 29 mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. 500 / 513 V Ref./Inst. 1000 / 997 V

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
5000	4000µR/hr	3800	4000
5000	1000µR/hr	850	1000
500	400µR/hr = 72200 cpm	390	400
500	100µR/hr	90	100
250	200µR/hr = 35800cpm	200	200
250	100µR/hr	100	100
50	7220 cpm	39.5	40
50	1805 cpm	9.5	10
25	3580 cpm	20	20
25	895 cpm	10	10

*Uncertainty within ± 10% C.F. within ± 20%

Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout				Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ S-394 ☐ 1122 ☐ 781

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☑ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

☑ m 500 S/N 141240 ☐ Oscilloscope S/N _____ ☑ Multimeter S/N 71300492

Calibrated By: Veronica Ornelas Date 15-Oct-06

Reviewed By: Rhonda Horn Date 15 Oct 06

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.
FORM C22A 06/02/2006

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed: _____

Designer and Manufacturer of Scientific and Industrial Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CERTIFICATE OF CALIBRATION

CUSTOMER ENVIRONMENTAL RESTORATION GROUP ORDER NO. 263667/306211

Mfg. Ludlum Measurements, Inc. Model 19 Serial No. 111333

Mfg. Model Serial No.

Cal. Date 28-Sep-06 Cal Due Date 28-Sep-07 Cal. Interval 1 Year Meterface 202-016

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 38 % Alt 702.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 900 V Input Sens. 34 mV Det. Oper. V at mV Threshold Dial Ratio = mV

☐ HV Readout (2 points) Ref./Inst. / V Ref./Inst. / V

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
5000	4000 uR/hr	4300	4000
5000	1000 uR/hr	1100	1000
500	400 uR/hr = 65300cpm	420	400
500	100 uR/hr	105	100
250	200 uR/hr = 33000cpm	210	200
250	100 uR/hr	105	100
50	6530 cpm	42	40
50	1630 cpm	10.2	10
25	3300 cpm	22	20
25	820 cpm	DS: 4/5.4	5

*Uncertainty within ± 10% C.F. within ± 20%

50, 25 **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout			

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978

State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ S-394 ☐ 1122 ☐ 781

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☑ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N ☐ Beta S/N ☐ Other

☑ m 500 S/N 54683 ☐ Oscilloscope S/N ☑ Multimeter S/N 70602489

Calibrated By: Duane Jackson Date 28-Sep-06

Reviewed By: W Ludlum Date 28 Sep 06

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.
FORM C22A 06/02/2006

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed:

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER ENVIRONMENTAL RESTORATION GRP ORDER NO. 264543 / 306667

Mfg. Ludlum Measurements, Inc. Model 19 Serial No. 193604

Mfg. _____ Model _____ Serial No. _____

Cal. Date 10-Oct-06 Cal Due Date 10-Oct-07 Cal. Interval 1 Year Meterface 202-016

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 49 % Alt 700.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☐ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 575 V Input Sens. 35 mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. _____ / _____ V Ref./Inst. _____ / _____ V

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
5000	4000 uR/hr	3900	4000
5000	1000 uR/hr	1000	1000
500	400 uR/hr = 70200 cpm	400	400
500	100 uR/hr	100	100
250	200 uR/hr = 38900 cpm	190	200
250	100 uR/hr	100	100
50	7020 cpm	40	40
50	1755 cpm	10	10
25	3890 cpm	22	20
25	972 cpm	5.5	5

*Uncertainty within ± 10% C.F. within ± 20% 50, 25 **Range(s) Calibrated Electronically**

Digital Readout: REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	Log Scale: REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*

...r International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. ...calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

...ference Instruments and/or Sources: ☐ S-394 ☐ 1122 ☑ 781

...-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

☑ m 500 S/N 189509 ☐ Oscilloscope S/N _____ ☑ Multimeter S/N 71300492

...alibrated By: Wendell Williams Date 10-OCT-06

...eviewed By: Rhonda Harris Date 10 Oct 06

...is certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.
...ORM C22A 06/02/2006

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed: _____

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER ENVIRONMENTAL RESTORATION GRP ORDER NO. / 264543 / 306667

Mfg. Ludlum Measurements, Inc. Model 19 Serial No. 101662

Mfg. _____ Model _____ Serial No. _____

Cal. Date 10-Oct-06 Cal Due Date 10-Oct-07 Cal. Interval 1 Year Meterface 202-016

heck mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 49 % Alt 700.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☐ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

strument Volt Set 650 V Input Sens. 33 mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. _____ / _____ V Ref./Inst. _____ / _____ V

COMMENTS:

nma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
5000	4000 uR/hr	4000	4000
5000	1000 uR/hr	1000	1000
500	400 uR/hr = 72200 cpm	380	400
500	100 uR/hr	100	100
250	200 uR/hr = 3700 cpm	190	200
250	100 uR/hr	100	100
50	7220 cpm	39	40
50	1805 cpm	10	10
25	3440 cpm	18	20
25	860 cpm	5	5

*Uncertainty within ± 10% C.F. within ± 20%

50, 25 **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
ital adout			

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

r International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques.
calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

eference Instruments and/or Sources: ☐ S-394 ☐ 1122 ☐ 781

-137 Gamma S/N ☐ 1162 ☐ G112 ☑ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

☑ m 500 S/N 189509 ☐ Oscilloscope S/N _____ ☑ Multimeter S/N 71300492

alibrated By: Wendell Williams Date 10-OCT-06

eviewed By: Rhonda Hamm Date 10 Oct 06

is certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.
)RM C22A 06/02/2006

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed: _____

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 12 Serial No.: 223414

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

☐ ~~THR/WIN ck.~~ High Voltage ck.: ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Threshold Setting: 40 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Calibration Point	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm		100 Kcpm
40 Kcpm		40 Kcpm
10 Kcpm		10 Kcpm
4 Kcpm		4 Kcpm
1 Kcpm		1 Kcpm
400 cpm		400 cpm
100 cpm		100 cpm

Comments:

Calibrated By: _____ Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: _____ Date: 5/1/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 12 Serial No.: 149332

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

☐ ~~THR/WIN ck.~~ High Voltage ck.: ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Threshold Setting: 40 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Calibration Point	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400Kcpm
100 Kcpm		100Kcpm
40 Kcpm		40Kcpm
10 Kcpm		10Kcpm
4 Kcpm		4Kcpm
1 Kcpm		1Kcpm
400 cpm		400cpm
100 cpm		100cpm

Comments:

Calibrated By: [signature] Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: [signature] Date: 5/1/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 12 Serial No.: 229304

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

~~☐ THR/WIN ck.~~ High Voltage ck.: ☑ 500v ☐ 1000v ☐ 1500v ☑ Battery ck. (min 4.4 vdc)

Threshold Setting: 40 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Calibration Point	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm		100 Kcpm
40 Kcpm		40 Kcpm
10 Kcpm		10 Kcpm
4 Kcpm		4 Kcpm
1 Kcpm		1 Kcpm
400 cpm		400 cpm
100 cpm		100 cpm

Comments:

Calibrated By: [signature] Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: [signature] Date: 5/1/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 12 Serial No.: 229277

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

☐ ~~THR/WIN ck.~~ High Voltage ck.: ☑ 500v ☐ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Threshold Setting: 40 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Calibration Point	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/-10%	400 Kcpm
100 Kcpm		100 Kcpm
40 Kcpm		40 Kcpm
10 Kcpm		10 Kcpm
4 Kcpm		4 Kcpm
1 Kcpm		1 Kcpm
400 cpm		400 cpm
100 cpm		100 cpm

Comments:

Calibrated By: _____ Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: _____ Date: 5/1/07

Efficiency Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-9 Serial No: PR251740

Counter Mfg.: Ludlum Model: 12 Serial No: 223414

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

GM tube voltage: 900 volts Counter Threshold Setting: 40 mV

Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other:

Detector geometry to source: ☑ Face, ☐ Planchett/In tray, ☐ Side, ☐ Other:

Distance to source: ☑ Contact, ☐ Planchett/In tray, ☐ 6 Inches, ☐ Other:

Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Gross source counts: 2400 cpm

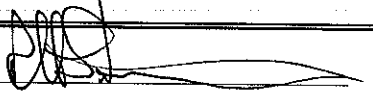
Background counts: 60 cpm

Net source counts: 2340 cpm

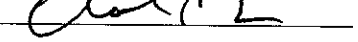
Comments:

4π Efficiency for Cal Source: 13 %

Efficiency = Net source counts (cpm) / Source activity (cpm,dpm)

Calibrated By:  Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By:  Date: 5/1/07

Efficiency Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-9 Serial No: PR093409

Counter Mfg.: Ludlum Model: 12 Serial No: 229304

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

GM tube voltage: 900 volts Counter Threshold Setting: 40 mV

Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other:

Detector geometry to source: ☑ Face, ☐ Planchett/In tray, ☐ Side, ☐ Other:

Distance to source: ☑ Contact, ☐ Planchett/In tray, ☐ 6 Inches, ☐ Other:

Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Gross source counts: 2400 cpm

Background counts: 80 cpm

Net source counts: 2320 cpm

Comments:

4π Efficiency for Cal Source: 13 %

Efficiency = Net source counts (cpm) / Source activity (cpm,dpm)

Calibrated By: Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: Date: 5/1/07

Efficiency Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-9 Serial No: PR248554

Counter Mfg.: Ludlum Model: 12 Serial No: 229277

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

GM tube voltage: 900 volts Counter Threshold Setting: 40 mV

Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other:

Detector geometry to source: ☑ Face, ☐ Planchett/In tray, ☐ Side, ☐ Other:

Distance to source: ☑ Contact, ☐ Planchett/In tray, ☐ 6 Inches, ☐ Other:

Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Gross source counts: 2400 cpm

Background counts: 70 cpm

Net source counts: 2330 cpm

Comments:

4π Efficiency for Cal Source: 13 %

Efficiency = Net source counts (cpm) / Source activity (cpm,dpm)

Calibrated By: Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: Date: 5/1/07

Efficiency Calibration

Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-9 Serial No: PR257173

Counter Mfg.: Ludlum Model: 12 Serial No: 149332

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

GM tube voltage: 900 volts Counter Threshold Setting: 40 mV

Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other:

Detector geometry to source: ☑ Face, ☐ Planchett/In tray, ☐ Side, ☐ Other:

Distance to source: ☑ Contact, ☐ Planchett/In tray, ☐ 6 Inches, ☐ Other:

Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Gross source counts: 2400 cpm

Background counts: 50 cpm

Net source counts: 2350 cpm

Comments:

4π Efficiency for Cal Source: 13 %

Efficiency = Net source counts (cpm) / Source activity (cpm,dpm)

Calibrated By: Calibration Date: 4-30-07

Calibration Due: 4-30-08

Reviewed By: Date: 5/1/07

Certificate of Calibration

Voltage Plateau Form

Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-10-1 Serial No.: PR 138385

Counter Mfg.: Ludlum Model: 2929 Serial No.: 132806

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 170 mV Beta Threshold: 4 mV Beta Window: 50 mV

Geometry / Distance to source: In planchett Cable Length: ☑ 39 inch ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts		Pot. Setting
	Alpha	Beta	Alpha	Beta	Alpha	Beta	
600	2424	551	1	200	0	8	2.50
650	3754	343	0	1162	0	19	2.70
700	4331	293	1	2154	0	31	2.90
750	4452	332	1	2926	0	52	3.10
800	4619	433	8	3683	1	63	3.30
850	4841	747	6	4337	2	113	3.50

Comments: Recommended Operating High Voltage: 800 volts

Calibrated By: Calibration Date: 7-6-07

Reviewed By: Calibration Due: 7-6-08

Date: 7-6-07

Certificate of Calibration

2 Channel Scaler Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2929 Serial No.: 132806

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: 97743 ☐ 201932 ☑

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☐ ~~Meter Zeroed~~ ☐ ~~Geotropism ck.~~ ☐ ~~E/S Response~~ ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☐ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 170 mV Beta Threshold.: 4.0 mV Beta Window.: 50 mV

Voltage setting: 800 volts = 3.30 on HV Dial (Pot.)

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Alpha Channel Digital Readout		Beta Channel Digital Readout	
	Instrument "As Found Reading"	Integrated Counts (1-minute count)	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	399446	+/- 10%	399440
40 Kcpm	+/- 10%	39956	+/- 10%	39946
4 Kcpm	+/- 10%	3995	+/- 10%	3996
400 cpm	+/- 10%	399	+/- 10%	400

Calibrated By: _____ Calibration Date: 7-6-07

Calibration Due: 7-6-08

Reviewed By: _____ Date: 7-6-07

Environmental Restoration Group, Inc.
8809 Washington NE, Ste. 150
Albuquerque, NM 87113

ph: 505.298.4224
fax: 505.797-1404
web: www.ERGOffice.com

EQUIPMENT PACKING SLIP

Company Name: Cabrera Services, Inc.
Contact Name: Gordon Tannahill
Contact Telephone: 702-839-1731

Order Number: 1044
P.O. or Reference Number: 07-1022.00 Task 2

Date Ordered: 7/6/2007
Date Shipped: 7/6/2007
Date of Delivery: 7/9/2007

Shipping Method: FedEx Priority Overnight
Shipping Number: 2246-1732-1

Ship To Information:
Gordon Tannahill c/o Extended Stay
Cabrera Services, Inc.
905 South Oyster Bay Rd
Bethpage, NY 11714
516-349-8759

Billing Address:
Cabrera Services - Maryland
Accounts Payable
103 East Mount Royal Ave
Baltimore, MD 21202

Equipment Enclosed:

Instrument	*Serial Number*
Ludlum 12	232131
Ludlum 19	144790
Ludlum 2929 & 43-10-1	132806 & PR138385
Ludlum 44-9	PR248560

Special Instructions:

None

Scientific and Industrial Instruments

POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CERTIFICATE OF CALIBRATION

CUSTOMER ERG (ENVIRO RES GRP) ORDER NO. 277826 / 314012

Mfg. Ludlum Measurements, Inc. Model 19 Serial No. 144790

Mfg. _____ Model _____ Serial No. _____

Cal. Date 31-May-07 Cal Due Date 31-May-08 Cal. Interval 1 Year Meterface 202-016

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 71 °F RH 45 % Alt 698.8 mm Hg

☐ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☑ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☐ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 1000 V Input Sens. 33 mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. _____ / _____ V Ref./Inst. _____ / _____ V

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
5000	4000 uR/hr	1800	4000
5000	1000 uR/hr	400	1000
500	400 uR/hr = 73000 cpm	180	400
500	100 uR/hr	40	100
250	200 uR/hr = 36000 cpm	75	200
250	100 uR/hr	35	100
50	7300 cpm	44	40
50	1825 cpm	11	10
25	3600 cpm	265	20
25	900 cpm	5.1	5

*Uncertainty within ± 10% C.F. within ± 20%

50, 25 **Range(s) Calibrated Electronically**

Digital Readout	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*

Log Scale	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978

State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ S-394/1122 ☐ 1131 ☐ 781

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☑ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

☑ m 500 S/N 189509 ☐ Oscilloscope S/N _____ ☑ Multimeter S/N 71300492

Calibrated By: Wendell Williams Date 31-MAY-07

Reviewed By: Rhonda Harris Date 5 June 07

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.

FORM C22A 01/24/2007

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed: _____

Efficiency Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-9 Serial No: PR248560

Counter Mfg.: Ludlum Model: 12 Serial No: 232131

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

GM tube voltage: 900 volts Counter Threshold Setting: 40 mV

Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other:

Detector geometry to source: ☑ Face, ☐ Planchett/In tray, ☐ Side, ☐ Other:

Distance to source: ☑ Contact, ☐ Planchett/In tray, ☐ 6 Inches, ☐ Other:

Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Gross source counts: 2300 cpm

Background counts: 80 cpm

Net source counts: 2220 cpm

Comments:

4π Efficiency for Cal Source: 12 %

Efficiency = Net source counts (cpm) / Source activity (cpm,dpm)

Calibrated By: Calibration Date: 7-6-07

Calibration Due: 7-6-08

Reviewed By: Date: 7-6-07

Certificate of Calibration

2 Channel Scaler Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2929 Serial No.: 132806

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: 97743 ☐ 201932 ☑

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☐ Meter Zeroed ☐ Geotropism ck. ☐ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☐ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 170 mV Beta Threshold.: 4.0 mV Beta Window.: 50 mV

Voltage setting: _____ volts = _____ on HV Dial (Pot.)

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Alpha Channel Digital Readout		Beta Channel Digital Readout	
	Instrument "As Found Reading"	Integrated Counts (1-minute count)	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	399446	+/- 10%	399440
40 Kcpm	+/- 10%	39956	+/- 10%	39946
4 Kcpm	+/- 10%	3995	+/- 10%	3996
400 cpm	+/- 10%	399	+/- 10%	400

Calibrated By: _____ Calibration Date: _____

Calibration Due: _____

Reviewed By: _____ Date: 4-6-07

Inst.#229277(1)		
QC Daily Source		
Date	Result (cpm)	P/F
5/14/2007	4950	Pass
5/15/2007	4900	Pass
5/16/2007	4950	Pass
5/17/2007	4500	Pass
5/18/2007	4600	Pass
5/21/2007	4650	Pass
5/22/2007	4800	Pass
5/23/2007	4550	Pass
5/24/2007	4800	Pass
5/25/2007	4700	Pass
5/29/2007	4650	Pass
5/30/2007	4750	Pass
5/31/2007	4600	Pass
6/1/2007	4500	Pass
6/4/2007	4400	Pass
6/5/2007	4500	Pass
6/6/2007	4600	Pass
6/7/2007	4400	Pass
6/8/2007	4600	Pass
6/11/2007	4550	Pass
6/12/2007	4500	Pass
6/13/2007	4700	Pass
6/14/2007	4600	Pass
6/15/2007	4500	Pass
6/18/2007	4600	Pass
6/19/2007	4650	Pass

Inst.#229277(1)		Source Ser. #	1903-04
Initial Source Readings		Nuclide	Tc-99
Date	Result (cpm)		
5/14/2007	5000		
5/14/2007	4850		
5/14/2007	4900		
5/14/2007	4950		
5/14/2007	4900		
5/14/2007	5000		
5/14/2007	4850		
5/14/2007	4800		
5/14/2007	4900		
5/14/2007	4950		
	Average		
	4910		

Inst.#229304(2)		
QC Daily Source		
Date	Result (cpm)	P/F
5/14/2007	4100	Pass
5/15/2007	4000	Pass
5/16/2007	4150	Pass
5/17/2007	4500	Pass
5/18/2007	4600	Pass
5/21/2007	4500	Pass
5/22/2007	4560	Pass
5/23/2007	4550	Pass
5/24/2007	4600	Pass
5/25/2007	4500	Pass
5/29/2007	4750	Pass
5/30/2007	4300	Pass
5/31/2007	4700	Pass
6/1/2007	4500	Pass
6/4/2007	4600	Pass
6/5/2007	4400	Pass
6/6/2007	4600	Pass
6/7/2007	4500	Pass
6/8/2007	4600	Pass
6/11/2007	4500	Pass
6/12/2007	4800	Pass
6/13/2007	4600	Pass
6/14/2007	4600	Pass
6/15/2007	4700	Pass
6/18/2007	4600	Pass
6/19/2007	4600	Pass

Inst.#229304(2)		Source Ser. #	1903-04
Initial Source Readings		Nuclide	Tc-99
Date	Result (cpm)		
5/14/2007	4100		
5/14/2007	4000		
5/14/2007	3900		
5/14/2007	4200		
5/14/2007	4200		
5/14/2007	4100		
5/14/2007	4200		
5/14/2007	4200		
5/14/2007	4000		
5/14/2007	4100		
	Average		
	4100		

Inst.#232131(25)		
QC Daily Source		
Date	Result (cpm)	P/F
7/11/2007	6000	Pass
7/12/2007	6000	Pass

Inst.#232131(25)		Source Ser. #	1904-04
Initial Source Readings		Nuclide	Tc-99
Date	Result (cpm)		
7/11/2007	6000		
7/11/2007	6000		
7/11/2007	8000		
7/11/2007	6000		
7/11/2007	7000		
7/11/2007	7000		
7/11/2007	6000		
7/11/2007	6000		
7/11/2007	8000		
7/11/2007	7000		
	Average		
	6700		

Inst.#108862(17)		
QC Daily Source		
Date	Result (cpm)	P/F
5/14/2007	11499	Pass
5/15/2007	11823	Pass
5/16/2007	11779	Pass
5/17/2007	11784	Pass
5/18/2007	11835	Pass
5/21/2007	11546	Pass
5/22/2007	11320	Pass
5/23/2007	11788	Pass
5/24/2007	12040	Pass
5/25/2007	10888	Pass
5/29/2007	11936	Pass
5/30/2007	12444	Pass
5/31/2007	11872	Pass
6/1/2007	11860	Pass
6/4/2007	11567	Pass
6/5/2007	11639	Pass
6/6/2007	12086	Pass
6/7/2007	12372	Pass
6/8/2007	12181	Pass
6/11/2007	12677	Pass
6/12/2007	12459	Pass
6/13/2007	11769	Pass
6/14/2007	12567	Pass
6/15/2007	11230	Pass

Inst.#108862(17)		Source Ser. #	3532
Initial Source Readings		Nuclide	Cs137
Date	Result (cpm)		
5/14/2007	11400		
5/14/2007	11142		
5/14/2007	11533		
5/14/2007	11385		
5/14/2007	11220		
5/14/2007	11300		
5/14/2007	11404		
5/14/2007	11314		
5/14/2007	11403		
5/14/2007	11298		
	Average		
	11340		

Inst.#163685(19)		
QC Daily Source		
Date	Result (cpm)	P/F
5/14/2007	11701	Pass
5/15/2007	11803	Pass
5/16/2007	11790	Pass
5/17/2007	11917	Pass
5/18/2007	11785	Pass
5/21/2007	11757	Pass
5/22/2007	11935	Pass
5/23/2007	11897	Pass
5/24/2007	12093	Pass
5/25/2007	11889	Pass
5/29/2007	12097	Pass
5/30/2007	11578	Pass
5/31/2007	11684	Pass
6/1/2007	11655	Pass
6/4/2007	11605	Pass
6/5/2007	11670	Pass
6/6/2007	11958	Pass
6/7/2007	11218	Pass
6/8/2007	11746	Pass
6/11/2007	11025	Pass
6/12/2007	12159	Pass
6/13/2007	11681	Pass
6/14/2007	11606	Pass
6/15/2007	11832	Pass
6/18/2007	12595	Pass
6/19/2007	12043	Pass

Inst.#163685(19)		Source Ser. #	3532
Initial Source Readings		Nuclide	CS-137
Date	Result (cpm)		
5/14/2007	11476		
5/14/2007	11732		
5/14/2007	11935		
5/14/2007	11727		
5/14/2007	11726		
5/14/2007	11964		
5/14/2007	11697		
5/14/2007	11769		
5/14/2007	11730		
5/14/2007	12320		
	Average		
	11808		

Inst.#190205(13)		
QC Daily Source		
Date	Result (cpm)	P/F
5/14/2007	5909	Pass
5/15/2007	5466	Pass
5/16/2007	5314	Pass
5/17/2007	5513	Pass
5/18/2007	4860	Pass
5/21/2007	5086	Pass
5/22/2007	5492	Pass
5/23/2007	5319	Pass
5/24/2007	5244	Pass
5/25/2007	5099	Pass
5/29/2007	5131	Pass
5/30/2007	5079	Pass
5/31/2007	5195	Pass
6/1/2007	4860	Pass
6/4/2007	4724	Pass
6/5/2007	4878	Pass
6/6/2007	5094	Pass
6/7/2007	5128	Pass
6/8/2007	5383	Pass
6/11/2007	5619	Pass
6/12/2007	5464	Pass
6/13/2007	5369	Pass
6/14/2007	5389	Pass
6/15/2007	5004	Pass
6/18/2007	5300	Pass
6/19/2007	5162	Pass

Inst.#190205(13)		Source Ser. #	3532
Initial Source Readings		Nuclide	Cs137
Date	Result (cpm)		
5/14/2007	5175		
5/14/2007	5270		
5/14/2007	4381		
5/14/2007	5121		
5/14/2007	5315		
5/14/2007	5270		
5/14/2007	5373		
5/14/2007	5439		
5/14/2007	5322		
5/14/2007	5351		
	Average		
	5202		

Inst.#216482(14)		
QC Daily Source		
Date	Result (cpm)	P/F
5/14/2007	5330	Pass
5/15/2007	5790	Pass
5/16/2007	5625	Pass
5/17/2007	5436	Pass
5/18/2007	4688	Pass
5/21/2007	5019	Pass
5/22/2007	5354	Pass
5/23/2007	5270	Pass
5/24/2007	5206	Pass
5/25/2007	5393	Pass
5/29/2007	5351	Pass
5/30/2007	5123	Pass
5/31/2007	5290	Pass
6/1/2007	5272	Pass
6/4/2007	5520	Pass
6/5/2007	4805	Pass
6/6/2007	5752	Pass
6/7/2007	5469	Pass
6/8/2007	4716	Pass
6/19/2007	4924	Pass

Inst.#216482(14)		Source Ser. #	3532
Initial Source Readings		Nuclide	Cs137
Date	Result (cpm)		
5/14/2007	5199		
5/14/2007	5211		
5/14/2007	5043		
5/14/2007	4966		
5/14/2007	5355		
5/14/2007	5105		
5/14/2007	4979		
5/14/2007	5347		
5/14/2007	5421		
5/14/2007	5268		
	Average		
	5189		

Inst.#101662(5)		
QC Daily Source		
Date	Result (µrem/hr)	P/F
5/14/2007	90	Pass
5/15/2007	80	Pass
5/16/2007	85	Pass
5/17/2007	90	Pass
5/18/2007	85	Pass
5/21/2007	85	Pass
5/22/2007	90	Pass
5/23/2007	85	Pass
5/24/2007	80	Pass
5/25/2007	90	Pass
5/29/2007	90	Pass
5/30/2007	85	Pass
5/31/2007	90	Pass
6/1/2007	90	Pass
6/4/2007	85	Pass
6/5/2007	90	Pass
6/6/2007	90	Pass
6/7/2007	90	Pass
6/8/2007	90	Pass
6/11/2007	85	Pass
6/12/2007	90	Pass
6/13/2007	85	Pass
6/14/2007	90	Pass
6/15/2007	85	Pass
6/18/2007	90	Pass
6/19/2007	80	Pass

Inst.#101662(5)		Source Ser. #	3532
Initial Source Readings		Nuclide	Cs-137
Date	Result (µrem/hr)		
5/14/2007	85		
5/14/2007	90		
5/14/2007	85		
5/14/2007	90		
5/14/2007	95		
5/14/2007	85		
5/14/2007	80		
5/14/2007	90		
5/14/2007	95		
5/14/2007	85		
	Average		
	88		

Inst.#221521(6)		
QC Daily Source		
Date	Result (µrem/hr)	P/F
5/14/2007	120	Pass
5/15/2007	110	Pass
5/16/2007	100	Pass
5/17/2007	100	Pass
5/18/2007	100	Pass
5/21/2007	95	Pass
5/22/2007	95	Pass
5/23/2007	95	Pass
5/24/2007	90	Pass
5/25/2007	100	Pass
5/29/2007	90	Pass
5/30/2007	95	Pass
5/31/2007	100	Pass
6/1/2007	95	Pass
6/4/2007	90	Pass
6/5/2007	95	Pass
6/6/2007	100	Pass
6/7/2007	90	Pass
6/8/2007	100	Pass
6/11/2007	100	Pass
6/12/2007	95	Pass
6/13/2007	90	Pass
6/14/2007	100	Pass
6/15/2007	90	Pass
6/18/2007	95	Pass
6/19/2007	100	Pass

Inst.#221521(6)		Source Ser. #	3532
Initial Source Readings		Nuclide	Cs-137
Date	Result (µrem/hr)		
5/14/2007	100		
5/14/2007	120		
5/14/2007	110		
5/14/2007	120		
5/14/2007	100		
5/14/2007	120		
5/14/2007	110		
5/14/2007	100		
5/14/2007	120		
5/14/2007	110		
	Average		
	111		

Inst.#144790(24)		
QC Daily Source		
Date	Result (µrem/hr)	P/F
7/11/2007	23	Pass
7/12/2007	22	Pass

Inst.#144790(24)		Source Ser. #	1142
Initial Source Readings		Nuclide	Cs-137
Date	Result (µrem/hr)		
7/11/2007	22		
7/11/2007	21		
7/11/2007	22		
7/11/2007	22		
7/11/2007	23		
7/11/2007	20		
7/11/2007	24		
7/11/2007	22		
7/11/2007	23		
7/11/2007	21		
	Average		
	22		

Inst.#101662(5)		
QC Daily Source		
Date	Result (µrem/hr)	P/F
5/14/2007	90	Pass
5/15/2007	80	Pass
5/16/2007	85	Pass
5/17/2007	90	Pass
5/18/2007	85	Pass
5/21/2007	85	Pass
5/22/2007	90	Pass
5/23/2007	85	Pass
5/24/2007	80	Pass
5/25/2007	90	Pass
5/29/2007	90	Pass
5/30/2007	85	Pass
5/31/2007	90	Pass
6/1/2007	90	Pass
6/4/2007	85	Pass
6/5/2007	90	Pass
6/6/2007	90	Pass
6/7/2007	90	Pass
6/8/2007	90	Pass
6/11/2007	85	Pass
6/12/2007	90	Pass
6/13/2007	85	Pass
6/14/2007	90	Pass
6/15/2007	85	Pass
6/18/2007	90	Pass
6/19/2007	80	Pass

Inst.#101662(5)		Source Ser. #	3532
Initial Source Readings		Nuclide	Cs-137
Date	Result (µrem/hr)		
5/14/2007	85		
5/14/2007	90		
5/14/2007	85		
5/14/2007	90		
5/14/2007	95		
5/14/2007	85		
5/14/2007	80		
5/14/2007	90		
5/14/2007	95		
5/14/2007	85		
	Average		
	88		

Inst.#221521(6)		
QC Daily Source		
Date	Result (µrem/hr)	P/F
5/14/2007	120	Pass
5/15/2007	110	Pass
5/16/2007	100	Pass
5/17/2007	100	Pass
5/18/2007	100	Pass
5/21/2007	95	Pass
5/22/2007	95	Pass
5/23/2007	95	Pass
5/24/2007	90	Pass
5/25/2007	100	Pass
5/29/2007	90	Pass
5/30/2007	95	Pass
5/31/2007	100	Pass
6/1/2007	95	Pass
6/4/2007	90	Pass
6/5/2007	95	Pass
6/6/2007	100	Pass
6/7/2007	90	Pass
6/8/2007	100	Pass
6/11/2007	100	Pass
6/12/2007	95	Pass
6/13/2007	90	Pass
6/14/2007	100	Pass
6/15/2007	90	Pass
6/18/2007	95	Pass
6/19/2007	100	Pass

Inst.#221521(6)		Source Ser. #	3532
Initial Source Readings		Nuclide	Cs-137
Date	Result (µrem/hr)		
5/14/2007	100		
5/14/2007	120		
5/14/2007	110		
5/14/2007	120		
5/14/2007	100		
5/14/2007	120		
5/14/2007	110		
5/14/2007	100		
5/14/2007	120		
5/14/2007	110		
	Average		
	111		

Inst.#144790(24)		
QC Daily Source		
Date	Result (µrem/hr)	P/F
7/11/2007	23	Pass
7/12/2007	22	Pass

Inst.#144790(24)		Source Ser. #	1142
Initial Source Readings		Nuclide	Cs-137
Date	Result (µrem/hr)		
7/11/2007	22		
7/11/2007	21		
7/11/2007	22		
7/11/2007	22		
7/11/2007	23		
7/11/2007	20		
7/11/2007	24		
7/11/2007	22		
7/11/2007	23		
7/11/2007	21		
	Average		
	22		

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CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 5)

Counting Instrument:	2360	Detector:	43/93	Calibration Date:	5/7/2007
Serial #:	184903	Serial #:	179868	12 month calibration:	OK
Detector Active Area or Area Covered by Smear (cm^2):	100			NRC 6 Mo Cal. Due Date?	OK

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA (DPM/100cm^2)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.2130	Th230	1247	41,200	3/30/2004	7.54E+04	41,199	100	1	1	0.90	1.29	6836.8	268.57
Beta	0.1750	Tc99	1246	27,800	3/30/2004	2.11E+02	27,514	1000	1	1	76.90	10.47	4614.6	327.53

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
5/21/2007	3	72	6459	4693	3.0	72.0	6456.0	4621.0	PASS	PASS	PASS	PASS	51.92	243	Yes	Yes	GT	DA
5/22/2007	1	63	7077	4269	1.0	63.0	7076.0	4206.0	PASS	PASS	PASS	PASS	35.93	228	Yes	Yes	GT	DA
5/23/2007	0	74	6494	4068	0.0	74.0	6494.0	3994.0	PASS	PASS	PASS	PASS	14.08	246	Yes	Yes	GT	DA
5/24/2007	0	96	6700	4675	0.0	96.0	6700.0	4579.0	PASS	PASS	PASS	PASS	14.08	278	Yes	Yes	GT	DA
5/25/2007	0	82	6478	4224	0.0	82.0	6478.0	4142.0	PASS	PASS	PASS	PASS	14.08	258	Yes	Yes	GT	DA
5/29/2007	0	81	6925	4151	0.0	81.0	6925.0	4070.0	PASS	PASS	PASS	PASS	14.08	256	Yes	Yes	GT	DA
5/30/2007	0	88	6679	4282	0.0	88.0	6679.0	4194.0	PASS	PASS	PASS	PASS	14.08	267	Yes	Yes	GT	DA
5/31/2007	0	92	6668	4166	0.0	92.0	6668.0	4074.0	PASS	PASS	PASS	PASS	14.08	272	Yes	Yes	GT	DA
6/1/2007	1	89	7071	4263	1.0	89.0	7070.0	4174.0	PASS	PASS	PASS	PASS	35.93	268	Yes	Yes	GT	DA
6/4/2007	0	85	6417	4109	0.0	85.0	6417.0	4024.0	PASS	PASS	PASS	PASS	14.08	262	Yes	Yes	GT	DA
6/5/2007	0	91	6274	4047	0.0	91.0	6274.0	3956.0	PASS	PASS	*QUESTION*	*QUESTION*	14.08	271	Yes	Yes	GT	DA
6/6/2007	1	99	6846	4164	1.0	99.0	6845.0	4065.0	PASS	*QUESTION*	PASS	PASS	35.93	282	Yes	Yes	GT	DA
6/7/2007	0	96	6794	4112	0.0	96.0	6794.0	4016.0	PASS	PASS	PASS	PASS	14.08	278	Yes	Yes	GT	DA
6/8/2007	0	97	6786	4154	0.0	97.0	6786.0	4057.0	PASS	PASS	PASS	PASS	14.08	279	Yes	Yes	GT	DA
6/11/2007	0	90	7169	4221	0.0	90.0	7169.0	4131.0	PASS	PASS	PASS	PASS	14.08	269	Yes	Yes	GT	DA
6/12/2007	0	96	6487	4102	0.0	96.0	6487.0	4006.0	PASS	PASS	PASS	PASS	14.08	278	Yes	Yes	GT	DA
6/13/2007	0	105	6768	4162	0.0	105.0	6768.0	4057.0	PASS	*QUESTION*	PASS	PASS	14.08	290	Yes	Yes	GT	DA
6/14/2007	0	86	6927	4275	0.0	86.0	6927.0	4189.0	PASS	PASS	PASS	PASS	14.08	264	Yes	Yes	GT	DA
6/15/2007	1	81	6308	4295	1.0	81.0	6307.0	4214.0	PASS	PASS	PASS	PASS	35.93	256	Yes	Yes	GT	DA
6/18/2007	0	89	6681	4067	0.0	89.0	6681.0	3978.0	PASS	PASS	PASS	PASS	14.08	268	Yes	Yes	GT	KA
6/19/2007	1	92	6431	4297	1.0	92.0	6430.0	4205.0	PASS	PASS	PASS	PASS	35.93	272	Yes	Yes	GT	KA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 5)

Counting Instrument:	2360		Detector:	43/93		Calibration Date:	5/7/2007											
Serial #:	168040		Serial #:	197432		12 month calibration:	OK											
Detector Active Area or Area Covered by Smear (cm^2):				100		NRC 6 Mo Cal. Due Date?	OK											

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA ($DPM/100cm^2$)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.2130	Th230	1247	41,200	3/30/2004	7.54E+04	41,199	100	1	1	0.50	0.53	7392.2	402.20
Beta	0.1750	Tc99	1246	27,800	3/30/2004	2.11E+02	27,514	1000	1	1	89.90	7.42	2614.7	233.41

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
5/22/2007	0	88	7365	2757	0.0	88.0	7365.0	2669.0	PASS	PASS	PASS	PASS	14.08	267	Yes	Yes	GT	DA
5/23/2007	0	85	7356	2715	0.0	85.0	7356.0	2630.0	PASS	PASS	PASS	PASS	14.08	262	Yes	Yes	GT	DA
5/24/2007	0	88	6645	2641	0.0	88.0	6645.0	2553.0	PASS	PASS	PASS	PASS	14.08	267	Yes	Yes	GT	DA
5/25/2007	1	83	7237	2752	1.0	83.0	7236.0	2669.0	PASS	PASS	PASS	PASS	35.93	259	Yes	Yes	GT	DA
5/29/2007	0	82	7376	2755	0.0	82.0	7376.0	2673.0	PASS	PASS	PASS	PASS	14.08	258	Yes	Yes	GT	DA
5/30/2007	0	82	7368	2670	0.0	82.0	7368.0	2588.0	PASS	PASS	PASS	PASS	14.08	258	Yes	Yes	GT	DA
5/31/2007	0	70	7345	2642	0.0	70.0	7345.0	2572.0	PASS	*QUESTION*	PASS	PASS	14.08	240	Yes	Yes	GT	DA
6/1/2007	0	90	7293	2645	0.0	90.0	7293.0	2555.0	PASS	PASS	PASS	PASS	14.08	269	Yes	Yes	GT	DA
6/4/2007	0	95	7354	2735	0.0	95.0	7354.0	2640.0	PASS	PASS	PASS	PASS	14.08	276	Yes	Yes	GT	DA
6/5/2007	0	98	7054	2711	0.0	98.0	7054.0	2613.0	PASS	PASS	PASS	PASS	14.08	280	Yes	Yes	GT	DA
6/6/2007	0	86	7178	2701	0.0	86.0	7178.0	2615.0	PASS	PASS	PASS	PASS	14.08	264	Yes	Yes	GT	DA
6/7/2007	1	83	6961	2692	1.0	83.0	6960.0	2609.0	PASS	PASS	PASS	PASS	35.93	259	Yes	Yes	GT	DA
6/8/2007	0	79	6987	2672	0.0	79.0	6987.0	2593.0	PASS	PASS	PASS	PASS	14.08	253	Yes	Yes	GT	DA
6/11/2007	1	86	7027	2568	1.0	86.0	7026.0	2482.0	PASS	PASS	PASS	PASS	35.93	264	Yes	Yes	GT	DA
6/12/2007	1	91	7027	2747	1.0	91.0	7026.0	2656.0	PASS	PASS	PASS	PASS	35.93	271	Yes	Yes	GT	DA
6/13/2007	0	81	6842	2674	0.0	81.0	6842.0	2593.0	PASS	PASS	PASS	PASS	14.08	256	Yes	Yes	GT	DA
6/14/2007	2	79	7031	2652	2.0	79.0	7029.0	2573.0	*QUESTION*	PASS	PASS	PASS	44.98	253	Yes	Yes	GT	DA
6/15/2007	0	82	6648	2761	0.0	82.0	6648.0	2679.0	PASS	PASS	PASS	PASS	14.08	258	Yes	Yes	GT	DA
6/18/2007	1	90	6823	2636	1.0	90.0	6822.0	2546.0	PASS	PASS	PASS	PASS	35.93	269	Yes	Yes	GT	KA
6/19/2007	1	77	6798	2715	1.0	77.0	6797.0	2638.0	PASS	PASS	PASS	PASS	35.93	250	Yes	Yes	GT	KA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 6)

Counting Instrument:	2929	Detector:	43-10-1	Calibration Date:	5/7/2007
Serial #:	137620	Serial #:	203054	12 month calibration:	OK
Detector Active Area or Area Covered by Smear (cm^2):	100				

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA (DPM/100cm^2)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.3480	Th230	1247	41,200	3/30/2004	7.54E+04	41,199	100	20	2	0.18	0.10	14054.3	62.88
Beta	0.1820	Tc99	1246	27,800	3/30/2004	2.11E+02	27,516	1000	20	2	33.78	1.57	6285.8	52.86

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
5/14/2007	4	693	28105	12669	0.2	34.7	14052.3	6299.9	PASS	PASS	PASS	PASS	7.45	87	Yes	Yes	GT	DA
5/15/2007	4	729	28176	12526	0.2	36.5	14087.8	6226.6	PASS	PASS	PASS	PASS	7.45	89	Yes	Yes	GT	DA
5/16/2007	2	681	28104	12797	0.1	34.1	14051.9	6364.5	PASS	PASS	PASS	PASS	6.53	86	Yes	Yes	GT	DA
5/17/2007	5	679	28083	12464	0.3	34.0	14041.3	6198.1	PASS	PASS	PASS	PASS	7.82	86	Yes	Yes	GT	DA
5/18/2007	3	669	28166	12800	0.2	33.5	14082.9	6366.6	PASS	PASS	PASS	PASS	7.03	86	Yes	Yes	GT	DA
5/21/2007	4	685	28347	12673	0.2	34.3	14173.3	6302.3	PASS	PASS	PASS	PASS	7.45	87	Yes	Yes	GT	DA
5/22/2007	5	687	28215	12734	0.3	34.4	14107.3	6332.7	PASS	PASS	PASS	PASS	7.82	87	Yes	Yes	GT	DA
5/23/2007	7	681	28120	12748	0.4	34.1	14059.7	6340.0	PASS	PASS	PASS	PASS	8.46	86	Yes	Yes	GT	DA
5/24/2007	4	680	28171	12634	0.2	34.0	14085.3	6283.0	PASS	PASS	PASS	PASS	7.45	86	Yes	Yes	GT	DA
5/25/2007	4	663	28136	12627	0.2	33.2	14067.8	6280.4	PASS	PASS	PASS	PASS	7.45	85	Yes	Yes	GT	DA
5/29/2007	5	657	28262	12837	0.3	32.9	14130.8	6385.7	PASS	PASS	PASS	PASS	7.82	85	Yes	Yes	GT	DA
5/30/2007	1	643	28113	12446	0.1	32.2	14056.5	6190.9	PASS	PASS	PASS	PASS	5.88	84	Yes	Yes	GT	DA
5/31/2007	0	722	28305	12658	0.0	36.1	14152.5	6292.9	PASS	PASS	PASS	PASS	4.31	89	Yes	Yes	GT	DA
6/1/2007	2	718	28268	12536	0.1	35.9	14133.9	6232.1	PASS	PASS	PASS	PASS	6.53	89	Yes	Yes	GT	DA
6/4/2007	1	695	27958	12453	0.1	34.8	13979.0	6191.8	PASS	PASS	PASS	PASS	5.88	87	Yes	Yes	GT	DA
6/5/2007	2	704	28269	12517	0.1	35.2	14134.4	6223.3	PASS	PASS	PASS	PASS	6.53	88	Yes	Yes	GT	DA
6/6/2007	4	723	28265	12701	0.2	36.2	14132.3	6314.4	PASS	PASS	PASS	PASS	7.45	89	Yes	Yes	GT	DA
6/7/2007	3	702	27999	12797	0.2	35.1	13999.4	6363.4	PASS	PASS	PASS	PASS	7.03	88	Yes	Yes	GT	DA
6/8/2007	3	708	28439	12585	0.2	35.4	14219.4	6257.1	PASS	PASS	*QUESTION*	PASS	7.03	88	Yes	Yes	GT	DA
6/8/2007	4	729	27950	12392	0.2	36.5	13974.8	6159.6	PASS	PASS	PASS	*QUESTION*	7.45	89	Yes	Yes	GT	DA
6/11/2007	4	691	28044	12492	0.2	34.6	14021.8	6211.5	PASS	PASS	PASS	PASS	7.45	87	Yes	Yes	GT	DA
6/12/2007	2	684	28071	12568	0.1	34.2	14035.4	6249.8	PASS	PASS	PASS	PASS	6.53	87	Yes	Yes	GT	DA
6/13/2007	4	719	27913	12524	0.2	36.0	13956.3	6226.1	PASS	PASS	PASS	PASS	7.45	89	Yes	Yes	GT	DA
6/14/2007	2	732	27884	12586	0.1	36.6	13941.9	6256.4	PASS	PASS	PASS	PASS	6.53	89	Yes	Yes	GT	KA
6/15/2007	3	697	28212	12659	0.2	34.9	14105.9	6294.7	PASS	PASS	PASS	PASS	7.03	87	Yes	Yes	GT	KA
6/18/2007	4	667	28298	12494	0.2	33.4	14148.8	6213.7	PASS	PASS	PASS	PASS	7.45	86	Yes	Yes	GT	KA
6/19/2007	5	702	28144	12556	0.3	35.1	14071.8	6242.9	PASS	PASS	PASS	PASS	7.82	88	Yes	Yes	GT	KA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 6)

Counting Instrument:	2929	Detector:	43-10-1	Calibration Date:	5/7/2007
Serial #:	147736	Serial #:	150788	12 month calibration:	OK
Detector Active Area or Area Covered by Smear (cm^2):	100				

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA (DPM/100cm^2)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.3450	Th230	1247	41,200	3/30/2004	7.54E+04	41,199	100	20	2	0.12	0.11	14490.0	97.33
Beta	0.1590	Tc99	1246	27,800	3/30/2004	2.11E+02	27,516	1000	20	2	40.56	4.22	5969.1	57.21

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
5/14/2007	2	863	29106	12059	0.1	43.2	14552.9	5986.4	PASS	PASS	PASS	PASS	6.58	110	Yes	Yes	GT	DA
5/15/2007	3	859	29025	12114	0.2	43.0	14512.4	6014.1	PASS	PASS	PASS	PASS	7.09	110	Yes	Yes	GT	DA
5/16/2007	4	781	28923	12027	0.2	39.1	14461.3	5974.5	PASS	PASS	PASS	PASS	7.51	105	Yes	Yes	GT	DA
5/17/2007	1	826	29191	12170	0.1	41.3	14595.5	6043.7	PASS	PASS	PASS	PASS	5.93	108	Yes	Yes	GT	DA
5/18/2007	3	669	29158	12186	0.2	33.5	14578.9	6059.6	PASS	PASS	PASS	PASS	7.09	98	Yes	Yes	GT	DA
5/21/2007	4	722	29293	12169	0.2	36.1	14646.3	6048.4	PASS	PASS	PASS	PASS	7.51	102	Yes	Yes	GT	DA
5/22/2007	4	722	29293	12169	0.2	36.1	14646.3	6048.4	PASS	PASS	PASS	PASS	7.51	102	Yes	Yes	GT	DA
5/23/2007	0	646	29155	12017	0.0	32.3	14577.5	5976.2	PASS	PASS	PASS	PASS	4.35	97	Yes	Yes	GT	DA
5/24/2007	4	693	28698	11833	0.2	34.7	14348.8	5881.9	PASS	PASS	PASS	PASS	7.51	100	Yes	Yes	GT	DA
5/25/2007	3	702	28872	12146	0.2	35.1	14435.9	6037.9	PASS	PASS	PASS	PASS	7.09	100	Yes	Yes	GT	DA
5/29/2007	4	746	28937	12067	0.2	37.3	14468.3	5996.2	PASS	PASS	PASS	PASS	7.51	103	Yes	Yes	GT	DA
5/30/2007	1	787	28786	11911	0.1	39.4	14393.0	5916.2	PASS	PASS	PASS	PASS	5.93	106	Yes	Yes	GT	DA
5/31/2007	3	692	28958	11784	0.2	34.6	14478.9	5857.4	PASS	PASS	PASS	PASS	7.09	100	Yes	Yes	GT	DA
6/1/2007	4	830	29052	12085	0.2	41.5	14525.8	6001.0	PASS	PASS	PASS	PASS	7.51	108	Yes	Yes	GT	DA
6/4/2007	4	847	28762	11994	0.2	42.4	14380.8	5954.7	PASS	PASS	PASS	PASS	7.51	109	Yes	Yes	GT	DA
6/5/2007	3	791	28692	11761	0.2	39.6	14345.9	5841.0	PASS	PASS	PASS	*QUESTION*	7.09	106	Yes	Yes	GT	DA
6/6/2007	2	696	28997	12150	0.1	34.8	14498.4	6040.2	PASS	PASS	PASS	PASS	6.58	100	Yes	Yes	GT	DA
6/7/2007	1	942	28741	11754	0.1	47.1	14370.5	5829.9	PASS	PASS	PASS	*QUESTION*	5.93	115	Yes	Yes	GT	DA
6/8/2007	2	704	29036	11894	0.1	35.2	14517.9	5911.8	PASS	PASS	PASS	PASS	6.58	100	Yes	Yes	GT	DA
6/11/2007	3	817	28651	11826	0.2	40.9	14325.4	5872.2	PASS	PASS	PASS	PASS	7.09	108	Yes	Yes	GT	DA
6/12/2007	2	826	28913	11737	0.1	41.3	14456.4	5827.2	PASS	PASS	PASS	*QUESTION*	6.58	108	Yes	Yes	GT	DA
6/12/2007	1	787	28811	12235	0.1	39.4	14405.5	6078.2	PASS	PASS	PASS	PASS	5.93	106	Yes	Yes	GT	DA
6/13/2007	2	826	29157	11919	0.1	41.3	14578.4	5918.2	PASS	PASS	PASS	PASS	6.58	108	Yes	Yes	GT	DA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 6)

Counting Instrument:	2929	Detector:	43-10-1	Calibration Date:	7/6/2007
Serial #:	132806	Serial #:	PR138385	12 month calibration:	OK
Detector Active Area or Area Covered by Smear (cm^2):	100				

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA (DPM/100cm^2)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.3410	Th230	1906-04	31,500	3/29/2004	7.54E+04	31,499	100	10	2	0.18	0.13	10735.5	103.20
Beta	0.2010	Tc99	1904-04	45,200	3/30/2004	2.11E+02	44,715	1000	10	2	45.28	4.18	9095.8	68.92

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
7/11/2007	2	416	21277	18118	0.2	41.6	10638.3	9017.4	PASS	PASS	PASS	PASS	7.74	89	Yes	Yes	gmt	gmt
7/12/2007	3	508	21511	18347	0.3	50.8	10755.2	9122.7	PASS	PASS	PASS	PASS	8.49	98	Yes	Yes	gmt	gmt

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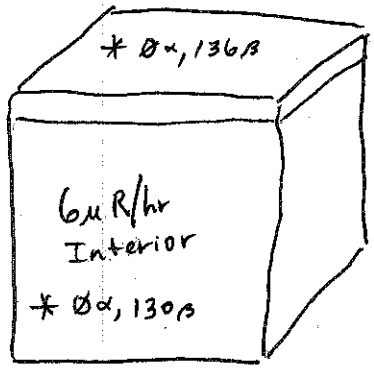
Location: Site: SYLVANIA CORNING, BLG 70	RWP# 07-1022.00-001	Survey # 001	Survey Type: Contamination	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	Ø	~~9447~~	26		
2	Ø	~~9045~~	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		N
11			36		
12		N	37		
13			38	A	
14			39		
15	A		40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



6μR/hr exterior

FREEZER IN BLDG

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
PERFORMED CONTAMINATION SURVEY of freezer in building 70. Performed 100% SCAN of accessible surfaces in interior & exterior	GORDON TANNAHILL	5/14/07	2360/43-93	168040			Ø	112	NA	5/7/08
			Mod 19	101662	NA	NA	NA	NA	6	10/7/07
	N		Mod 2929	147736			0.1	43	NA	4/30/08
	A									
							N			
	Reviewed By:	Date:								
	GMT	5/15/07					A			

Key: ■ A/S Location; *-* Boundary; ○ Smear; □ Dose Rate μR /hr; * Direct Reading CPM/direct frisk; △ Grab Sample

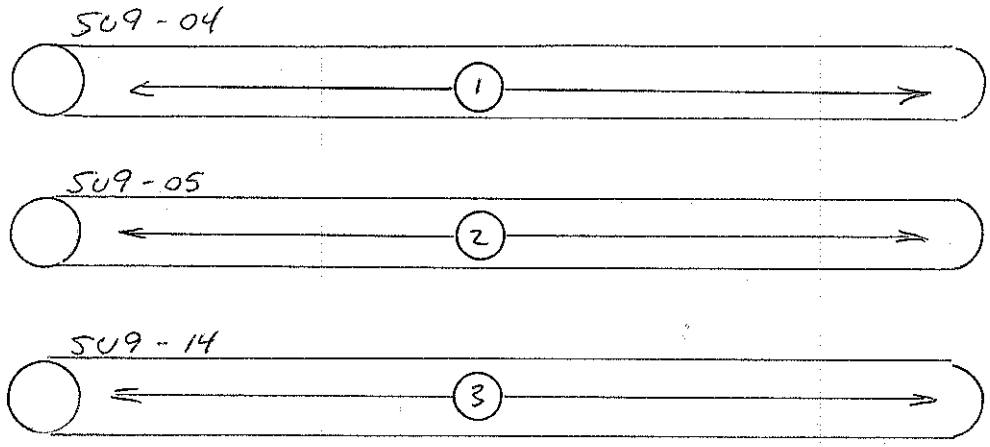
Location: SU9-04, 05, 14 Site: SYLVANIA - CORNING FUSRAP SITE	RWP# 07-1022.00-001	Survey # 002	Survey Type: FREE RELEASE	pg. 1 of 1

Smear (~~CPM/100 cm²~~) circle one

Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	0	98	26		
2	0	79	27		
3	0	60	28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		N
11			36		
12			37		
13		N	38	A	
14			39		
15			40		
16			41		
17	A		42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

1. SU9-04, END OF BORING
2. SU9-05, " "
3. SU9-14, " "



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SMEARS ARE FROM	K. ANDREWS	5/16/07	2929/ 43-10-1	147736 PR. 150788	0.345	0.159	~~4~~	~~781~~	NA	04/30/08
GROSS AREAS OF TUBES							0.2	36.5		
@ EACH BORING LOCATION,	N									
ALL GROSS MASSALINN WERE							N			
DID NOT EXCEED BKG. OF	A									
0α, 131 BX w/2360, 43-93	Reviewed By:	Date:					A			
swipe results are counts/2min	[signature]	5/16/07								

Key

■	A/S Location
-	Boundary
○	Smear
□	Dose Rate ____/hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: ZEBRA TRUCK / DRILL RIG Site: SYLVANIA - CORNING FUSRAP SITE	RWP# 07-1022.00-001	Survey # 003	Survey Type: INCOMING	pg. 1 of 1

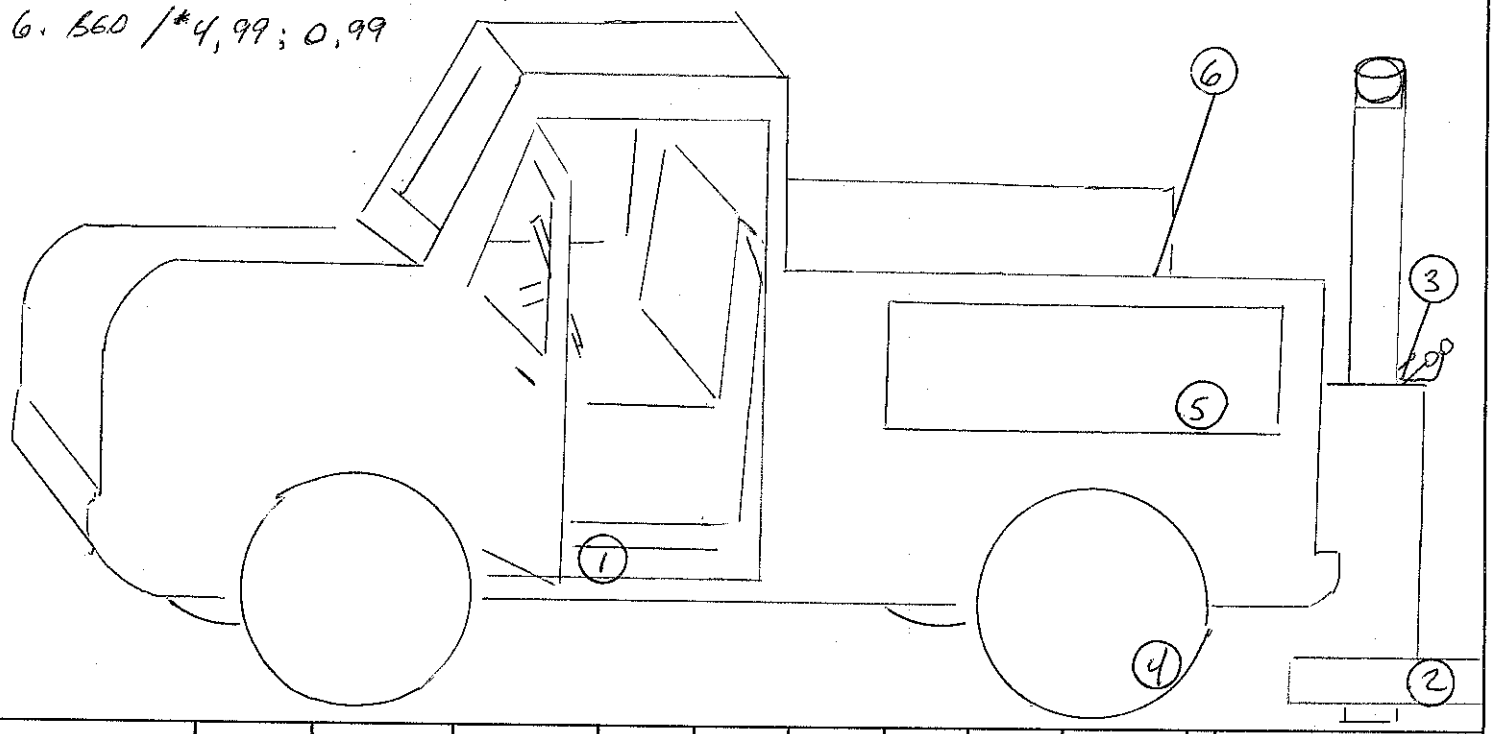
Smear (CPM/100 cm²) circle one

Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	0	83	26		
2	1	70	27		
3	0	81	28		
4	0	68	29		
5	0	76	30		
6	1	72	31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

LOCATION / DIRECTS

1. CAB / * 0, 116
2. SHOE / * 0, 127
3. CONTROL PANEL / * 4, 87
4. TIRE / * 0, 108
5. TOOL BOX LEFT, RIGHT / * 0, 151
6. BED / * 4, 99; 0, 99



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
swipe results in counts / 2 min.	A. CRAIG - K. ANDREWS	05/15/07	2360/ 43-93	168040	0.15	0.10	0	131	NA	5/7/08
	K. ANDREWS	05/16/07	2929/ 43-10-1	147736/ PR. 150788	0.345	0.159 KMA	~~4~~ 0.2	~~781~~ 36.5	NA	04/30/08
	Reviewed By: [signature]	Date: 5/16/07								

Key

■	A/S Location
-	Boundary
○	Smear
□	Dose Rate ____ /hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: ZEBRA TRUCK / DRILL RIG	RWP#	Survey #	Survey Type:	pg. 1 of 1
Site: SYLVANIA - CORNING FUSRAP SITE	07 - 1022.00 - 001	004	FREE RELEASE	

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	69	26		
2	1	83	27		
3	1	71	28		
4	0	72	29		
5	2	67	30		
6	0	69	31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

1. CAB, INTERIOR / * 1,64
2. TABLE ON TRUCK / * 0,57
3. TAILGATE / * 1,66
4. PROBE ON RIG / * 0,64
5. BED OF TRUCK / * 0,59
6. TIRES / * 1,68

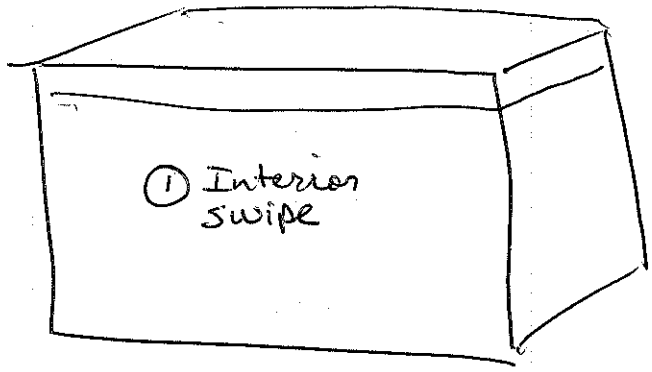
Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
GROSS MASS CLEANUP FROM	A. CRAIG	05/16/07	2360/43-93	148040	0.15	0.10	0	66	NA	5/7/08
TRUCK - 2 CPM α, 71 CPM β	K. ANDREWS	05/16/07	2929/43-10-1	147736/PR.150788	0.345	0.159 KMA	4	78	NA	04/30/08
AVG. SCAN OF ALL							0.2	36.5		
ACCESSABLE AREAS OF										
TRUCK RIG WERE										
0 CPM α	Reviewed By:	Date:								
65 CPM βγ		5/16/07								

Key: ■ A/S Location; *-* Boundary; ○ Smear; □ Dose Rate ____/hr; * Direct Reading CPM/direct frisk; △ Grab Sample

Location: Site: SYLVANIA CORNING	RWP# 07-1022.00-01	Survey # 005	Survey Type: SHIPPING	pg. 1 of 1

circle one

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)					
No.	α	β	No.	α	β
1	3.5	39.5	26		
2	Ø	35.5	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



7 μR/hr on contact

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
E&E sample codes	Al Craig	5/16/07	2929	137620	34.8%	18.2%	0.2	36.5	NA	4/30/08
			Mod 19	221521	NA	NA	NA	NA	5μR/hr	10/15/07
	N									
							N			
	A									
	Reviewed By:	Date:					A			
	DM Reed	5/16/07								

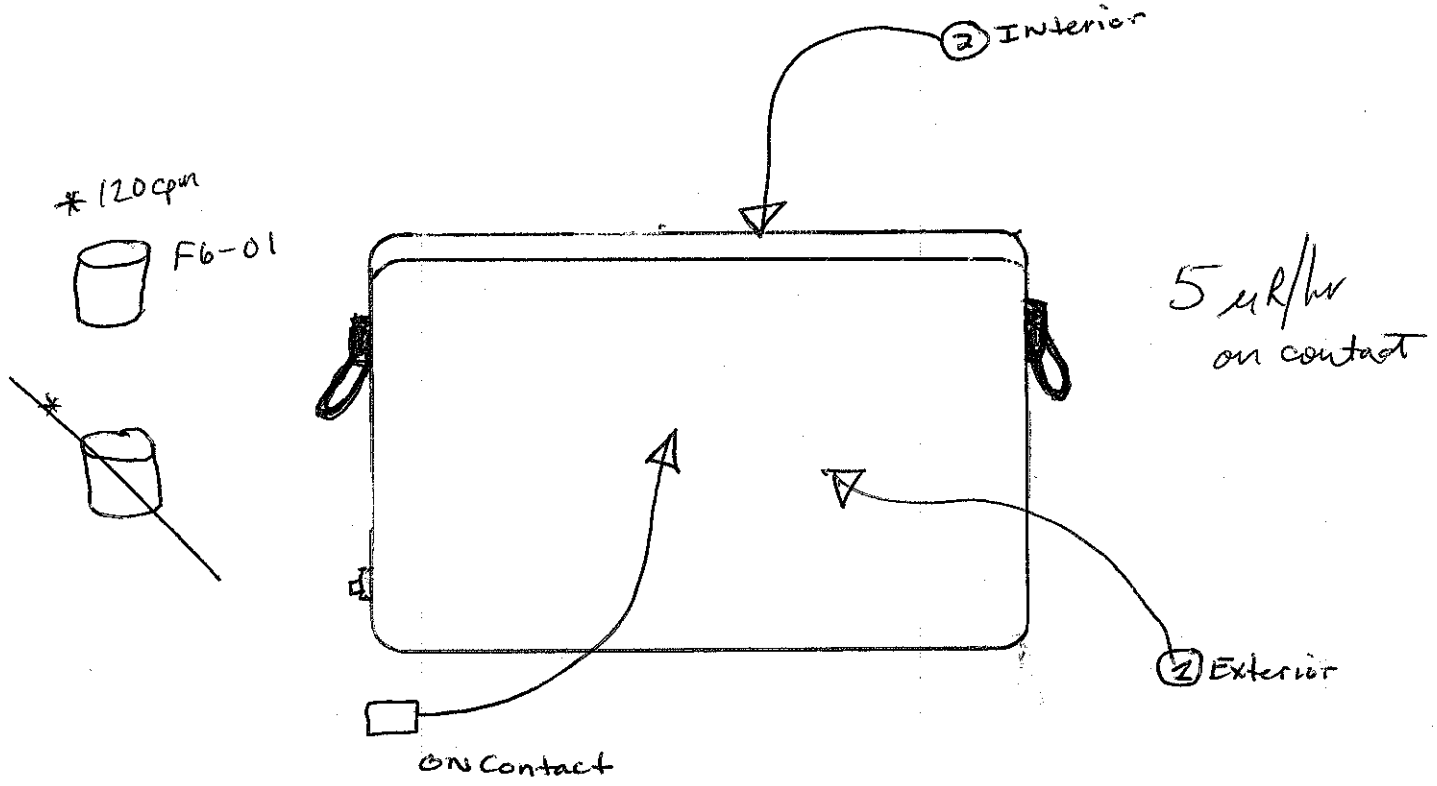
Key

- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate ____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: Site: Sylvania Corning | RWP# 07-1022.00-001 | Survey # 006 | Survey Type: Doserate/Smear | pg. 1 of 1

Smear (CPM/100 cm²) 2 min | Direct Count (CPM/Direct Frisk) | circle one

No.	α	β	No.	α	β
1	0	38	26		
2	1	34	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12		V	37		V
13			38		
14			39		
15	A		40	A	
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
EIC Sample Cooler	M Craig	5/17/07	2929	137620	34.8	18.2	0.1	41.3	N/A	4/30/08
	K. Andrews	5/17/07	mod 19	221521	N/A	N/A	N/A	N/A	5mr/h	10/18/07
			449	229304	NA	13%	NA	50	NA	4/30/08
							V			
	Reviewed By:	Date:					A			
	SMK	5/17/07								

Key: ■ A/S Location; *..* Boundary; ○ Smear; □ Dose Rate _____/hr; * Direct Reading CPM/direct frisk; △ Grab Sample

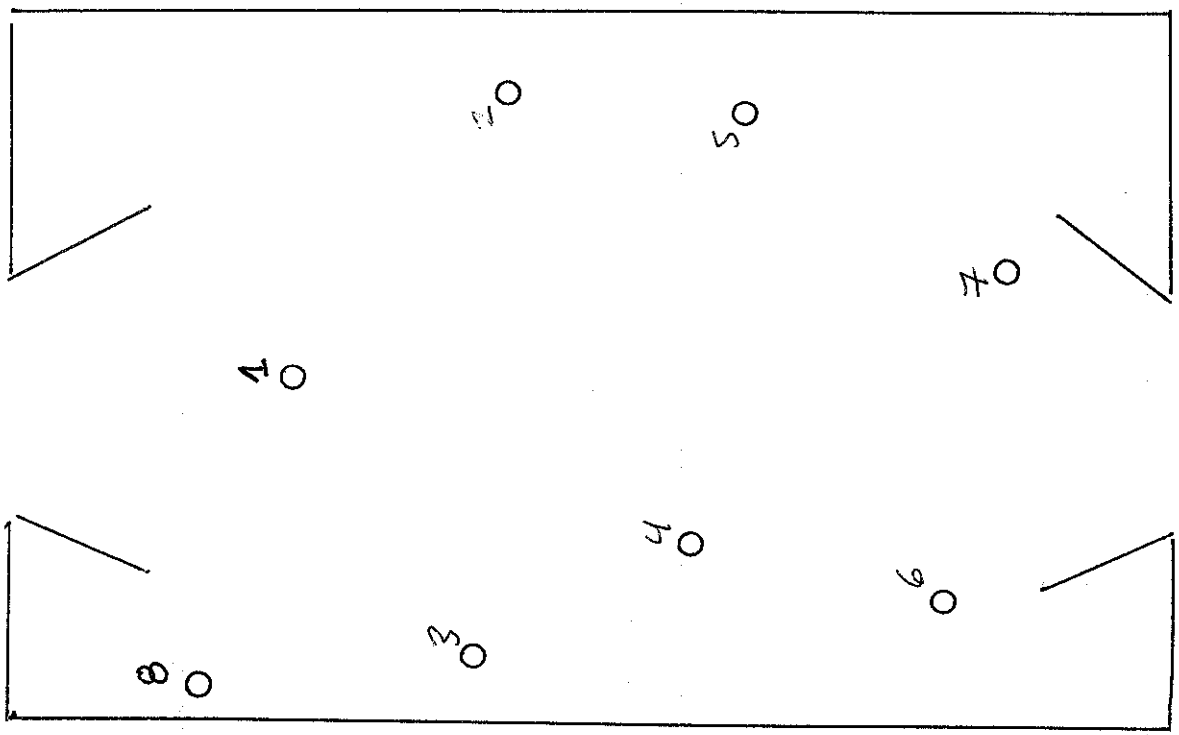
Location: Site: Sylvania Corning	RWP# 07-1022.00-07	Survey # 07	Survey Type: Smear/Static	pg. 1 of [

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	35	26		
2	0	31	27		
3	0	38	28		
4	2.5	43	29		
5	1	45	30		
6	0	40	31		
7	2.5	42.5	32		
8	0	34.5	33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

Statics

1	0/133
2	3/133
3	3/130
4	0/235
5	2/271
6	1/292
7	2/206
8	1/153



HALLWAY Borings & Core locations

Comments

Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Al Craig	5/18/07	2929	147736	34.52	15.9	0.2	33.5	NA	4/30/08
Kevin Andrews	5/18/07	2360	168040	15.0	10.0	Ø	97	NA	5/8/07
Reviewed By:	Date:								
[signature]	5/18/07								

Key

- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

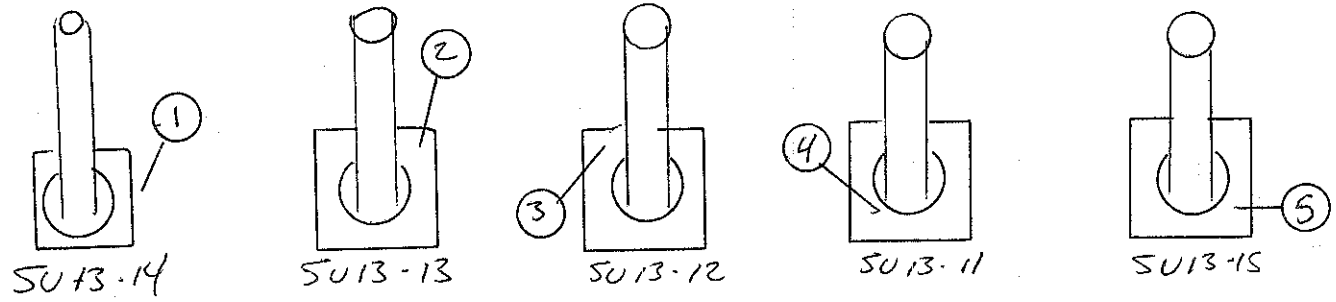
Location: GEOPROBE / CORE LOCATIONS
Site: SYLVANIA - CORNING FUSRAP SITE

RWP# 07-1022.00-01 | Survey # 008 | Survey Type: FINAL RELEASE | pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	81	26		
2	0	59	27		
3	1	78	28		
4	1	76	29		
5	0	65	30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

1. SU13-14
2. SU13-13
3. SU13-12
4. SU13-11
5. SU13-15



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
End of Boring Smears	K. ANDREWS	5/21/07	2929-43-10-1	147736-PR.150788	.213	.175	0.2	~~49.3~~	~~34.5~~ KMA	4-30-08
	Reviewed By:	Date:								
	SMT	5/21/07								

Key
- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: SU 14-18
Site: SYLVANIA-CORNING FUSRAP SITE

RWP# 07-1022.00-001

Survey # 009

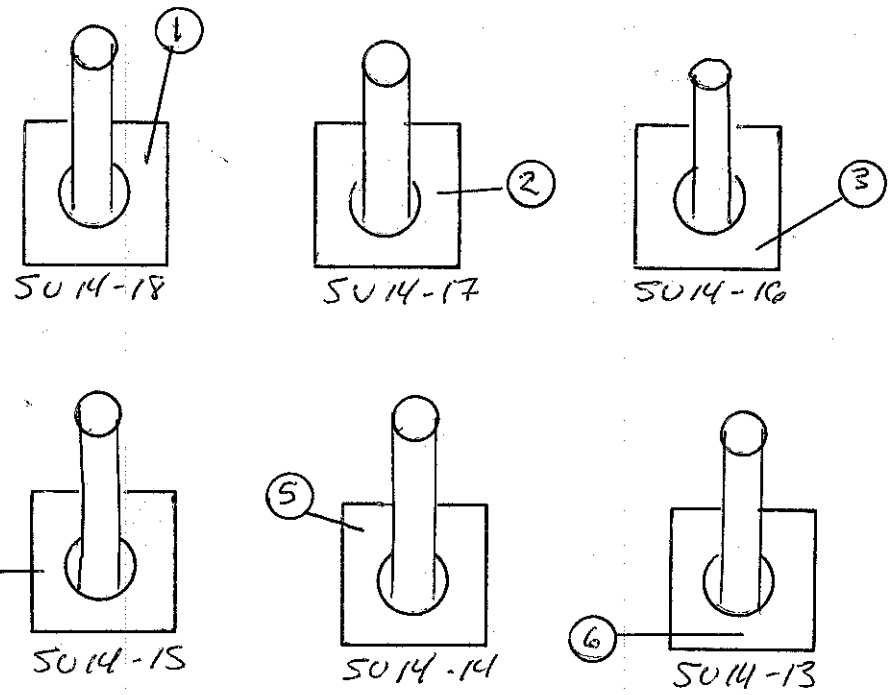
Survey Type: FREE RELEASE

pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)
circle one

No.	α	β	No.	α	β
1	0	29	26		
2	0	25	27		
3	0	32.5	28		
4	1	31.5	29		
5	1	23.5	30		
6	0	34	31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

1. SU 14-18
2. SU 14-17
3. SU 14-16
4. SU 14-15
5. SU 14-14
6. SU 14-13



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	R. Avalos	05/22/07	2929-43-10-1	147736-PR150788	0.2130	0.1750	0.2	36.1	N/A	4-30-08
	Reviewed By:	Date:								
	[illegible]	5/24/07								

Key
- A/S Location
- Boundary
- Smear
- Dose Rate _____/hr
- Direct Reading CPM/direct frisk
- Grab Sample

Location: ZEBRA TRAC GROUNDS RIG
Site: SEQUOYAH - COLLINS FERRY SITE

RWP# 07-1022-00-001

Survey # 010

Survey Type: FINAL RELEASE

pg. 1 of 1

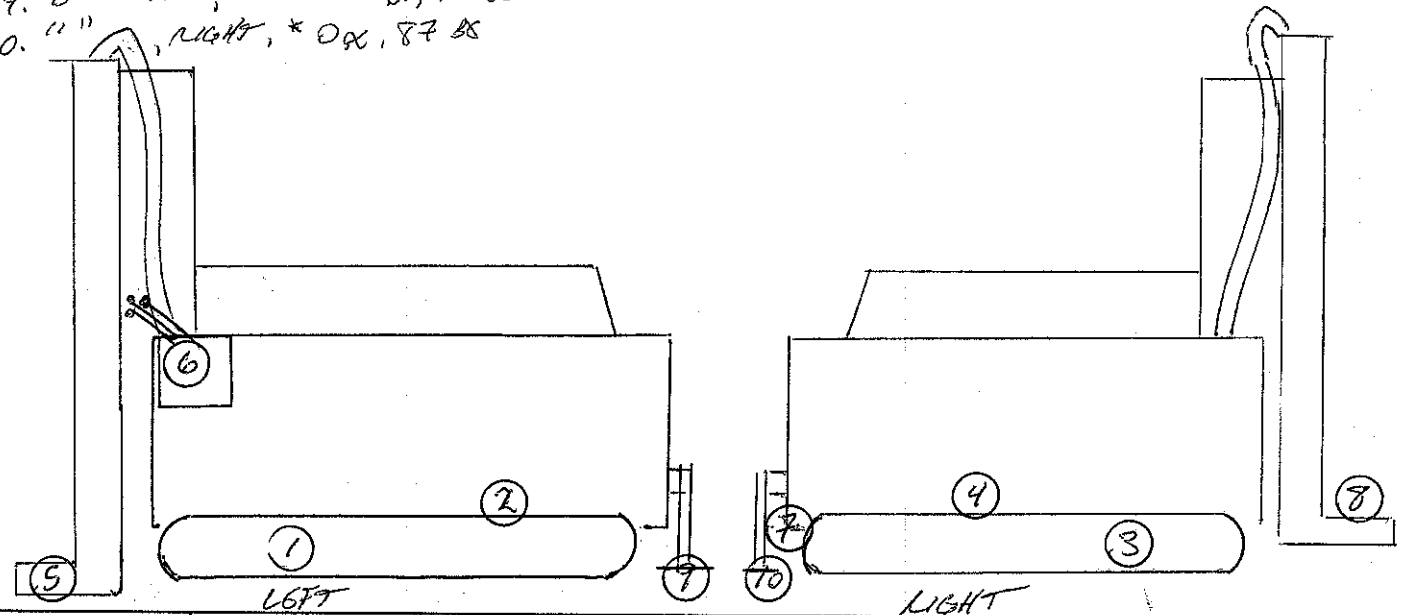
~~Smear (CPM/100 cm²)~~
Direct Count (CPM/Direct Frisk)

circle one

No.	α	β	No.	α	β
1	0	38	26		
2	0	35	27		
3	.5	25	28		
4	0	45	29		
5	0	40	30		
6	0	38	31		
7	.5	30	32		
8	0	34	33		
9	0	32	34		
10	0	37	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

DIRECT COUNTS 4/2360

1. LEFT TRAC HOUSING * 1α, 62 BG
2. LEFT TRAC, * 0α, 75 BG
3. RIGHT TRAC HOUSING, * 0α, 67 BG
4. LIGHT TRAC, * 2α, 84 BG
5. SHOE, * 1α, 94 BG
6. CONTROLS * 1α, 68 BG
7. BASE OF TRAC LUG, * 1α, 77 BG
8. TOP OF SHOE, * 0α, 83 BG
9. OUTRIGGER, LEFT, * 1α, 95 BG
10. " ", RIGHT, * 0α, 87 BG



Comments

Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
R. ANDREWS	5/25/07	2360/43-93	184905 M. 179868	0.15	0.10	0	82	82 2MIN	05/07/08
A. CRAIG	5/25/07	2929/43-10-1	137020 PR. 203054	~~0.34~~ 0.27 SWT	1.75	~~0.17~~ 0.13 SWT	53.2	N/A	05/07/08

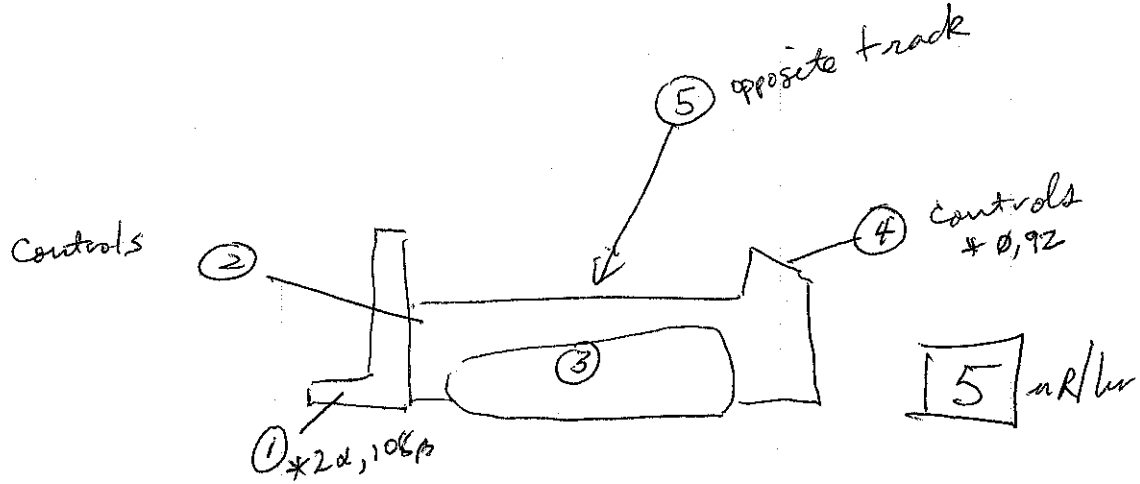
Reviewed By: SWT Date: 5/25/07

Key
- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: Site: HICKSVILLE L.I. FUSRAP	RWP# 07-1022-00-001	Survey # 011	Survey Type: Release Survey	pg. 1 of 1

Smear (CPM/100 cm²) ~~Direct Count (CPM/Direct Frisk)~~ — circle one

No.	α	β	No.	α	β
1	0.5	40	26		
2	Ø	35.5	27		
3	Ø	39.5	28		
4	Ø	38	29		
5	0.5	41.5	30		
6			31		
7			32		
8			33		
9			34		
10			35		V
11			36		
12			37	A	
13			38		
14		V	39		
15			40		
16			41		
17	A		42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Bobcat Geoprobe Rig

Comments: Swipe results in CPM

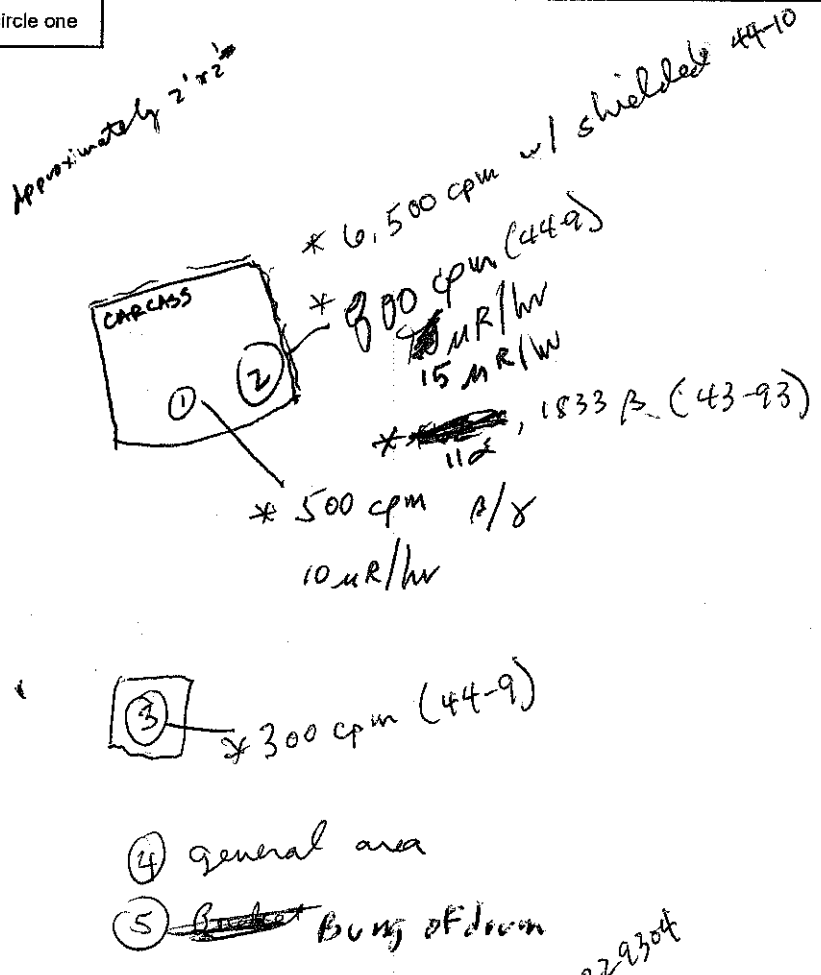
Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
smt	6/7/07	147736	2929	34.5	15.9	0.1	47.1	NA	4/30/08
~~smt~~		~~smt~~	~~449~~						
		184903	43-93	15.Ø	10.Ø	1	84	NA	5/07/08
		101662	Mod 19	NA	NA	NA	NA	5mR/hr	10/07/07
						~~2~~			
Reviewed By:	Date:								
	6/7/07					A			

Key: A/S Location; Boundary; Smear; Dose Rate μR /hr; Direct Reading CPM/direct frisk; Grab Sample

Location: Site: EM 29	RWP# 07-1022.00-001	Survey # 012	Survey Type: Contamination	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	4	87	26		
2	6	84	27		
3	1	70	28		
4	2	67	29		
5	3	73	30		
6	3	90	31		
7	1	82	32		
8	0	78	33		
9	0	66	34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Drum carcass found @ 3' bgs @ Em-29. Drum had elevated activity in seams & folds (bung). Drum appears to have lead.

(2) Bucket of Backhoe
(4) general area
(8)
(9)

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	Al Craig	6/6/07	44-9	~~229804~~ 229304	NA	10%	NA	40	NA	5/08
			Mod 19	221521	NA	NA	NA	NA	5	5/08
			44-10 shld	108862	NA	NA	NA	NA	~~1833~~	5/08
			43-93	168040	15%	10%	2	86	NA	5/08
			2929	147736	34.5	15.9	0.2	40.9	NA	4/08
	Reviewed By: Smt	Date: 6/6/07								

Key: ■ A/S Location; *-* Boundary; ○ Smear; □ Dose Rate _____/hr; * Direct Reading CPM/direct frisk; △ Grab Sample

Location: Site: BOBCAT RIG	RWP# 07-1022.00-001	Survey # 013	Survey Type: RELEASE	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	.5	39	26		
2	0	32	27		
3	0	34	28		
4	0	40	29		
5	.5	32	30		
6	0	33	31		
7	0	35	32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

Statics

1 1/52 ✱

2 1/61 ✱

3 0/54 ✱

4 1/63 ✱

Smears

1 – 7

Probe Tracks Body

Scan Result

At BKG or Below Ambient BKG

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	AC	6/15/07	2929	137620	34.8	18.2	2	689	N/A	4/5/08
			2360	168090	21.3	17.5	1	52	N/A	5/1/08
	Reviewed By:	Date:								
	SWT	6/15/07								

Key

- ▩ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: Back Hoe
Site:

RWP# 07-1022.00-001

Survey # 014

Survey Type: RELEASE

pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)

circle one

No.	α	β	No.	α	β
1	0	37	26		
2	1	36	27		
3	0	31	28		
4	1	34	29		
5	0	40	30		
6	0	28	31		
7	0	34	32		
8	05	42	33		
9	0	38	34		
10	05	32	35		
11	0	35	36		
12			37		
13			38		
14			39		
15			40		
16			41		
17		2	42		
18			43		
19	4		44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

Statics

Swipes

Bucket * 2/86 ①,②

Hoe * 1/73 ③,④

RT * 2/89 - - - ⑤

LT * 1/90 - - - ⑥

RRT * 2/76 - - - ⑦

LRT * 3/71 - - - ⑧

Cab * 2/82 - - - ⑨

Out rigger (L,R) - - - - ⑩,④

SCAN 4393/2360

< Than 100 cpm Beta/gamma

< Than 5 Alpha cpm

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	AL KA	6/15/07	2929	137620	34.8	18.2	2	689	N/A	4/30/08
			2360	168040	2130	17.5	1	52	N/A	5/1/08
							2			
							4			
	Reviewed By:	Date:								
	gmt	6/15/07								

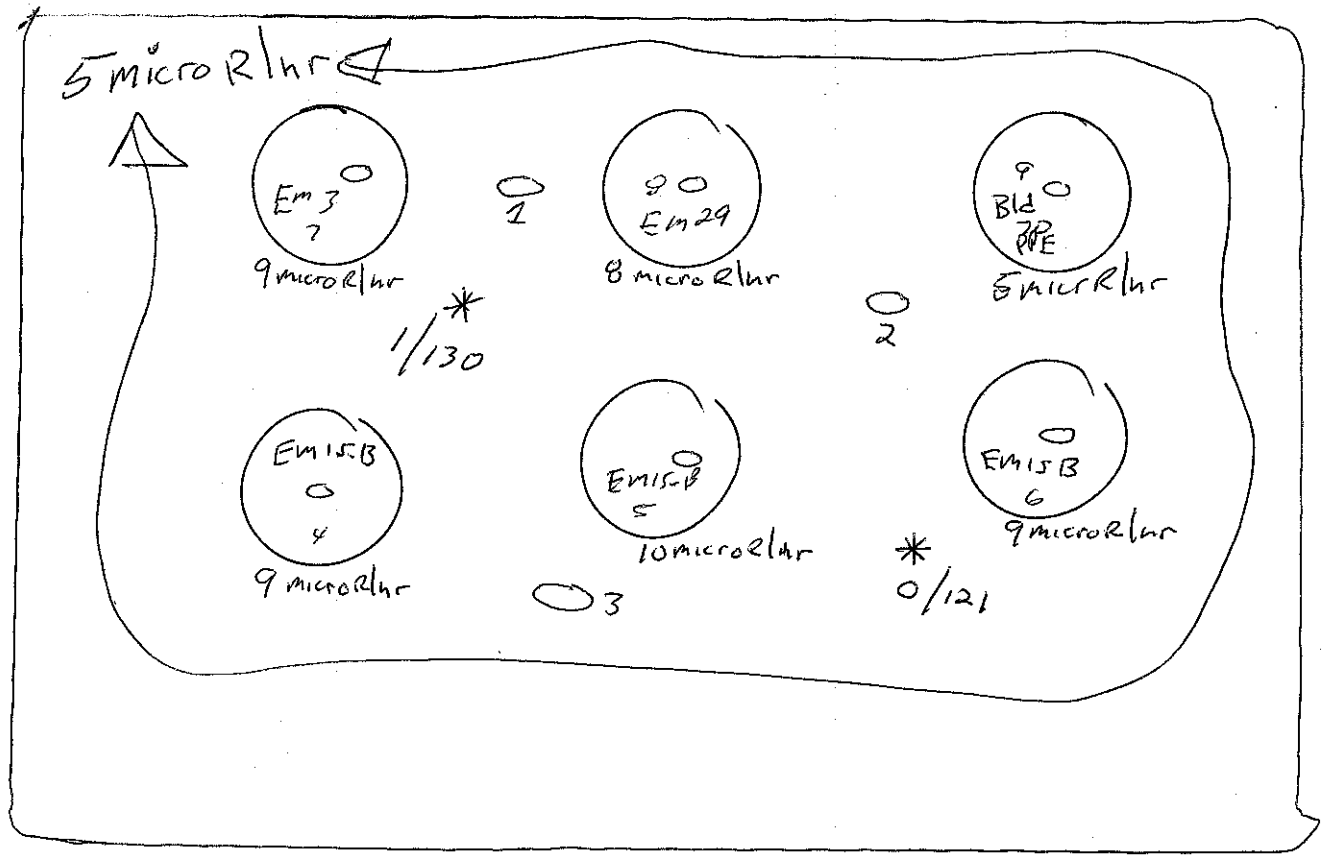
Key

- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: Site: RAD Drum Area	RWP# 07-1022.00-001	Survey # 015	Survey Type: Contamination	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0.5	34	26		
2	0.5	34	27		
3	0.5	35	28		
4	0.5	32	29		
5	0.5	40	30		
6	0.5	36	31		
7	0.5	38	32		
8	0.5	32	33		
9	0.5	35	34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due	Key
	AL KA	6/15/07	2929	137620	34.6	18.2	2	669	N/A	4/30/08	
			2360	168040	21.56	17.5	1	52	N/A	5/1/08	■ A/S Location
	N		MOD19	221521					5	10/15/07	*-* Boundary
											○ Smear
	A					2					□ Dose Rate _____/hr
	Reviewed By:	Date:				A					* Direct Reading CPM/direct frisk
	SMT	6/15/07									△ Grab Sample

Location: ACTIVE SAMPLE PT.	RWP#	Survey #	Survey Type:	
Site: SYLVANIA - COLVING FUSCAP SITE	07 - 1022.00 - 001	016	FLEX LOCATE	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	52	26		
2	1	50	27		
3	0	65	28		
4	0	78	29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13	N		38	N	
14		A	39		A
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

1. SU 10-09
2. SU 10-02
3. DR R1/R2
4. SU 11-22

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
2 MIN CT. ON	K. ANDREWS	6/6/07 ~~04/30/08~~	2929/ 43-10-1	137620/ 203054	.318	.182			N/A	04/30/08
SMEARS.					N					
					A					

Reviewed By:	Date:
[illegible]	6/6/07

Key: ■ A/S Location; *_* Boundary; ○ Smear; □ Dose Rate _____/hr; * Direct Reading CPM/direct frisk; △ Grab Sample

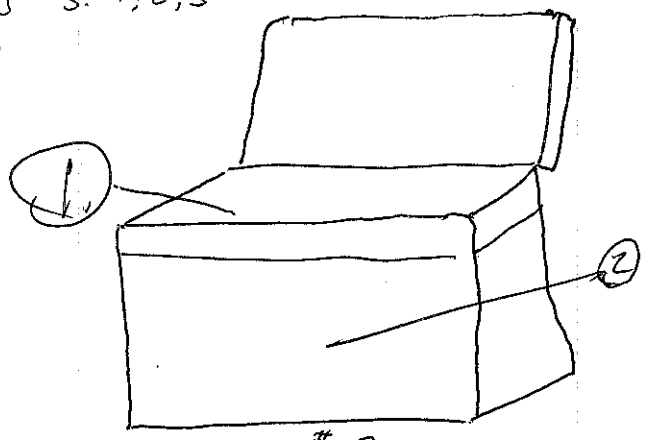
Location: HICKSVILLE Site:	RWP# 07-1022.00-001	Survey # Release/Swipe ← →	Survey Type: p17	pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)

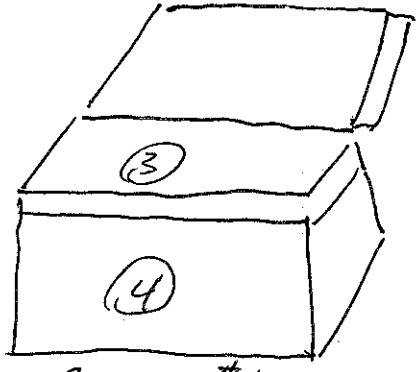
circle one

No.	α	β	No.	α	β
1	1	40	26		
2	1	34	27		
3	0	37	28		
4	0	40	29		
5	0	32	30		
6	1	31	31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

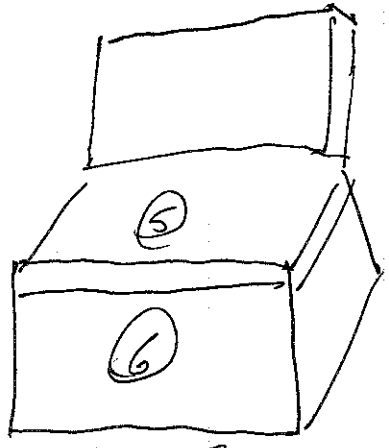
ARCHIVE COOLERS #'s 1, 2, 3
1. COOLER 2 INSIDE
2. " " OUTSIDE
3. COOLER 1 INSIDE
4. COOLER 1 OUTSIDE
5. COOLER 3 INSIDE
6. COOLER 3 OUTSIDE



COOLER # 2



COOLER #1



COOLER 3

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	Kandrews	6/18/07	~~#4 9~~							
			2929	137620	0.348	0.182	0.2	33.4	NA	4/30/08
	Reviewed By:	Date:								
	[signature]	6/18/07								

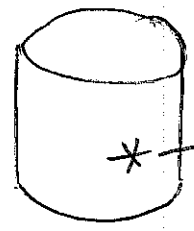
Key
- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE Site: BLG 70 G4-01	RWP# 07-1022.00-001	Survey # ~~Contamination~~ gmt SURVEY-018	Survey Type: CORE BORING	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (~~CPM~~/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	10	80	26		
2	0	55	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		N
11			36		
12		N	37		
13			38	A	
14	A		39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

Smear results in counts per 2 minutes.

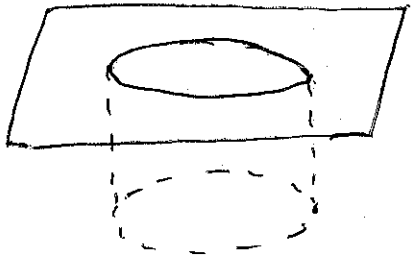


100-110 cpm w/ 44-9 (β/γ)

~~20 kcpm (γ) w/ 44-10~~ gmt

① Pre coring

② post coring.



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SCANNED 100% of core	K. ANDREWS	5/16/07	12C/44-9	229304	NA	0.10	NA	30	NA	5/08
SAMPLE & BOREHOLE. ~~Static~~	A. Craig	5/16/07	19	221521	NA	NA	NA	NA	5	10/07
Measurements performed			2221/44-10	108862	NA	NA	NA	NA	2,873	5/08
at locations w/ highest activity.	N		2360/43-93	168040	0.15	0.10	0	98	NA	5/08
	A		2929	147736	0.345	0.159	0.2	39.1	NA	5/08
TRANSCRIBED Results from	Reviewed By:	Date:							N	
log to survey form.	[signature]	6/19/07							A	

Key	
■	A/S Location
-	Boundary
○	Smear
□	Dose Rate μR /hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: HICKSVILLE
Site: D8-02

RWP# 07-1022.00-001

Survey # SURVEY 019

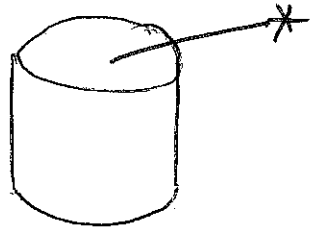
Survey Type: CORE BORING

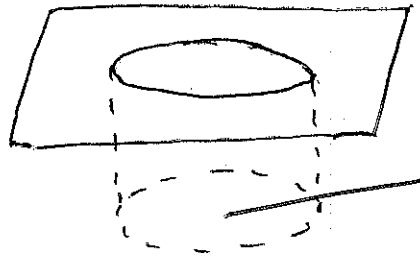
pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)
circle one

No.	α	β	No.	α	β
1	0.5	37.5	26		
2	Ø	37	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

① pre coring
② post coring





Comments:
SCANNED 100% of core SAMPLE & BOREHOLE. Static measurements performed at locations w/ highest activity. TRANSCRIBED SURVEY from field log.

Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
K. Andrews	5/16/07	12C/44-9	229304	NA	0.10	NA	45	NA	5/08
A. Craig	5/16/07	19	42221521	NA	NA	NA	NA	5	10/07
		2221/44-10	108862	NA	NA	NA	NA	1,448	5/08
		2360/43-93	168040	0.15	0.10	2	96	NA	5/08
A		2929	147736	0.345	0.159	0.2	39.1	NA	5/08
Reviewed By:	Date:				V				
JM Cruz	6/19/07				A				

Key:
- A/S Location
- Boundary
- Smear
- Dose Rate μR /hr
- Direct Reading CPM/direct frisk
- Grab Sample

Location: HICKSVILLE
Site: BLG 70 F6-02

RWP# 07-1022.00-001

Survey # SURVEY-020

Survey Type: CORE BORING

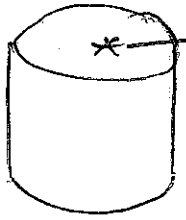
pg. 1 of 1

circle one

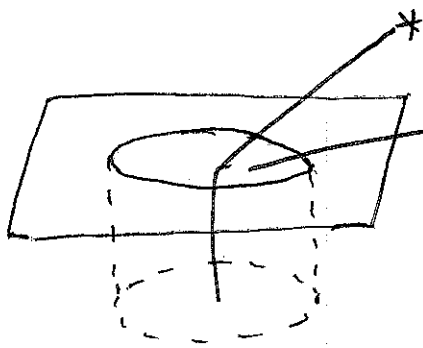
Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	0-5	36.5	26		
2	Ø	34.5	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		Z
10			35		
11		V	36		
12			37	A	
13			38		
14	A		39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

① pre survey
② post survey



33 Kcpm β/γ w/ 44-9



4,746 cpm γ w/ 44-10

20 uR/hr in hole

LAS of core & hole + equipment is Ø α, 118 β w/ ~~2360-~~ 43-93.

Comments

SCANNED 100% of core SAMPLE & BOREHOLE. ~~Static~~ Measurements performed at location w/ highest activity. Transcribed survey from field log.

Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
K. Andrews	5/16/07	12C/44-9	229304	NA	0.10	NA	35	NA	5/08
M. Craig	5/16/07	19	+0221521	NA	NA	NA	NA	5	10/07
		2221/44-10	108862	NA	NA	NA	NA	1,856	5/08
		2360/43-93	168040	0.15	0.10	1	99	NA	5/08
		2929	147736	0.345	0.159	0.2	39.1	NA	5/08
Reviewed By:	Date:				Z				
	6/19/07				A				

Key

- A/S Location
- Boundary
- Smear
- Dose Rate μR /hr
- Direct Reading CPM/direct frisk
- Grab Sample

Location: HICKSVILLE
Site: D9-01

RWP# 07-1022.00-001

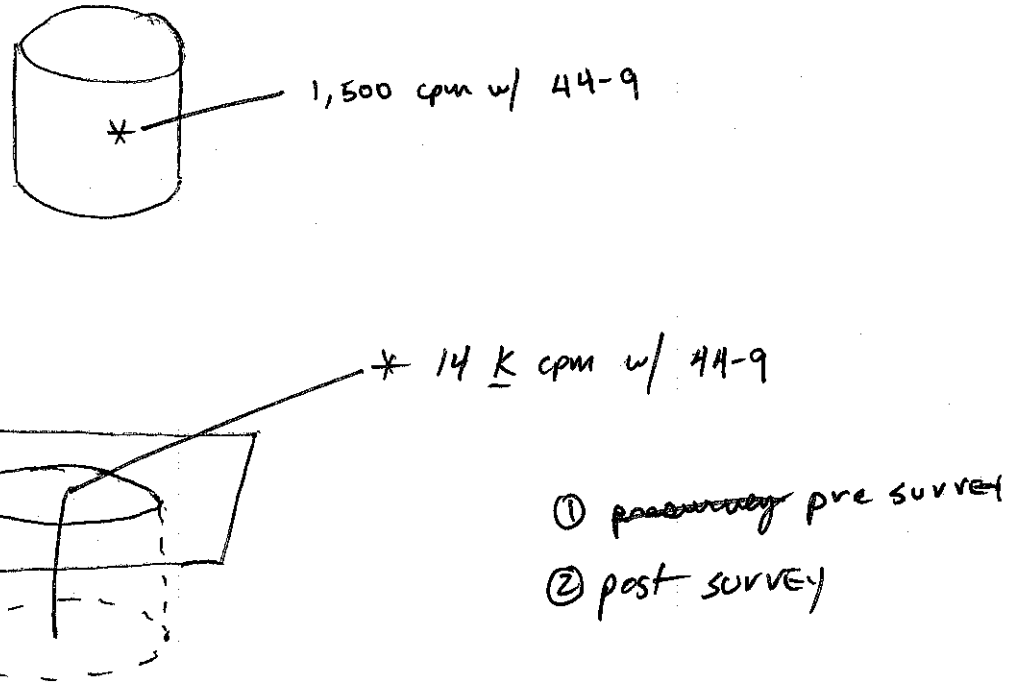
Survey # SURVEY-021

Survey Type: CORE BORING

pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)
circle one

No.	α	β	No.	α	β
1	Ø	36	26		
2	1.5	47	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		N
10			35		
11		N	36		
12			37		
13			38	A	
14			39		
15	A		40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments:
SCANNED 100% of core
SAMPLE & BOREHOLE. ~~Static~~
Measurements performed
at locations w/ highest activity.

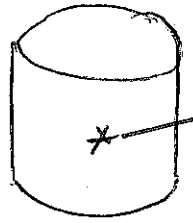
Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
K. ANDREWS	5/17/07	12C/44-9	229304	NA	0.10	NA	45	NA	5/08
A. CRAIG	5/17/07	19	42221521	NA	NA	NA	NA	5	10/07
	N	2221/44-10	108862	NA	NA	NA	NA	1,407	5/08
		2360/43-93	168040	0.15	0.10	1	83	NA	5/08
	A	2929	147736	0.345	0.159	0.1	41.3	NA	5/08
Reviewed By:	Date:				N				
	6/19/07				A				

Key:
- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate μR /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE Site: F6-01	RWP# 07-1022.00-001	Survey # SURVEY-022	Survey Type: CORE BORING	pg. 1 of 1

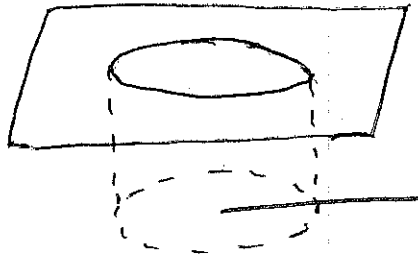
Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	1	38	26		
2	0	33	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		N
12		N	37		
13			38	A	
14	A		39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



20 μR/hr @ contact.
35 K cpm w/ 44-9. (β/γ)

① pre survey
② post survey



20 K cpm w 44-10 (γ)

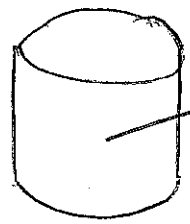
Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SCANNED 100% of core	K. Andrews	5/17/07	12C/44-9	229304	NA	0.10	NA	50	NA	5/08
SAMPLE & BOREHOLE. Static	A. Craig	5/17/07	19	+2221521	NA	NA	NA	NA	5	10/07
Measurements performed			2221/44-10	108862	NA	NA	NA	NA	1,586	5/08
at locations w/ highest Activity.			2360/43-93	168040	0.15	0.10	1	80	NA	5/08
			2929	147736	0.345	0.159	0.1	41.3	NA	5/08
	Reviewed By:	Date:								
	[signature]	6/19/07								

Key: ■ A/S Location; *-* Boundary; ○ Smear; □ Dose Rate μR /hr; * Direct Reading CPM/direct frisk; △ Grab Sample

Location: HICKSVILLE Site: F3-01	RWP# 07-1022.00-001	Survey # SURVEY-023	Survey Type: CORE BORING	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	1	44.5	26		
2	0.5	38.5	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11		N	36		N
12			37		
13			38		
14	A		39	A	
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

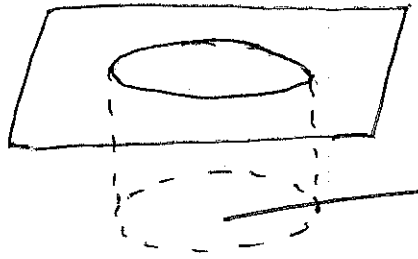


* 600 cpm w/ 44-9 (β/γ), 3 K cpm w/ 44-10 (γ)

$\boxed{7}$ μR/hr at contact

① pre SURVEY

② post SURVEY



* 3 K cpm w/ 44-10 (γ)

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SCANNED 100% of core	K. Andrews	5/17/07	12C/44-9	229304	NA	0.10	NA	50	NA	5/08
SAMPLE & BOREHOLE. ~~Static~~	A. Craig	5/17/07	19	221521	NA	NA	NA	NA	~~75~~	~~10/08~~ 10/07
Measurements performed			2221/44-10	108862	NA	NA	NA	NA	~~1586~~ 1867	5/08
at locations w/ highest activity.	N		2360/43-93	168040	0.15	0.10	1	83	NA	5/08
	A		2929	147736	0.345	0.159	0.1	41.3	NA	5/08
	Reviewed By:	Date:					N			
	[signature]	6/19/07					A			

Key

■	A/S Location
"-"	Boundary
○	Smear
□	Dose Rate μR /hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: HICKSVILLE
Site: A3-01

RWP# 07-1022.00-001

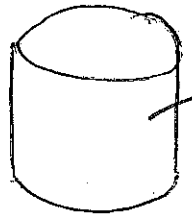
Survey # SURVEY-024

Survey Type: CORE BORING

pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)
circle one

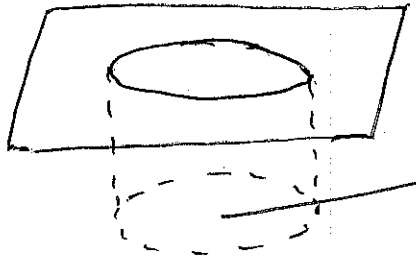
No.	α	β	No.	α	β
1	0	~~40.1~~ 40.5	26	(40.5)	Smt
2	1.5	47.5	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



12 mR/hr @ contact

* 100 cpm w/ 44-9 (β/γ); 7,823 cpm w/ 44-10 (γ)

① pre survey
② post survey.



* 2,730 cpm w/ 44-10 (γ)

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SCANNED 100% of core	K. Andrews	5/17/07	12C/44-9	229304	NA	0.18	NA	50	NA	5/08
SAMPLE & BOREHOLE. ~~Static~~	A. Craig	5/17/07	19	42221521	NA	NA	NA	NA	5	10/07
Measurements performed			2221/44-10	108862	NA	NA	NA	NA	1,849	5/08
at locations w/ highest activity.			2360/43-93	168040	0.15	0.18	1	83	NA	5/08
	A		~~2929~~	0.345	0.159	0.1	~~41.3~~	A		Smt
	Reviewed By:	Date:	2929	147736	0.345	0.159	0.1	41.3	NA	5/08
	JMD QP	6/19/07					A			

Key
- A/S Location
- Boundary
- Smear
- Dose Rate μR /hr
- Direct Reading CPM/direct frisk
- Grab Sample

Location: REMOTE GEOPROBE UNIT / CORE DRILL Site: SYLVANIA - CORNING FUSRAP SITE	RWP# 07-1022.00-001	Survey # SURVEY #025	Survey Type: FREE RELEASE	pg. 1 of 1

Smear (CPM/100 cm²) circle one

Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	0	76	26		
2	0	61	27		
3	1	59	28		
4	0	66	29		
5	0	64	30		
6	0	74	31		
7	0	60	32		
8	1	82	33		
9			34		
10			35		
11			36		
12			37	N	
13			38		A
14			39		
15			40		
16	N		41		
17		A	42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

GEOPROBE

1. SHOE, ~~0 BC~~ KMA 0α / 86 Bγ
2. CONTROLS, 0α / 71 Bγ
3. WHEELS, 1α / 83 Bγ
4. BASE, 0α / 79 Bγ

CORE DRILL

5. DRILL BLADE, 1α / 85 Bγ
6. BASE / PLATE, 0α / 72 Bγ
7. CONTROLS, 1α / 64 Bγ
8. WHEELS, 2α / 70 Bγ

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
1 MIN CT FOR STATIC	K. ANDREWS	06/19/07	2360/43-93	189903/179868	15.0	10.0	0	72	N	05/07/08
READING, 2 MIN CT.	K. ANDREWS	06/19/07	2929/43-10-1	137620/203054	.348	.182	0.3	35.1	A	04/30/08
FOR SMEARS.										
					N					
Swipe counts over										
2 minutes.	Reviewed By:	Date:								
	D. M[illegible]	6/19/07			A					

Key

■	A/S Location
-	Boundary
○	Smear
□	Dose Rate _____/hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: ZEBRA GEOPROBE TRAC RIG	RWP#	Survey #	Survey Type:	
Site: SYLVANIA - CORNING FUSRAP SITE	07-1022.00-001	026	TURB LEGACY	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	1	65	26		
2	1	68	27		
3	1	64	28		
4	1	61	29		
5	0	78	30		
6	0	80	31		
7	0	70	32		
8	1	72	33		
9	0	74	34		
10	1	55	35		
11	0	59	36		
12	0	69	37		
13	2	74	38	N	
14			39		A
15			40		
16			41		
17			42		
18			43		
19	N		44		
20		A	45		
21			46		
22			47		
23			48		
24			49		
25			50		

1. SHOE, 1α / 81 BB
2. LEFT SIDE OUTRIGGER, 0α / 70 BB
3. RIGHT SIDE OUTRIGGER, 0α / 63 BB
4. RIGHT TRAC HOUSING, 2α / 77 BB
5. LIGHT SIDE TRAC, 0α / 83 BB
6. BARREL, 1α / 70 BB
7. ROSS, 0α / 64 BB
8. LEFT TRAC HOUSING, 2α / 69 BB
9. LEFT TRAC, 1α / 78 BB
10. BASE OF SHOE, 0α / 72 BB
11. BARREL SHIELF, 1α / 68 BB
12. UNDERCARRIAGE, 0α / 81 BB
13. CONTROL PANEL, 0α / 56 BB

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SWIPE RESULTS	K. ANDREWS	6/19/07	2360/43-93	184903/179868	15.0	10.0	0	72	N	05/07/08
are listed over a	K. ANDREWS	6/19/07	2929/43-10.1	137620/263054	.348	.182	0.3	35.1	A	04/30/08
2 minute count										
time, NOT CPM.										
1 MIN OT FOR STATIC READ.										
	Reviewed By:	Date:								
		6/19/07								

Key: ■ A/S Location; *-* Boundary; ○ Smear; □ Dose Rate ____/hr; * Direct Reading CPM/direct frisk; △ Grab Sample

Location: ARCHIVE SAMPLE LOCATIONS
Site: SYLVANIA · CORNING NPL RAP SITE

RWP# 07-1022.00-001

Survey # 027

Survey Type: Free Release

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)
circle one

ARCHIVE SAMPLE PT. I.D. #'S

1. SU 11-08,
2. DR-E,
3. SU 11-13,
4. SU 11-21,
5. SU 12-06,
6. DR-J,
7. DR-U,
8. SU 9-01,

No.	α	β	No.	α	β
1	1	66	26		
2	0	63	27		
3	1	67	28		
4	0	69	29		
5	0	73	30		
6	1	62	31		
7	1	75	32		
8	0	59	33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39	N	
15			40		A
16	N		41		
17		A	42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
~~KMA~~ ~~1 MW OF. FOR STATIC~~	K. ANDREWS	06/19/07	2360/43-93	184983/179868	15.0	10.0	0	72	N	05/07/08
~~READINGS~~, 2 MW OF. FOR SMEARS.	K. ANDREWS	06/19/07	2929/45-10.1	137620/203054	.348	.182	0.3	35.1	A	04/30/08
					N					
N				A						
A	Reviewed By:	Date:								
		6/19/07								

Key
- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE
Site: BLDG 70

RWP# 07-1022.00-001

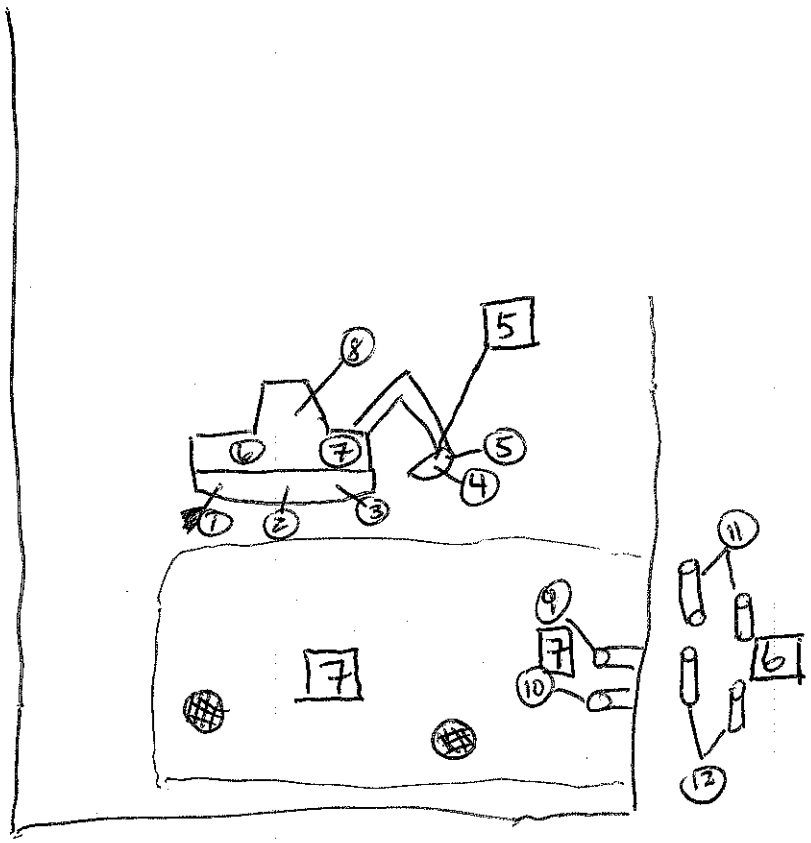
Survey # grant ~~018~~ 028

Survey Type: Contamination

pg. 1 of 1

circle one: → Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	Ø	38	26		
2	1	47	27		
3	Ø	41	28		
4	0.5	47	29		
5	Ø	51	30		
6	Ø5	53	31		
7	1	51	32		
8	Ø	55	33		
9	Ø	52	34		
10	0.5	47	35		
11	0.5	50	36		
12	Ø	53	37		V
13	Ø	44	38		
14	1	56	39	A	
15	Ø	52	40		
16	0.5	49	41		
17	Ø	42	42		
18	0.5	50	43		
19	0.5	55	44		
20	1.0	50	45		
21			46		
22		V	47		
23			48		
24		A	49		
25			50		



(1) BACKHOE TRACK
(2) " "
(3) " "
(4) BACKHOE BUCKET
(5) "
(6) BACKHOE EXTERIER
(7) " "
(8) CAB + Controls
(9) PVC PIPE in situ
(10) " "
(11) > PIPE REMOVED
(12)
(13) - (20) Tools, Equipment, PERSONNEL, MISC.

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
PERFORMED 100% SCAN of	G.M. TANNAHILL	7/12/07	2929	132806	0.34	0.20	0.3	50.8	NA	7/08
BACKHOE, Equipment, pipe &			12/44-9	232131	NA	0.10	NA	60	NA	7/08
personnel. Performed 50%			Mod 19	144790	NA	NA	NA	NA	7	5/08
scan of asphalt &						V				
materials.										
	Reviewed By:	Date:				A				
	[signature]	7/12/07								

Key
- A/S Location
- Boundary
- Smear
- Dose Rate MR /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE
Site: BLDG 70

RWP# 07-1022.00-001

Survey # ~~019~~ Smt

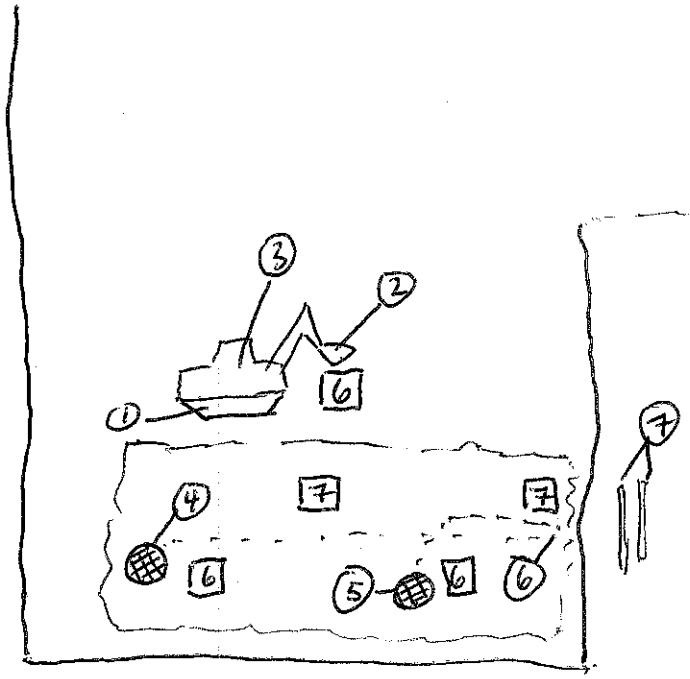
Survey Type: CONTAMINATION

pg. 1 of 1

→ Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)

circle one

No.	α	β	No.	α	β
1	0	40	26		
2	0	44	27		
3	1	45	28		
4	0.5	42	29		
5	0	53	30		
6	0.5	42	31		
7	0	42	32		
8	0.5	46	33		
9	0.5	44	34		
10	0.5	42	35		
11			36		
12			37		
13			38		
14			39		
15		//	40		
16			41		
17			42		
18	1		43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



(1) BACKHOE TRACK & Exterior
(2) " Bucket
(3) " Interior
(4) DRAIN
(5) DRAIN
(6) PVC PIPE (IN SITU)
(7) PVC PIPE Removed Sections
(8) TOOLS & Equipment
(9) " "
(10) " "

MANHOLE COVER

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
PERFORMED 100% SCAN	J.M. & OP	7/11/07	2929	132806	0.340	0.201	0.2	41.6	NA	7/08
of ACCESSIBLE SURFACES of			12/44-9	232131	NA	0.10	NA	40	NA	7/08
~~BACKE~~ BACKHOE, PIPE, tools			Mod. 19	144790	NA	NA	NA	NA	8 µR/hr	5/08
etc. PERFORMED 50% scan						N				
of asphalt and DIRT. NO										
elevated activity ~~from~~	Reviewed By:	Date:				A				
Identified.	J.M. & OP	7/11/07								

Key
- ■ A/S Location
- ·-· Boundary
- ○ Smear
- □ Dose Rate µR /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

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CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SB9 - 04
Total Depth: 15'
Page: 1 of 1

Date/Time: 05/15/07 1030 - 1120
Instr. Model / SN: 2221 w/ 44-10 10886 w/ PR. 15461S
Cal Due: 04/30/08
Ambient Bkg: 1,811 cpm
Technician Init: KMA

Sleeve #	Depth Range	Core & Scan Info			
		Top			Bottom
1	0' - 4'	1,700	1,600	1,600	1,500
	Core Scan Results (cpm):				
2	4' - 8'	1,500	1,600	1,500	1,600
	Core Scan Results (cpm):				
3	8 - 12'	1,700	1,800	1,800	1,850
	Core Scan Results (cpm):				
4	12' - 16'	1,600	1,600	1,700	
	Core Scan Results (cpm):				
5	~~16' - 20'~~		✓		
	Core Scan Results (cpm):		A		

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

500 mL - 44-9 - 85 cpm

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU9-04
Page No.: 1 of 1

Contractor: E&G	Driller: ZEBRA ENVIR.	Date Started: 05/15/07	Rock Refusal Depth:
Method: Geoprobe	Water Elevation: NA	Date Finished: 05/15/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 7'	Casing Size: 4' Acetate
			Core Size: 1.5" ~~#~~ Grout
Logged By: KMA	Checked By: [illegible]		
Date/Time: 05/15/07 1125			

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1'		2,145	FULL	SOIL	5 μR/hr @ Borehole surface				
	2'		1,640							
	3'		1,567							
	4'		1,538							
	5'		1,935							
	6'		2,908							
	7		1,672							

Notes
2221/G1 # 216482
BKG 1,104 CPM
MODEL 19 / 221151 BKG 5 MICRO R
HOLE CAVED IN AFTER 7'

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU9-05
Total Depth: 17'
Page: 1 of 1

Date/Time: 05/15/07 1450
Instr. Model / SN: 2221 w/4410, 108862
Cal Due: 04/30/08
Ambient Bkg: 1734 cpm
Technician Init: KMA

Sleeve #	Depth Range	Core & Scan Info			
		Top			Bottom
1	0' - 4'	1550	1650	1600	1600
	Core Scan Results (cpm):				
2	4' - 8'	1500	1500	1600	1600
	Core Scan Results (cpm):				
3	8 - 12'	1700	1650	1700	1550
	Core Scan Results (cpm):				
4	12' - 16'	1650	1600	1600	1500
	Core Scan Results (cpm):				
5	16' - 20'	1500			
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU9-05
Page No.: ___ of ___

Contractor: ZEBRA	Driller: Zebra	Date Started: 05/15/07	Rock Refusal Depth: NA
Method: Geoprobe	Water Elevation: N/A	Date Finished: 05/15/07	Rock Cored (FT): NA
Elevation: NA	Soil Drilled:	Total Depth: 17'	Casing Size: 4'
			Core Size: 1.5"
Logged By: E. ANDREWS	Checked By: BWK		
Date/Time: 05/15/07 1610			

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		3004		Soil	5 uR/hr @ Borehole surface				
	2		3014							
	3		2334							
	4		1496							
	5		1549							
	6		1656							
	7		1680							
	8		2730							
	9		3330							
	10		3883							
	11		3115							
	12		1936							
	13		1307							
	14		1320							
	15		1037							
	16		1036							
	17		0662							

Notes
2221 / G1 # 216482
BKG - 1028 CPM
MODEL 19 / 221151
BKG 5 uR/hr

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

(1)

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SBR1-SW09-07-E1
Total Depth: 15'
Page: 1 of 1

Date/Time: 5/15/07
Instr. Model / SN: 44/10 - 163685
Cal Due: 10/27/07
Ambient Bkg: 1537 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info
1	~~0'-4'~~ DA 0'-5'	Top / Bottom
		Core Scan Results (cpm): 1310 1737 1617
2	~~4'-8'~~ DA 5'-10'	
		Core Scan Results (cpm): 1703 1656 1659 1410 1507
3	~~8-12'~~ DA 10-15'	
		Core Scan Results (cpm): 1614 1784 1396 1388 1617
4	12' - 16'	
		Core Scan Results (cpm):
5	16' - 20'	
		Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SW09-07 (Archive)
Total Depth: 4'
Page: 1 of 1

Date/Time: 5/16/07 1905
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/08
Ambient Bkg: 1593 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top … Bottom
		Core Scan Results (cpm): 1450 1450 1500
2	4' - 8'	
		Core Scan Results (cpm):
3	8 - 12'	
		Core Scan Results (cpm):
4	12' - 16'	
		Core Scan Results (cpm):
5	16' - 20'	
		Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBRI-SU09-07
Page No.: 1 of 1

Contractor: E & E	Driller: ZEBRA	Date Started: 5/15/07	Rock Refusal Depth: NA
Method: GEOPROBE 4" MACRO CORE	Water Elevation: NA	Date Finished: 5/15/07	Rock Cored (FT):
Elevation: NA	Soil Drilled: 15'	Total Depth: 8'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/15/07		2221 SN# 190205	AKE 2221 -
		Mod 19 SN# 101662	Mod 19 - 7 μR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	NA	1850	NA	Soil	6 μR/hr @ Borehole surface				
	2	↓	1798	↓	↓					
	3		2129							
	4		2980							
	5		2746							
	6		1641							
	7		1712							
	8	↓	1583	↓	↓					

NA

NA

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-~~SW09~~-05/D
Total Depth: 50
Page: 1 of 2

Date/Time: 5/15/07
Instr. Model / SN: 44-10 / 163685
Cal Due: 10/29/07
Ambient Bkg: 1839 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	~~0'-4'~~ DA 0'-5'	Core Scan Results (cpm): 1737 1760 1830 1526
2	~~4'-8'~~ DA 5'-10'	Core Scan Results (cpm): 1742 2166 1812 1622 2144
3	~~8'-12'~~ DA 10'-15'	Core Scan Results (cpm): 1557 1494 1603 1428
4	~~12'-16'~~ DA 15'-20'	Core Scan Results (cpm): 1522 1487 1425 1501
5	~~16'-20'~~ DA 20'-25'	Core Scan Results (cpm): 1450 1450 1400

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SBR1-SUP9-08/D
Total Depth: 50
Page: 2 of 2

Date/Time: 5/15/07
Instr. Model / SN: 44/10 - 163685
Cal Due: 10/27/07
Ambient Bkg: 1439 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info			
		Top			Bottom
1	~~0' - 4'~~ DA 25' - 30'				
	Core Scan Results (cpm):	1480	1350	1500	
2	~~4' - 8'~~ 30' - 35'				
	Core Scan Results (cpm):	1378	1357	1485	
3	~~8 - 12'~~ 35' — 40'				
	Core Scan Results (cpm):	1461	1360	1428	
4	~~12' - 16'~~ 40' - 45'				
	Core Scan Results (cpm):	1375	1430		
5	~~16' - 20'~~ 45' - 50'				
	Core Scan Results (cpm):	1602	1480	1467	

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

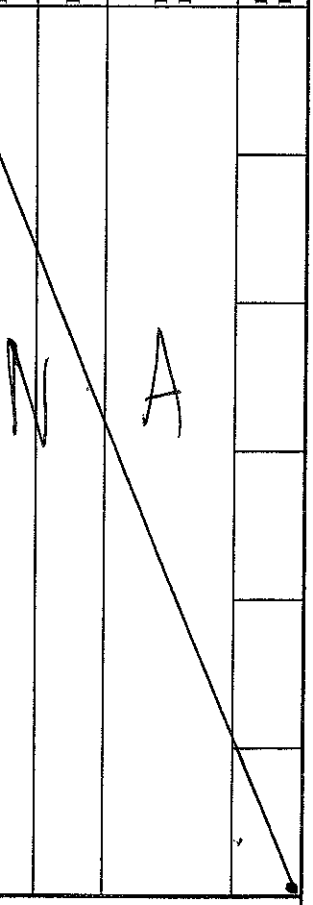
CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBH-SUB9-08/D
Page No.: 1 of 2

Contractor: E & E	Driller: ZEBRA	Date Started: 5/15/07	Rock Refusal Depth: N/A
Method: GEO PROBE	Water Elevation: N/A	Date Finished: 5/15/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled: ~~50'~~ gmt	Total Depth: 35'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: gmt		
Date/Time: 5/15/07		2221 SN# 190205	BKG 2221-998 cpm
		Mod. 19 SN# 101662	Mod. 19 - 6 µR/Hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	N/A	934	N/A	SOIL	6 µR/hr @ Borehole surface				
	2		1624							
	3		1752							
	4		1808							
	5		1999							
	6		2443							
	7		3030							
	8		3468							
	9		2744							
	10		3734							
	11		4203							
	12		3525							
	13		1994							
	14		1309							
	15		1483							
	16		1230							
	17		1128							
	18		1123							
	19		1053							
	20		1377							
	21		1151							
	22		1033							
	23		1082							
	24		965							
	25		938							
	26		978							
	27		833							
	28		883							
	29		782							
	30		759							



Notes

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBRS-SW09-05/D
Page No.: 2 of 2

Contractor: E E S	Driller: ZEBRA	Date Started: 5/15/07	Rock Refusal Depth: N/A
Method: GEO PROBE	Water Elevation: N/A	Date Finished: 5/15/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled: ~~50'~~	Total Depth: 35'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: JM		
Date/Time: 5/15/07		2221 S/N# 190205	BKG - 2221 - 998
		Mod. 19 S/N# 101662	Mod. 19 - 6 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	31	N/A	802	N/A	Soil	cpm/hr @ borehole surface				
	32		787							
	33		796							
	34		776							
	35		884							
			N				N		A	N/A
				A						

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU9-14
Total Depth: 15'
Page: 1 of 1

Date/Time: 05/15/07 1325
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04/30/08
Ambient Bkg: 1699 cpm
Technician Init: KMA

Sleeve #	Depth Range	Core & Scan Info			
		Top			Bottom
1	0' - 4'	1700	1850	1700	1700
	Core Scan Results (cpm):				
2	4' - 8'	1600	1950	1800	1600
	Core Scan Results (cpm):				
3	8 - 12'	1605	1600	1650	1900
	Core Scan Results (cpm):				
4	12' - 16'	1700	1600	1500	
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SD9-14
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA ENV.	Date Started: 05/15/07	Rock Refusal Depth: NA
Method: geoprobe	Water Elevation: NA	Date Finished: 05/15/07	Rock Cored (FT): NA
Elevation: NA	Soil Drilled:	Total Depth: 10'	Casing Size: 4'
			Core Size: 1.5"
Logged By: KMA	Checked By: gwt		
Date/Time: 05/15/07 1350			

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2222			SMR/lw @ to borehole surface				
	2		2195							
	3		1976							
	4		1776							
	5		1913							
	6		1898							
	7		1886							
	8		2385							
	9		3044							
	10		1651							

Notes

2221/G1 # 216482

BKG 903 cpm

MODEL 19/22151 BKG 5 MICRO R

HOLE CAVED-IN AFTER 10'

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

(3)

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SU09-02(21)
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/16/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1269 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top … Bottom)
1	0' - 4'	Core Scan Results (cpm): 1250 1350 1300
2	4' - 8'	Core Scan Results (cpm): 1325 1200 1200
3	8 - 12'	Core Scan Results (cpm): ZERO Recovery
4	12' - 16'	Core Scan Results (cpm): 1400 1250 1300
5	~~16' - 20'~~	Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

5 mR/hr

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SUB9-02
Page No.: 1 of 1

Contractor: E & E	Driller: ZEBRA	Date Started: 5/16/07	Rock Refusal Depth: N/A
Method: GEO PROBE	Water Elevation: N/A	Date Finished: 5/16/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled: 16'	Total Depth: 15'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/16/07		S/N # 190205 (2221) Mod 19 - S/N # 101662	BKG (2221) - 947 cpm Mod-19 - 5 µR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	N/A	1566	N/A	Soil	5 mR/hr @ Borehole Surface				
	2		2393							
	3		2707							
	4		3235							
	5		2373							
	6		1567							
	7		1497							
	8		1548							
	9		1324							
	10		1312							
	11		1261							
	12		1209							
	13		1266							
	14		1189							
	15		1055							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

(4)

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR-SW09-03
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/16/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1401 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top … Bottom
		Core Scan Results (cpm): 1350 1350 1275
2	4' - 8'	
		Core Scan Results (cpm): 1500 1325 1350
3	8 - 12'	
		Core Scan Results (cpm): 1300 1255 1250 1300
4	12' - 16'	
		Core Scan Results (cpm): 1250 1225 1225
5	~~16' - 20'~~	
		Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SB09-03
Page No.: 1 of 1

Contractor: E & E	Driller: ZEBRA	Date Started: 5/16/07	Rock Refusal Depth: N/A
Method: GEO Probe	Water Elevation: N/A	Date Finished: 5/16/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled: 16'	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: JWT		
Date/Time: 5/16/07		2221-S/N# 190205	BKG-2221 - 877
		Mod 19 S/N # 101662	Mod. 19 - 6 uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	N/A	2069	N/A	SOIL	5 uR/hr @ Borehole surface				
	2		2202							
	3		2176							
	4		2164							
	5		2558							
	6		3257							
	7		3697							
	8		2300							
	9		3045							
	10		3021							
	11		3583							
	12		1482							
	13		1296							
	14		1147							
	15		1076							
	16		764							

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site Date/Time: 5/16/07

Project #: ~~07-1005.00~~ 07-1022.00 II Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685

Location ID: SB21-SU09-0SD (Archive) Cal Due: 10/27/07

Total Depth: 10' Ambient Bkg: 1593 cpm

Page: 1 of 1 Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info
1	~~0'-4'~~ DA 0'-5'	Top … Bottom
	Core Scan Results (cpm):	1650 1595 1550
2	~~4'-8'~~ DA 5'-10'	
	Core Scan Results (cpm):	1500 1575 1450 1600
3	8 - 12'	
	Core Scan Results (cpm):	
4	12' - 16'	
	Core Scan Results (cpm):	
5	16' - 20'	
	Core Scan Results (cpm):	

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

5' acetate sleeves.

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRE SU09-09
Total Depth: ~14'
Page: 1 of 1

Date/Time: 5/16/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1496 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top … Bottom)
1	0' - 4'	Core Scan Results (cpm): 1600 1500 1650
2	4' - 8'	Core Scan Results (cpm): 1650 1500 1550
3	8 - 12'	Core Scan Results (cpm): 1650 1600 1450
4	12' - 16'	Core Scan Results (cpm): 1550 1550
5	16' - 20'	Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

Rain ~~some~~.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBRI-SW09-09
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/16/07	Rock Refusal Depth: N/A
Method: geoprobe	Water Elevation: N/A	Date Finished: 5/16/07	Rock Cored (FT): N/A
Elevation: N/A	Soil Drilled:	Total Depth: 7'	Casing Size: N/A
			Core Size: 1.5" X 4'
Logged By: DA	Checked By: JMT		
Date/Time: 5/16/07		2221 S/N# 190205	BKG-2221- 1182 cpm
		Mod. 19 S/N# 101662	Mod. 19- 5uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	N/A	1921	N/A	Soil	5uR/hr @ borehole surface				
	2		1971							
	3		2990							
	4		2147							
	5		1807							
	6		1889							
	7		1766							
			N							
				A						

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-Sub9-13
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/16/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1394 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top … Bottom
		Core Scan Results (cpm): 1450 1300
2	4' - 8'	
		Core Scan Results (cpm): 1400 1300 1250
3	8 - 12'	
		Core Scan Results (cpm): 1200 1200 1250
4	12' - 16'	
		Core Scan Results (cpm): 1300 1450 1300
5	~~16' - 20'~~	
		Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SSRI-SW09-13
Page No.: 1 of 1

Contractor: E E E	Driller: ZEBRA	Date Started: 5/16/07	Rock Refusal Depth: N/A
Method: Geo Probe	Water Elevation: N/A	Date Finished: 5/16/07	Rock Cored (FT): NA
Elevation: N/A	Soil Drilled: 16'	Total Depth: 10'	Casing Size: 4'
			Core Size: 1.5"
Logged By: DA	Checked By: JMT		
Date/Time: 5/16/07		2221 S/N# 190205	BK6-2221-926
		Mod. 19 S/N# 101662	Mod. 19- 5μR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	N/A	2113	N/A	Soil	5μR/hr @ Borehole surface				
	2	↓	2231	↓	↓					
	3		2423							
	4		2407							
	5		3077							
	6		1742							
	7		1472							
	8		1357							
	9		1479							
	10		1210							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 09-1032.60 II
Location ID: SBRE-SU09-10
Total Depth: 55'
Page: 1 of 3

Date/Time: 5/17/07 0840
Instr. Model / SN: 44-10 / 163685
Cal Due: 10/27/07
Ambient Bkg: 1333 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	
		Core Scan Results (cpm): 1525 1600 1500
2	4' - 8'	
		Core Scan Results (cpm): 1550 1550 1500 1500
3	8 - 12'	
		Core Scan Results (cpm): 1500 1500 1525
4	12' - 16'	
		Core Scan Results (cpm): 1450 1500 1500
5	16' - 20'	
		Core Scan Results (cpm): 1600 1500

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB21-SW89-10
Total Depth: 55'
Page: 2 of 3

Date/Time: 5/17/07
Instr. Model / SN: 44-107 / 163685
Cal Due: 10/27/07
Ambient Bkg: 1833 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	~~0'-4'~~ 20'-24'	Core Scan Results (cpm): 1550 1550 1650
2	24'-28'	Core Scan Results (cpm): 1600 1750
3	28-32'	Core Scan Results (cpm): 1600 1650
4	32'-36'	Core Scan Results (cpm): 1500 1500
5	36'-40'	Core Scan Results (cpm): 1550 1500

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

Elevated pid (314 ppm), continue digging.

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBK4-Sub9-10
Total Depth: 55'
Page: 3 of 3

Date/Time: 5/17/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1333 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top … Bottom)	Core Scan Results (cpm)
1	40' - 44'		1575 1575
2	44' - 48'		1600 1450
3	48' - 52'		1650 1675 1500
4	52' - 56'		1750 1600
5	~~56' - 60'~~	N	A

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBRA-SU#9-10
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/17/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/17/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 27'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By:		
Date/Time: 5/17/07		S/N NaI- 190205	BKG NaI (cpm) 957 cpm
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6 uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2108	N/A	SOIL					
	2		2085							
	3		2213							
	4		1709							
	5		1998							
	6		2207							
	7		3118							
	8		2379							
	9		1943							
Z	10		1175							
	11	Z	1251							
	12		1270							
	13	A	1221							
	14		1048							
	15		990							
	16		1007							
	17		903							
	18		851							
	19		848							
	20		845							
	21		774							
	22		798							
	23		1188							
	24		747							
	25		839							
	26		811							
	27		817							
	~~28~~ DA		~~A~~							
	N/A		N		A					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SV09-11
Total Depth: 10'
Page: 1 of 1

Date/Time: 5/17/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1613 cpm
Technician Init: SMT

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	Core Scan Results (cpm): 1750, 1600, 1440
2	4' - 8'	Core Scan Results (cpm): 1550, 1600, 1450
3	8 - 12'	Core Scan Results (cpm): 1500, 1500, 1450
4	12' - 16'	Core Scan Results (cpm): 1600, 1500, 1460
5	16' - 20'	Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SS09-11
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/17/07	Rock Refusal Depth: NA
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/17/07	Rock Cored (FT): NA
Elevation: NA	Soil Drilled:	Total Depth: 10'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: gmt	Checked By: gmt		
Date/Time: 5/17/07		S/N NaI- 190205	BKG NaI (cpm) 1,141
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2179	N/A	SOIL	6uR/hr @Borehole surface				
	2		1747							
	3		1846							
	4		1605							
	5		1748							
	6		2102							
	7		1860							
	8		1880							
	9		1686							
Z	10		1141							
		Z	N/A		N/A					
A										
		A								

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: F6-01
Total Depth: ~~8~~ KMA 7.5'
Page: 1 of 1

Date/Time: 05/16/07
Instr. Model / SN: 2221 w/44-10 #108862 w/PR. 154615
Cal Due: 04/30/08
Ambient Bkg: 1586 cpm
Technician Init: KMA

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top: 7,000 | 9,000 | 2,000 | 2,200 :Bottom Core Scan Results (cpm): 1ST 7" WERE COLD BOLING / SOIL HAND AUGER SEE LOGBOOK FOR RESULTS
2	4' - 8'	2,000 | 1,900 | 2,600 | 2,100 Core Scan Results (cpm): GEOPROBE HIT REFUSAL @ 7.5' DEPTH
3	8 - 12'	Core Scan Results (cpm):
4	12' - 16'	Core Scan Results (cpm):
5	16' - 20'	Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

GEOPROBE HIT REFUSAL @ 7.5'

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: F6 01
Page No.: 1 of 1

Contractor: ZEBRA ENV.	Driller: L. REESE	Date Started: 05/17/07	Rock Refusal Depth: 7.5'
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 05/17/07	Rock Cored (FT): 7" CONCRETE
Elevation: N/A	Soil Drilled: SANDY - SILTY	Total Depth:	Casing Size: STONE/SOIL
		METER INFO	Core Size:
Logged By: KMA	Checked By:	2221 W/G1	MODEL 19 221521
Date/Time: 05/17/07		#216482 W/C358C	CAL DUE DATE 10/15/07
		CAL. DUE DATE 05/04/08	

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	N/A	29,106		SOIL	TOP 4" CONCRETE/8" STONE & SOIL				
	2		3,204			LIMIT OF CONTAMINATION. (SUSPECT)				
	3		2,596							
	4		1,769							
	5		1,575							
	6		2,143		SOIL					
	7		N/A			HOLE CAVED-IN BEFORE COUNTS WERE TAKEN, KMA				
	7.5									

Notes

2221 W/G1 BKG 916 1 MIN (ct.)

CABRERA SERVICES, INC.	PROJECT NAME: Sylvania-Corning FUSRAP LOCATION: Hicksville, NY CLIENT: E & E	BORING LOG Location ID: SV12-20 Page No.: 1 of 1

Contractor: ZEBRA ENV.	Driller: C. RAGSO	Date Started: 05/18/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 05/18/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 13'	Casing Size:
		METER INFO	Core Size:
Logged By: RMA	Checked By: gwk	2221 w/ GT	MODEL 19 221521
Date/Time: 05/18/07		# 216482 w/ C358C	CAL DUE DATE 10/15/07
		CAL DUE. 05/04/08	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1124							
	2		1516							
	3		2410							
	4		2441							
	5		2467							
	6		2440							
	7		2482							
	8		2441							
	9		2677							
	10		1528							
	11		1300							
	12		1082							
	13		1148							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 12-20
Total Depth: 16'
Page: 1 of 1

Date/Time: 05/18/07
Instr. Model / SN: 2221 w/ 44-10 # 108862 w/ PR 154615
Cal Due: 04/30/08
Ambient Bkg: 1,889 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)	
1	0' - 4'	1,800	1,900	1,900
	Core Scan Results (cpm):	1ST 1' OF TUBE VOID SOIL/MATERIAL	
2	4' - 8'	1,800	1,850
	Core Scan Results (cpm):	4'-6' OF TUBE VOID SOIL/MATERIAL	
3	8 - 12'	1,900	1,700	1,800
	Core Scan Results (cpm):	8'-9' OF TUBE VOID OF SOIL/MATERIAL	
4	12' - 16'	1,800	1,700	1,700
	Core Scan Results (cpm):	9" VOID OF TOP OF TUBE	
5	16' - 20'			
	Core Scan Results (cpm):		

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU12-21
Total Depth: 12
Page: 1 of 1

Date/Time: 05/18/07
Instr. Model / SN: 2221 w/ 44-10 #108862 w/ PR. 154615
Cal Due: 04/30/08
Ambient Bkg: 2075 cpm
Technician Init: AC, KMA

Sleeve #	Depth Range	Core & Scan Info			
		Top VOID			Bottom
1	0' - 4'	1111111	2,000	2,100	2000
Core Scan Results (cpm):		0-1' OF TUBE. VOID OF SOIL/MATERIAL			
2	4' - 8'	2,000	2000	1900	2000
Core Scan Results (cpm):					
3	8 - 12'	1,900	2,200	2,000	2,100
Core Scan Results (cpm):					
4	12' - 16'				
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SUM-21
Page No.: of

Contractor: ZEBRA	Driller: L. MCCOY	Date Started: 5/18/07	Rock Refusal Depth: 9'
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/18/07	Rock Cored (FT): 12'
Elevation: N/A	Soil Drilled: SAND & SILTY	Total Depth: 9'	Casing Size:
		CORED TO 12' BUT HIT REFUSAL, BUT HOLE CAVED IN @ 9'	Core Size: 1.5" x 4'
Logged By: KMA	Checked By: GWK		
Date/Time: 5/18/07 1330			

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2086							
	2		3869							
	3		5316							
	4		2793							
	5		1710							
	6		1480							
	7		1525							
	8		1885							
	9		2660							

Notes
BKG FOR 2221 W/G1
#168040 - 1035

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRMSW12 - 14
Total Depth: 12'
Page: 1 of 1

Date/Time: 5/18/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1495 cpm
Technician Init: JA

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top … Bottom
		Core Scan Results (cpm): 1450 1500 1550
2	4' - 8'	
		Core Scan Results (cpm): 1250 1400 1550 1550
3	8 - 12'	
		Core Scan Results (cpm): 1550
4	12' - 16'	
		Core Scan Results (cpm):
5	16' - 20'	
		Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

6 µR/hr Bkg. on Mod. 19

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBG1-SU12-14
Page No.: 1 of 1

Contractor: EEE	Driller: ZEBRA	Date Started: 5/18/07	Rock Refusal Depth: NA
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/18/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 5'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/18/07		S/N NaI- 190205	BKG NaI (cpm) - 1082
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6 uR/hr

Sample Information						Sample Description and Classification				
Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type		Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1975		SOIL	Borehole 6 uR/hr @ Borehole (1m)				
	2		2256							
	3		3214							
	4		2832							
	5		1494							

Notes

uR/hr

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: A3-01
Total Depth: 8'
Page: 1 of 1

Date/Time: 05/18/07
Instr. Model / SN: 2221 w/44.10 #108862 w/PR. 154615
Cal Due: 04/30/08
Ambient Bkg: 1997 cpm
Technician Init: KA

Sleeve #	Depth Range	Core & Scan Info			
1	0' - 4'	Top	End first Tube →		Bottom
		2000	1,800	1,950	
	Core Scan Results (cpm):	1'-3' Compacted into 2 Ft Section of Tube			
2	4' - 8'		End Second Tube →		
		2000	1,900	2000	1,950
	Core Scan Results (cpm):	Second Tube Full Recovery 3'-6'			
3	8 - 12'				
	Core Scan Results (cpm):				
4	12' - 16'				
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

3 Ft macros on mobile indoor Rig

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: A3-Ø1
Page No.: 1 of 1

Contractor: ZEBRA ENV.	Driller: Zebra	Date Started: 05/18/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: NA	Date Finished: 5/18/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 8'	Casing Size: 3'
		METER INFO	Core Size: 1.5
Logged By: KA	Checked By: [signature]	2221 w/ G1	MODEL 19 221521
Date/Time: 05/16/07		#216482 w/ C358C	CAL DUE DATE 10/15/07
		CAL DUE DATE 05/04/08	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2364			5 uR/hr @ Borehole surface				
	2		2169							
	3		2379							
	4		2179							
	5		1514							
	6		1493							
	7		1928							
	8		2748							

Notes BKG 1,046
9:55 AM

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 5/18/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-SU~~12~~ 12/-09
Cal Due: 10/27/07
Total Depth: ~~12'~~ 12'
Ambient Bkg: 1517 cpm
Page: 1 of 1
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	Core Scan Results (cpm): 1700 1500 1600 1500 1550
2	~~4' - 8'~~ DA 6'-11'	Core Scan Results (cpm): 1600 1550 1500
3	~~8 - 12'~~ DA 11'-16'	Core Scan Results (cpm):
4	12' - 16'	Core Scan Results (cpm):
5	16' - 20'	Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

5' sleeves (2" diameter)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB4-SW02-09
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/18/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/18/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size: ~~7.5' DA~~ 4' 2" x 5'
Logged By: DA	Checked By: GMT		
Date/Time: 5/18/07		S/N NaI- 190205	BKG NaI (cpm) 1060
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 5

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1637		SOIL					
	2		2665							
	3		2199							
	4		2660							
	5		2635							
	6		2257							
	7		1652							
	8		1720							
	9		1472							
Z	10		1782							
	11	Z	2261							
A	12		1395							
		A								

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ DA 07-1022.00 #
Location ID: SB21-SW12-19
Total Depth: 10
Page: 1 of 1

Date/Time: 5/18/07
Instr. Model / SN: 2221 w/ 44-10, SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1478 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info
1	~~0'-4'~~ DA 0'-6'	Top / Bottom Core Scan Results (cpm): 1275 1450 1350 1350
2	~~4'-8'~~ DA 6'-11'	Core Scan Results (cpm): 1450 1500 1300
3	~~8-12'~~ DA 11'-15'	Core Scan Results (cpm): 1250 1300 1350
4	12' - 16'	Core Scan Results (cpm):
5	16' - 20'	Core Scan Results (cpm):

NA

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

5' tube + 1' extender on core sampler barrel (1'-6')
5' tube 6'-11'
4' tube 11'-15'

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBRI-SW12-19
Page No.: 1 of

Contractor: E&E	Driller: ZEBRA	Date Started: 5/18/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/18/08	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 11'	Casing Size:
			Core Size: ~~1.5" OA~~ 4' 8" x 5'
Logged By: DA	Checked By: GMK		
Date/Time: 5/18/07		S/N NaI- 190205	BKG NaI (cpm) 1010 cpm
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1388		SOIL					
	2		1753							
	3		3162							
	4		2611							
	5		1530							
	6		1458							
	7		1452							
	8		1774							
	9		2288							
Z	10		2495							
A	11	Z	1728							
		A								

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU13-13
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/21/07 10:20
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2030 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	2,500 | 2,400 | 2,000 | 2,000
		Core Scan Results (cpm): Top 4" Voids
2	4' - 8'	2,600 | 2,600 | 2,600 | 2,000
		Core Scan Results (cpm): 10" Voids @ 4'-4'10"
3	8 - 12'	2,400 | 2,100 | 2,400 | 2,400
		Core Scan Results (cpm): 7" Voids @ 8'-8'7"
4	12' - 16'	2,200 | 2,300 | 2,300
		Core Scan Results (cpm): 12'-13' Section of Tube Voids
5	16' - 20'	
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU 12-13
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. MEESE	Date Started: 5/21/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/21/07	Rock Cored (FT):
Elevation:	Soil Drilled: SANDY, SILTY	Total Depth: 16'	Casing Size:
		MODEL INFO	Core Size: 1.5" x 4'
Logged By: KMA, AC	Checked By: [illegible]	2221 W/GI 216482	MODEL INFO
Date/Time: 5/21/07		CAL DUE 05-01-08	MODEL # 22152I
			BKG 7, CONTACT 7 MR/HR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1760		SOIL					
	2		1859							
	3		1856							
	4		1787							
	5		1926							
	6		2070							
	7		2125							
	8		1771							
	9		1318							
	10		1299							
	11		1362							
	12		1481							
	13		1006							
	14		1013							
	15		1013							
	16		911		V					
			N							
				A						

Notes BKG 1225

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU13-14
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/21/07 - 8:45
Instr. Model / SN: 2221 w/44-10 108762
Cal Due: 04-30-08
Ambient Bkg: 2018 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	[hatched]	2,000	2,000	2,300
Core Scan Results (cpm):		1ST 1' WAS VOID OF SOIL/MATERIAL			
2	4' - 8'	[hatched] 2000	2,250	2,100	2,150
Core Scan Results (cpm):		9" Void			
3	8 - 12'	2,000	2,000	2,000	1,900
Core Scan Results (cpm):					
4	12' - 16'	1950	2,700	2,100	2,300
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.	PROJECT NAME: Sylvania-Corning FUSRAP LOCATION: Hicksville, NY CLIENT: E & E	BORING LOG Location ID: SU13-14 Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. REESE	Date Started: 5/21/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation:	Date Finished: 5/21/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled: SILTY, SANDY	Total Depth: 7'	Casing Size:
		METER INFO	Core Size: 1.5" x 4'
Logged By: KMA, AC	Checked By: [illegible]	2221 w/ GI 216482	METER INFO
Date/Time: 5/21/07 0935		CAL DUE 05-04-08	MODEL 19 221521
		BKG: 1,077 CPM (1 MIN)	BKG 5, C.6 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1924		SOIL				P.U.C.	
	2		2478							
	3		2467							
	4		2997							
	5		2216							
	6		2174							
	7		1804							
								GEOPROBE w/ P.U.C. FOR D.H.G. REFUSED @ 7' DEPTH.		
			N	A						

Notes

wall collapse

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB21-SU13-03
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/21/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1819 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	1600 | 1650 | 1700 | 1650
	Core Scan Results (cpm):	VOID
2	4' - 8'	1600 | 1600 | 1625 | 1650
	Core Scan Results (cpm):	VOID
3	8 - 12'	1550 | 1650 | 1600
	Core Scan Results (cpm):	VOID
4	12' - 16'	1600 | 1500 | 1500
	Core Scan Results (cpm):	VOID
5	16' - 20'	
	Core Scan Results (cpm):	

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

TwR/LC

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB01-SW03-03
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/21/09	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/21/09	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 15'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: gwt		
Date/Time: 5/21/09		S/N NaI- 190205	BKG NaI (cpm)- 1230
		S/N Mod19- 101662	BKG Mod19 (uR/hr)- 7 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1703		SOIL					
	2		2436							
	3		2784							
	4		2304							
	5		2500							
	6		2192							
	7		2016							
	8		2114							
	9		2153							
Z	10		2147							
	11	Z	2301							
	12		1763							
	13	A	1632							
	14		1085							
	15		1077							
	16		1130							

Z

A

Notes: Acetate sleeve for liner (casing)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 5/21/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBRI-SU13-02
Cal Due: 10/27/07
Total Depth: 16'
Ambient Bkg: 2027 cpm
Page: 1 of 1
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info				
		Top 1	2	3	4	Bottom
1	0' - 4'	VOID 1950	1800	1875	1900	
	Core Scan Results (cpm):					
		VOID 1	2	3	4	
2	4' - 8'	1900	1850	1850	1900	
	Core Scan Results (cpm):					
		1	2	3	4	
3	8 - 12'		1775	1550	1775	
	Core Scan Results (cpm):	VOID				
		1	2	3	4	
4	12' - 16'		1900	1700	1700	
	Core Scan Results (cpm):	VOID				
		1	2	3	4	
5	~~16' - 20'~~			A		
	Core Scan Results (cpm):	N				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SB03-02
Page No.: 1 of

Contractor: E&E	Driller: ZEBRA	Date Started: 5/21/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/21/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: gmt		
Date/Time: 5/21/07		S/N NaI- 190205	BKG NaI (cpm) 1476
		S/N Mod 19- 101662	BKG Mod19 (uR/hr) 7 uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2052		SOIL	7 µR/hr @ bore hole				
	2		2432							
	3		2215							
	4		2611							
	5		3186							
	6		2222							
	7		1564							
	8		1693							
	9		1850							
Z	10		1765							
	11	Z	1263							
A	12		1328	N	A					
	13	A	1117					Z		
	14		1193							
	15		1031					A		
	16		911							

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SW03-01
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/21/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/21/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 11'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/21/07		S/N NaI- 190205	BKG NaI (cpm) 1470
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 7 uR/hr

Sample Information						Sample Description and Classification				
Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type		Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2101		SOIL	7uR/hr @ bore hole				
	2		2973							
	3		6606							
	4		2800							
	5		2548	N.A.						
	6		2463							
	7		3097							
	8		1978							
	9		2018							
Z	10		1580							
A	11	Z	1092							
		A						A	Z	
				N.A.						
		N.A.								

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 5/21/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-SU13-01
Cal Due: 10/27/07
Total Depth: 16'
Ambient Bkg: 1887 cpm
Page: 1 of 1
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info				
1	0' - 4'	Top 1	2	3	4	Bottom
			1900	1850	1750	
	Core Scan Results (cpm):	VOID				
2	4' - 8'	1	2	3	4	
		1750	1800	1850	1850	
	Core Scan Results (cpm):	VOID				
3	8 - 12'	1	2	3	4	
		1450	1750	1950	1900	
	Core Scan Results (cpm):	VOID				
4	12' - 16'	1	2	3	4	
			1900	1700	1800	
	Core Scan Results (cpm):	VOID				
5	16' - 20'	1	2	3	4	
				A		
	Core Scan Results (cpm):		N			

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SU09-12
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/21/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1945 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info.
1	0' - ~~4~~ 6'	Top: VOID | VOID | 1900 | 1900 :Bottom Core Scan Results (cpm):
2	~~4' - 8'~~ 6' - 11'	 Core Scan Results (cpm): No Recovery
3	~~8 - 12'~~ 11 - 16'	VOID | 1850 | 1900 | 20,000 Core Scan Results (cpm):
4	12' - 16'	 Core Scan Results (cpm):
5	16' - 20'	 Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here.)*

~~4~~ First Push w/ 5' core + 1' extention (0-6')

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU09-12
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/21/09	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/21/09	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: gmt		
Date/Time: 5/21/09		S/N NaI - 190205	BKG NaI (cpm) 1598
		S/N Mod19 - 101662	BKG Mod19 (uR/hr) 7µR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2529		SOIL	7µR/hr @ bore hole				
	2		2226							
	3		2299							
	4		2567							
	5		2212							
	6		2176							
	7		1984							
	8		1851							
	9		1801							
	10		1905							
	11	2	1304							
	12		1230							
	13	A	969							
	14		968							
	15		928							
	16		789							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB21-Sub9-06
Total Depth: 20'
Page: 1 of 1

Date/Time: 5/21/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1589 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 6'	Top 1: 1400 | 2: 1450 | 3: 1400 | 4 | Bottom 5: 1400
		Core Scan Results (cpm): Void
2	~~6' - 8' DA~~ 11'	1 | 2 | 3 | 4 | 5
		Core Scan Results (cpm): No SAMPLE
3	~~8 - 12' DA~~ 11' - 16'	1: 1350 | 2: 1350 | 3: 1450 | 4: 1550 | 5: 1400
		Core Scan Results (cpm): Void
4	~~12' - 16' DA~~ 16' - 21'	1 | 2 | 3: 1300 | 4: 1400 | 5: 1300
		Core Scan Results (cpm): Void Void Void
5	16' - 20'	1 | 2: A | 3 | 4 | 5
		Core Scan Results (cpm): N

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

5' Acetate & 1' extension First run

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBRI-SU09-06
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/21/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/21/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 20'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: gmt		
Date/Time: 5/21/07		S/N NaI- 190205	BKG NaI (cpm) 110
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		4257		SOIL	5uR/hr @ Borehole Surface				
	2		2392							
	3		1499							
	4		1512							
	5		1517							
	6		1712							
	7		2867							
	8		2519							
	9		1350							
	10		1096							
	11		1113							
	12		1099							
	13		984							
	14		967							
	15		894							
	16		816							
	17		1245							
	18		1020							
	19		925							
	20		728							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SW 13-15
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/21/07 1600
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2270 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info			
		Top			Bottom
1	0' - 4'	2,200	2,150	2300	2,300
	Core Scan Results (cpm):				
2	4' - 8'	2,200	2,200	2,100	2,300
	Core Scan Results (cpm):				
3	8 - 12'	2,450	2,200	2,200	2,100
	Core Scan Results (cpm):				
4	12' - 16'	2,200	2,200	2,150	2,200
	Core Scan Results (cpm):	8" VOID FROM 12' TO 12'8"			
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU13-15
Page No.: 1 of 1

Contractor: ZEBRA	Driller:	Date Started: 5/21/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation:	Date Finished: 5/21/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 16	Casing Size:
		METER INFO	Core Size:
Logged By: KA	Checked By: [illegible]	2221 w/GI 216482	MODEL 19 # 221521
Date/Time: 5/21/07		CAL DUE 05-04-08	BKG 5 uR/hr
			CORE AREA 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2366							
	2		3397							
	3		2976							
	4		2545							
	5		1513							
	6		1494							
	7		2671							
	8		2695							
	9		1593							
	10		1290							
	11		1276							
	12		1327							
	13		1133							
	14		992							
	15		964							
	16		867							

Notes BKG 1153

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU13-11
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/21/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2590 cpm
Technician Init: RMA/AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'		2400	2200	2150
	Core Scan Results (cpm):	14" void			
2	4' - 8'	2,400	2,400	2,200	2,200
	Core Scan Results (cpm):				
3	8 - 12'		← 2,200 →	2,200	2,100
	Core Scan Results (cpm):	10" VOID FROM 8' TO 8'10"			
4	12' - 16'		2,400	2,200	2,200
	Core Scan Results (cpm):	VOID FROM 12' TO 13'			
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SW13-11
Page No.: 1 of 1

Contractor: 766A	Driller: C. REGSG	Date Started: 05/21/07	Rock Refusal Depth: 7'
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 05/21/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled: SILTY, SANDY	Total Depth: 7'	Casing Size:
		MOBIL 1270	Core Size:
Logged By: KMA, AC	Checked By: [illegible]	2221 w/ GI 216482	MOSBL 19 #221521
Date/Time: 5/21/07 1525		CAL DUE 05-04-08	LIQ 6 ux/hr
			core soc. 7 ux/hr.

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1903		SAND					
	2		2155							
	3		2167							
	4		2219							
	5		2469							
	6		1844							
	7		1491			HIT REFUSAL @ 7' DEPTH				

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 13-12
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/2/07 1:20
Instr. Model / SN: 2221 w/44-10 108962
Cal Due: 04-30-08
Ambient Bkg: 2282 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top: 2,500 | 2,500 | 2,500 | 2,500 :Bottom
		Core Scan Results (cpm): 1ST 4" VOID OF SOIL/MATERIAL
2	4' - 8'	2,600 | 2,650 | 2,600 | 2,600
		Core Scan Results (cpm):
3	8 - 12'	2,400 | 2,400 | 2,500 | 2,400
		Core Scan Results (cpm):
4	12' - 16'	2,650 | 2,600 | 2,500 | 2,550
		Core Scan Results (cpm): 6" VOID FROM 12' - 12'6"
5	16' - 20'	| | |
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU13-12
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. REESE	Date Started: 05/21/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 05/21/07	Rock Cored (FT):
Elevation: NA	Soil Drilled: SANDY, SILTY	Total Depth: 15'	Casing Size:
		METER INFO	Core Size: 1.5" x 4'
Logged By: KMA/AC	Checked By: [illegible]	2221 W/GI 216482	MODEL 19 #221521
Date/Time: 5/21/07		CAL DUE 05-04-08	BKG 6 NR/HR.
			ON CORE AREA 7 NR/HR.

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2438		SOIL					
	2		2611							
	3		2607							
	4		2441							
	5		2050							
	6		1934							
	7		2444							
	8		2334							
	9		1487							
	10		1128							
	11		1249							
	12		1529							
	13		1040							
	14		1042							
	15		1004							
	~~16~~		~~1042~~	KMA		N/A, LAST FOOT COLLAPSED BEFORE PVC WAS INSTALLED. KMA				

Notes BKG 1282

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SU13-04
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1919 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top: 1700 (1) | 1650 (2) | 1750 (3) | 1600 (4) Bottom
		Core Scan Results (cpm): VOID
2	4' - 8'	1700 | 1700 | 1750 | 1675
		Core Scan Results (cpm):
3	8 - 12'	1: 1625 | 2: 1750 | 3: 1600 | 4: 1600
		Core Scan Results (cpm): VOID
4	12' - 16'	1: ~~1650~~ | 2: 1700 | 3: 1600 | 4: 1700
		Core Scan Results (cpm): VOID 1 ft.
5	~~16' - 20'~~	
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g., refusal, grout, water, poor recovery, etc. here)

7 μR/hr Bkgd.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBH-SW13-04
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/21/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/22/07		S/N NaI- 190205	BKG NaI (cpm) 1508
		S/N Mod 19- 101662	BKG Mod19 (uR/hr) 7 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1589		SOIL	7uR/hr @ bore hole				
	2		2068							
	3		3586							
	4		3750							
	5		1923							
	6		2143							
	7		2673							
	8		1867							
	9		2067							
Z	10		1546							
	11	Z	1259							
9	12		1477							
	13	A	1097							
	14		909	NA						
	15		940							
	16		981							

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SW13-B5
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1896 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	1750 / 1625 / 1700
	Core Scan Results (cpm):	VOID
2	4' - 8'	1650 / 1675 / 1600
	Core Scan Results (cpm):	VOID
3	8 - 12'	1600
	Core Scan Results (cpm):	
4	12' - 16'	1650 / 1700
	Core Scan Results (cpm):	
5	16' - 20'	A
	Core Scan Results (cpm):	

Comments *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SU13-05
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/22/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 16	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: gmt		
Date/Time: 5/22/07		S/N NaI- 190205	BKG NaI (cpm) 1322
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 7

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1787		SOIL	7 µR/hr @ bore hole				
	2		2196							
	3		2251							
	4		2004							
	5		1905							
	6		2004							
	7		2037							
	8		1827							
	9		1729							
Z	10		1779							
	11	Z	1966	NA						
A	12		1499							
	13	A	1419							
	14		1616							
	15		1610							
	16		2209							
	NA		NA		NA					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SW13-06
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221w/44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1855 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top | 1: 1600 | 2: 1600 | 3: 1650 | 4: 1600 | Bottom
		Core Scan Results (cpm): VOID
2	4' - 8'	1700 | 1650 | 1650 | 1650
		Core Scan Results (cpm):
3	8 - 12'	VOID | 1650 | 1700
		Core Scan Results (cpm):
4	12' - 16'	VOID | 1650 | 1600
		Core Scan Results (cpm): VOID
5	16' - 20'	A N
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

6 μR/hr - BKGD.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SW13-P6
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/22/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 14'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/22/07		S/N NaI- 190205	BKG NaI (cpm) 1278
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6µR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1635		SOIL	6µR/hr @ bore hole				
	2		2240							
	3		2704							
	4		2512							
	5		1854							
	6		3498							
	7		3508							
	8		2323							
	9		2047							
	10		1972							
	11	Z	1367							
	12		1270							
	13	A	1101							
	14		1088							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SW13-18
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221w/44-10; SN# 163685
Cal Due: 9/27/07
Ambient Bkg: 1896 cpm
Technician Init: JA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	0' - 4'	Top VOID	1700	1400	1750	1650 Bottom
	Core Scan Results (cpm):					
2	4' - 8'	VOID	1700	1750	1600	1700
	Core Scan Results (cpm):					
3	8 - 12'		1630	1600	1800	1700
	Core Scan Results (cpm):	VOID				
4	12' - 16'	VOID	1650	1600	1650	1600
	Core Scan Results (cpm):					
5	16' - 20'			A		
	Core Scan Results (cpm):	N				

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc here)*

7μR/hr = Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBRI-SU13-08
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/22/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/22/07		S/N NaI- 190205	BKG NaI (cpm) 1316
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 7uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1522		SOIL	7μR/hr @ bore hole				
	2		1658							
	3		2424							
	4		2593							
	5		2339							
	6		1529							
	7		1897							
	8		1372							
	9		1804							
Z	10		1926							
	11	Z	2436							
A	12		1501							
	13	A	1200							
	14		1050							
	15		971	NA						
	16		956							

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRL-SU13-10
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1746 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top: 1680 | 1750 | 1800 | 1700 :Bottom Core Scan Results (cpm): VOID
2	4' - 8'	1600 | 1750 | 1650 Core Scan Results (cpm): VOID
3	8 - 12'	1550 | 1600 Core Scan Results (cpm): VOID
4	12' - 16'	VOID 1600 | 1750 | 1650 | 1650 Core Scan Results (cpm):
5	16' - 20'	A Core Scan Results (cpm): N

Comments: (record any drilling or sampling issues; e.g. core lost, soil, groundwater, poor recovery, etc. here)

7 µR/hr = Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB01-SW13-10
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/22/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 15'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: JA	Checked By: GW		
Date/Time: 5/22/07		S/N NaI- 190205	BKG NaI (cpm) 1326
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 7

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1810		SOIL	7 μR/hr @ bore hole				
	2		2590							
	3		2213							
	4		2260							
	5		2119							
	6		2186							
	7		1724							
	8		2145							
	9		1819							
	10		1126							
	11		1559							
	12		1467							
	13		1036							
	14		998							
	15		902							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SU13-B9
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221w/44-10; SN# 163685
Cal Due: 10/27/05
Ambient Bkg: 1742 cpm
Technician Init: DA/GMT.

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top VOID 1'8" | 1750 | 1550 | 1600 Bottom
		Core Scan Results (cpm):
2	4' - 8'	1750 | 1700 | 1800 | 1650
		Core Scan Results (cpm): VOID
3	8 - 12'	1750 | 1650 | 1700
		Core Scan Results (cpm): VOID
4	12' - 16'	1600 | 1625 | 1600
		Core Scan Results (cpm):
5	16' - 20'	N | A
		Core Scan Results (cpm):

Comments: (Record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

BKGD- TMR/NR

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBC-5413-BG
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/22/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: GMT		
Date/Time: 5/22/07		S/N NaI- 190205	BKG NaI (cpm) 1338
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 5 uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1513		SOIL	7 uR/hr @ bore hole				
	2		1758							
	3		2145							
	4		2167							
	5		2662							
	6		2626							
	7		1907							
	8		2336							
	9		2614							
Z	10		1709							
	11	Z	1520	N						
A	12		1270					Z		
	13	A	1256		A					
	14		905					A		
	15		895							
	16		835							

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 14-18
Total Depth: 16
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2230 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	2,400	2,450	2,450	2,450
Core Scan Results (cpm):					
2	4' - 8'	2,300	2,350	2,400	2,400
Core Scan Results (cpm):					
3	8 - 12'	~~2,400~~	2,500	2,400	2,350
Core Scan Results (cpm):		void 12"			
4	12' - 16'	~~2,400~~	2,600	2,450	2,250
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

Comments *(record any drilling or sampling issues, e.g., refusal, groundwater, pool recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU14-18
Page No.: of

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 5/22/07	Rock Refusal Depth: N/A
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled: SANDY, SILTY	Total Depth: 16	Casing Size:
		METER INFO	Core Size: 4' x 1.5"
Logged By: RMR, AC	Checked By: [signature]	2221 W/GI 216482	MODEL 19 #221521
Date/Time: 5/22/07		CAL DUE 05-04-08	GFG 5 UR/HR CONTACT 6 UR/HR
			CAL DUE 10/15/07

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1707							
	2		2428							
	3		3333							
	4		3103							
	5		2858							
	6		1773							
	7		1515							
	8		2495							
	9		2350			VOID IN TUBE @ 8'-9'				
	10		1572							
	11		1270							
	12		1101							
	13		1350			VOID IN TUBE @ 12'-13'				
	14		972							
	15		1075							
	16		1105							

Notes BKG 1199

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SUI4 - 17
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221 W/44-10 108762
Cal Due: 04-30-08
Ambient Bkg: 2440 cpm
Technician Init: KMA/AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'		2,250	2,250	2,300
Core Scan Results (cpm):		0'-1' OF CORE VOID OF SOIL/MATERIAL			
2	4' - 8'		2,300	2,250	2,300
Core Scan Results (cpm):		4'-5' OF CORE VOID OF SOIL/MATERIAL			
3	8 - 12'		2,500	2,400	2,450
Core Scan Results (cpm):		8'-9' OF CORE VOID OF SOIL/MATERIAL			
4	12' - 16'		2,200	2,200	2,200
Core Scan Results (cpm):					
5	~~16' - 20'~~				
Core Scan Results (cpm):					

Comments: *(record any drilling or sampling issues (e.g., refusal, groundwater, poor recovery, etc.) here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU 14-17
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 05/22/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished:	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SANDY, SILTY	Total Depth:	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, AC	Checked By: [signature]	2221 w/GI 216482	MODEL 19 #221521
Date/Time: 5/22/07		CAL DUE 05-04-08	BKG 6 mr/hr, CON. 6 mr/hr
			CAL DUE 10/15/07

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2148			1ST 1' OF CORE DRILLED WAS VOID OF MATERIAL				
	2		2107							
	3		1757							
	4		2033							
	5		1938			4'-5' OF CORE DRILLED WAS VOID OF MATERIAL				
	6		2069							
	7		2267							
	8		1602							
	9		1502			8'-9' OF CORE DRILLED WAS VOID OF MATERIAL				
	10		1241							
	11		1310							
						12'-13' OF CORE DRILLED WAS VOID OF MAT/SOIL WERE NOT ABLE TO D.H.G. TO MAX CORE DEPTH OF 16' DUE TO COLLAPSE IN HOLE. KMA				

N/A

Notes BKG 13 93

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SV14-16
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07, 1245
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2346 cpm
Technician Init: KHA, AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	2,150	2,000	2,150	2,150
Core Scan Results (cpm):		0'-6" VOIDS OF SOIL/MATERIAL			
2	4' - 8'	2,100	2,100	2,000	2,200
Core Scan Results (cpm):					
3	8 - 12'	2,100	2,100	1,850	2,150
Core Scan Results (cpm):					
4	12' - 16'	1,800	1,850	2,000	2,100
Core Scan Results (cpm):					
5	~~16' - 20'~~				
Core Scan Results (cpm):					

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB19-16
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABRERA	Date Started: 5/22/07	Rock Refusal Depth:	
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/22/07	Rock Cored (FT):	
Elevation: O.G.	Soil Drilled: SANDY, SILTY	Total Depth: 16'	Casing Size:	
		METER INFO	Core Size:	
Logged By: KMA, AC	Checked By:	2221 W/GI 216482	METER INFO	
Date/Time: 5/22/07		CAL DUE 05-04-08	MODEL A #2215A1 BKG 6 uR/hr	
			CAL DUE 10-15-07 Con 4 uR/hr	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		3188		SOIL	1ST 0-6" VOID				
	2		3217							
	3		2924							
	4		1777							
	5		1877							
	6		2165							
	7		2940							
	8		2132							
	9		1765							
	10		1125							
	11		1152							
	12		1392							
	13		1157			1ST 0-6" VOID				
	14		1011							
	15		969							
	16		862							

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SB14-15
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2303 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	XXXXX	2000	2100	2000
	Core Scan Results (cpm):	12" Void			
2	4' - 8'	2000	2100	2000	2050
	Core Scan Results (cpm):				
3	8 - 12'	2,100	2,000	2,000	2,100
	Core Scan Results (cpm):				
4	12' - 16'	XXXXX	2150	2000	2000
	Core Scan Results (cpm):	12" void			
5	16' - 20'		N/A		
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU14-15
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 5/22/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/22/07	Rock Cored (FT):
Elevation:	Soil Drilled: SAND, SILT	Total Depth: 16'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, AC	Checked By: [signature]	2221 W/GI 216482	MODEL 19 #221521
Date/Time: 5/22/07		CAL DUE 05-04-08	CAL DUE 10-15-07
			BKG. 6 UR/HR, COV. 5 UR/HR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2854							
	2		2523							
	3		1398							
	4		1506							
	5		1720							
	6		2396							
	7		2465							
	8		2269							
	9		1809							
	10		1395							
	11		1137							
	12		1038							
	13		974							
	14		899							
	15		820							
	16		776							

N

A

Notes BKG 1407

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SW 14-14
Total Depth: 16'
Page: 1 of 1

Date/Time: 05/22/07 1500
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2499 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		~~2000~~	2000	2000	2000
		Core Scan Results (cpm):	6" void			
2	4' - 8'		2,100	2,000	1,950	2,100
		Core Scan Results (cpm):				
3	8 - 12'		~~2,100~~	2,200	2,000	2,000
		Core Scan Results (cpm):	6" void			
4	12' - 16'		~~2,100~~	2000	2050	2000
		Core Scan Results (cpm):	6" void			
5	16' - 20'					
		Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU 14-14
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLERO	Date Started: 5/22/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: P.G.	Soil Drilled: SAND, SILT	Total Depth: 16'	Casing Size:
		METER INFO	Core Size:
Logged By: RMA, AC	Checked By: [signature]	2221 w/GI 216482	MODEL 19 #221527
Date/Time: 5/22/07, 1530		CAL DUE 05-04-08	CAL. DUE. 05-04-08
			BKG 7 mr/hr LOW 7 mr/hr.

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1291		SOIL					
	2		2015							
	3		1892							
	4		2103							
	5		2325							
	6		2408							
	7		2185							
	8		2487							
	9		2131							
	10		1599							
	11		1118							
	12		1212							
	13		1655							
	14		1054							
	15		1253							
	16		986							

Notes BKG 1289

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU14-13
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/22/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2320 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		[illegible]	[illegible]	1800	1900
		Core Scan Results (cpm):	Void 2PT			
2	4' - 8'		1700	1900	1800	1900
		Core Scan Results (cpm):				
3	8 - 12'		[illegible]	1700	1700	1900
		Core Scan Results (cpm):	6" void			
4	12' - 16'		[illegible]	1,950	1,900	1,850
		Core Scan Results (cpm):	6" Voids			
5	16' - 20'					
		Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SW-14-13
Page No.: 1 of 1

Contractor: ZEBRA	Driller: NA	Date Started: 5/22/07	Rock Refusal Depth:	
Method: DIRECT PUSH	Water Elevation: NA	Date Finished: 5/22/07	Rock Cored (FT):	
Elevation:	Soil Drilled: 16'	Total Depth: 16'	Casing Size:	
		HORIBA U-50	Core Size:	
Logged By: KA, AC	Checked By: GMK	2221 w/ GI 216482	HOSGI 19 221521	
Date/Time: 5/22/07		CAL DUE 05-04-08	CAL DUE 10-15-07	
			BKG 5 CPS 4 INCH	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2376							
	2		2429							
	3		2096							
	4		1513							
	5		1819							
	6		1679							
	7		2169							
	8		1939							
	9		1366							
	10		1127							
	11		1142	GMK						
	12		1225							
	13		~~1200~~	1130						
	14		1125							
	15		1132							
	16		1106							

Notes: BKG 1216

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SW09-01
Total Depth: 24
Page: 1 of 2

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1945 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	VOID | 1900 | 1750 | 1950 | 1700
		Core Scan Results (cpm):
2	4' - 8'	1775 | 1750 | 1775 | 1750
		Core Scan Results (cpm):
3	8 - 12'	VOID | 1800 | 1655 | 1600
		Core Scan Results (cpm):
4	12' - 16'	VOID | 2000 | 1700 | 1675 | 1750
		Core Scan Results (cpm):
5	16' - 20'	VOID | 1700
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

SEE NEXT PG - CONTINUE PG. (CORE)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB21-SU09-B1
Total Depth: 24'
Page: 2 of 2

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/09
Ambient Bkg: 1945 cpm
Technician Init: JA / GMT

Sleeve #	Depth Range	Core & Scan Info
1	20' - 24'	Top — VOID — Bottom; 1800 | 1700
		Core Scan Results (cpm):
2	24' - 28'	
		Core Scan Results (cpm):
3	28 - 32'	
		Core Scan Results (cpm):
4	32' - 36'	
		Core Scan Results (cpm):
5	36' - 40'	
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SUG9-01
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/23/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/23/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 23'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: CMT		
Date/Time: 5/23/07		S/N NaI- 190205	BKG NaI (cpm) 1331
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 9

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2277		SOIL	7uR/hr @ BORE HOLE				
	2		3135							
	3		2726							
	4		1985							
	5		1679							
	6		1801							
	7		1405							
	8		1396							
	9		1484							
	10		1403							
	11	Z	1405							
	12		1259							
	13	A	1317							
	14		1259							
	15		1082							
	16		1186							
	17		1154							
	18		997	NA						
	19		929							
	20		1119							
	21		1145							
	22		1128							
	23		1081							
				NA	NA					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DRY H-C 2-1
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/23/07
Instr. Model / SN: 2221 / 44-10 ; 163685
Cal Due: 10/27/07
Ambient Bkg: 1889 cpm
Technician Init: [illegible]

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1900	1800	1900
Core Scan Results (cpm):					
2	4' - 8'		1750	1800	1750
Core Scan Results (cpm):					
3	8 - 12'		1900	1800	1700
Core Scan Results (cpm):					
4	12' - 16'		1800	1800	1700
Core Scan Results (cpm):					
5	16' - 20'	N		A	
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~SB~~ DRY HC-21
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/23/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/23/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/23/07		S/N NaI- 190205	BKG NaI (cpm) 1172
		S/N Mod 19- 101662	BKG Mod19 (uR/hr) 7

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1947		SOIL	7 μR/hr @ borehole				
	2		2318							
	3		1863							
	4		1747							
	5		1926							
	6		1669							
	7		1783							
	8		1809							
	9		1457							
Z	10		1154							
	11	Z	1209							
A	12		1297							
		A								
				NA						
		N	NA							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB21-5414-01
Total Depth: 16
Page: 1 of 1

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 2489 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info			
		Top			Bottom
1	0' - ~~3~~'	2400	2250	2500	
HAND AUGER					
Core Scan Results (cpm):					
2	~~3~~' - 8'	2500	2450	2300	2400
Core Scan Results (cpm):					
3	8 - 12'	Void	2350	2200	2200
Core Scan Results (cpm):					
4	12' - 16'		2300	2350	2400
Core Scan Results (cpm):					
5	~~16~~' - 20'		A		
Core Scan Results (cpm):		N			

Comments: *(Record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

HAND Auger (0-3) ft., soil loose on plastic (different geometry

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU14-B1
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/23/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/23/07	Rock Cored (FT):
Elevation: NA	Soil Drilled: N/A	Total Depth: 15'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: ~~5/23/07~~ DA	Checked By: GW		
Date/Time: 5/23/07		S/N NaI- 190205	BKG NaI (cpm) 1747
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 9

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2384		SOIL					
	2		2740							
	3		3270							
	4		3329							
	5		1712							
	6		1979							
	7		1982							
	8		1794							
	9		1327							
Z	10		1423							
	11	Z	1228		A					
	12		1197							
	13	A	1236							
	14		1101		N					
	15		889							
			N A		N A					
	A									
N										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR-SU14-02
Total Depth: 16
Page: 1 of 1

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 241 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top VOID | 2400 | 2300 | 2300 Bottom
HAND AUGER		
		Core Scan Results (cpm):
2	4' - 8'	VOID | 2350 | 2300 | 2350
		Core Scan Results (cpm):
3	8 - 12'	2300 | 2250 | 2200
		Core Scan Results (cpm):
4	12' - 16'	2550 | 2300 | 2350
		Core Scan Results (cpm):
5	16' - 20'	N | A
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

9µR/hr ~~BKGD~~ DA BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBG1-SU14-02
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/23/07	Rock Refusal Depth:
Method: 4' MACROCORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/23/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4' MA DA
Logged By: ~~SBG-SU~~ DA	Checked By: gmk		
Date/Time: 5/23/07		S/N NaI-190205	BKG NaI (cpm) 1857
		S/N Mod19-101662	BKG Mod19 (uR/hr) 9

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2571		Soil	9μR/hr @ bore hole				
	2		2106							
	3		2552							
	4		2183							
	5		2020							
	6		1932							
	7		1867							
	8		1981							
	9		1416							
	10		1323							
	11		1248							
	12		1138							
	13		1249							
	14		1230							
	15		995							
	16	~~100~~ DA	1009							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SW14-07
Total Depth: ~~SW14-07~~ 16'
Page: 1 of 1

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2147 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		2100	2150	2050	2100
		Core Scan Results (cpm):				
2	4' - 8'		2250	2150	2000	2000
		Core Scan Results (cpm):				
3	8 - 12'		[illegible]	2000	2000	2200
		Core Scan Results (cpm):	12" void			
4	12' - 16'		[illegible]	2,250	2,200	2290
		Core Scan Results (cpm):	VOIDS FROM 12' TO 12'			
5	16' - 20'					
		Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SO 19-07
Page No.: 1 of 1

Contractor: ZEBRA	Driller: NA	Date Started: 5/22/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: NA	Date Finished: 5/22/07	Rock Cored (FT):
Elevation: NA	Soil Drilled: NA	Total Depth: 16	Casing Size:
		MODEL NO 5	Core Size: 1.5 x 4
Logged By: A. Craig	Checked By: GW	1221 W/GI 216482	6
Date/Time: 5/22/07		CAL DUE 05-04-08	6
		1022 cpm	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2447							
	2		3313							
	3		1983							
	4		1502							
	5		1361							
	6		2299							
	7		2371							
	8		1989							
	9		1202							
	10		1579							
	11		1543							
	12		1202							
	13		1110							
	14		1152							
	15		970							
	16		965							

Notes BKG 1115

CABRERA SERVICES, INC.

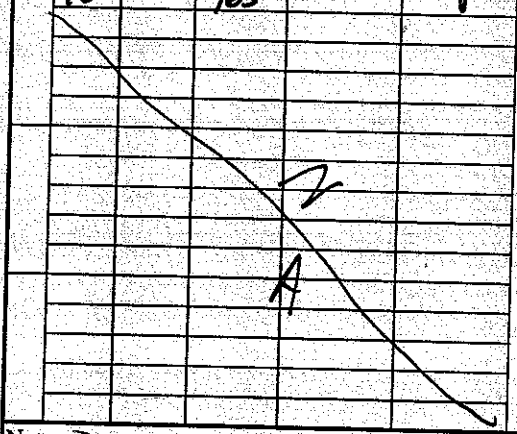
PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU19-09
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 5/23/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/23/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 16'	Casing Size:
Logged By: KMA, AC	Checked By: [illegible]	METER INFO	Core Size:
Date/Time: 5/23/07 1610		2221 W/GI 216482	MODEL 19 221521 BKG 5 UR/HR
		CAL DUE 05-04-08	CAL DUE 10/15/07 CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1962		SOIL					
	2		2054							
	3		2311							
	4		2670							
	5		3313							
	6		1851							
	7		1798							
	8		2250							
	9		1281							
	10		1685							
	11		1286							
	12		1143							
	13		1173							
	14		1223							
	15		1072							
	16		965							



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Notes BKG 1132

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 19-09
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/44-10 108962
Cal Due: 04-30-08
Ambient Bkg: 2197 cpm
Technician Init: KMR / AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	XXXXX	2250	2300	2200
	Core Scan Results (cpm):	Void 12"			
2	4' - 8'	2,200	2300	2150	2150
	Core Scan Results (cpm):				
3	8 - 12'	2,250	2,200	2,250	2,100
	Core Scan Results (cpm):	5" VOID			
4	12' - 16'	2,350	2,150	2,050	2,200
	Core Scan Results (cpm):	6" VOID			
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)*

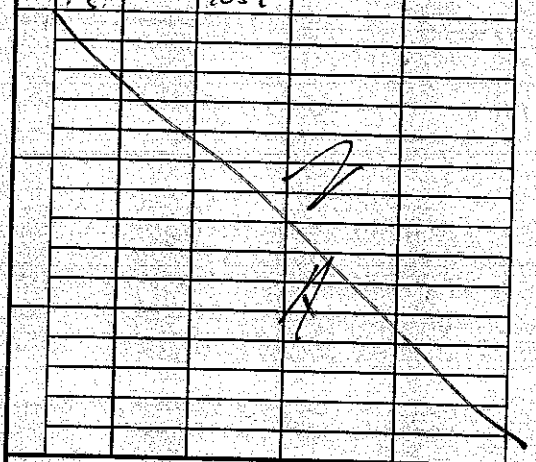
CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SO19-20
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABRERA Co	Date Started: 5/23/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/23/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND/SILT	Total Depth: 15'	Casing Size:
		METER INFO	Core Size:
Logged By: ICMA/AC	Checked By:	2221 W/GL 216482	MODEL 19 221521
Date/Time: 5/25/07		CAL DUE 05-01-08	CAL DUE 10-15-07
		1122 cpm	BKG 5 uR/hr Con 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2631							
	2		3042							
	3		2571							
	4		1685							
	5		1923							
	6		1733							
	7		2676							
	8		1964							
	9		1577							
	10		1366							
	11		1209							
	12		1131							
	13		1136							
	14		1059							
	15		1051							



Notes BKG 1122

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 14-20
Total Depth: 15'
Page: 1 of 1

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2141 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		XXXXX	2200	2150	2000
		Core Scan Results (cpm):	12" void			
2	4' - 8'		2050	2100	2000	2000
		Core Scan Results (cpm):				
3	8 - 12'		2000	2150	2000	1900
		Core Scan Results (cpm):				
4	12' - 16'		1850	2000	2000	//////
		Core Scan Results (cpm):	REFUSAL @ 15'			
5	16' - 20'			N/A		
		Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SW 14-11
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABRERA	Date Started: 5/23/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/23/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 15'	Casing Size:
		MODEL NO 2221 W/ GL 216482 CAL DUE 05-04-08	Core Size:
Logged By: KMA, AC	Checked By:		Model P 7/15/21
Date/Time: 5/23/07		1145 cpm	Cal DUE 10-15-07
			BKG CPM 5 WE/DE COM 5 WE/DE

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2338		SOIL					
	2		2058							
	3		2292							
	4		2830							
	5		2682							
	6		3042							
	7		2616							
	8		1504							
	9		1677							
	10		1180							
	11		1120							
	12		951							
	13		987							
	14		1903							
	15		1181		V					

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 14 - 11
Total Depth: 16'
Page: 1 of 1

Date/Time: 05/23/07 1100
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2153 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		1,950	2,000	2,050	2,100
		Core Scan Results (cpm):				
2	4' - 8'		2200	2,150	2,200	2,150
		Core Scan Results (cpm):	6" void			
3	8 - 12'		2200	2050	2100	2000
		Core Scan Results (cpm):				
4	12' - 16'		2,150	2,200	2,000	2100
		Core Scan Results (cpm):				
5	16' - 20'					
		Core Scan Results (cpm):	A			

Comments: (record any drilling or sampling issues e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 14 - 12
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2138 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		[illegible]	2,250	2,100	2,100
		Core Scan Results (cpm):	12" void			
2	4' - 8'		2100	2150	2250	2300
		Core Scan Results (cpm):				
3	8 - 12'		[illegible]	2200	2000	2050
		Core Scan Results (cpm):	10" void			
4	12' - 16'		[illegible]	2200	2150	2100
		Core Scan Results (cpm):	5" void			
5	16' - 20'					
		Core Scan Results (cpm):		N/A		

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU 14-12
Page No.: 1 of 1

Contractor: ZEBRA	Driller:	Date Started: 5/23/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation:	Date Finished: 5/23/07	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 16	Casing Size:
Logged By: AL CRAIG	Checked By: [illegible]	METER INFO 2221 W/GI 216482	Core Size:
Date/Time: 5/23/07		CAL DUE 05-04-08	Mod 19 221521 BKG 5 Cal Due 10/5/07

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2071							
	2		2299							
	3		2822							
	4		1509							
	5		1454							
	6		1739							
	7		2202							
	8		2127							
	9		1603							
	10		1369							
	11		1794							
	12		1239							
	13		1079							
	14		1114							
	15		950							
	16		937							

Notes BKG 1069

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU14 - 19
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/23/07
Instr. Model / SN: 2221 w/44-10 108962
Cal Due: 04-30-08
Ambient Bkg: 2138 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		2,150	2,200	2,050	2,000
		Core Scan Results (cpm):				
2	4' - 8'		2250	2150	2000	2200
		Core Scan Results (cpm):				
3	8 - 12'		2300	2100	2100	2150
		Core Scan Results (cpm):				
4	12' - 16'		2,100	2,150	2,000	2,150
		Core Scan Results (cpm):	9" VOID FROM 12' - 12'9"			
5	16' - 20'			N/A		
		Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU14-19
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CALELLANO	Date Started: 5/23/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/23/07	Rock Cored (FT):
Elevation: D.G.	Soil Drilled: SAND, SILT	Total Depth: 16'	Casing Size:
Logged By: KMA, AC	Checked By: [illegible]	METER INFO	Core Size:
Date/Time: 05/23/07 1020		2221 w/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
			BKG 5 [illegible] CON 5 [illegible]

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2399		SOIL					
	2		3428							
	3		1850							
	4		1567							
	5		1807							
	6		2375							
	7		2877							
	8		2012							
	9		1473							
	10		1240							
	11		1056							
	12		1043							
	13		1345							
	14		973							
	15		869							
	16		1009							

Notes BKG 1069

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SW14-~~01~~ DA-04
Total Depth: 16
Page: 1 of 1

Date/Time: ~~5/23/07~~ DA 5/24/07
Instr. Model / SN: 2221 w/ 44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 2491 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top HAND AUGER VOID Bottom 2200 2300 2200
	Core Scan Results (cpm):	
2	4' - 8'	VOID 2300 2300 2350 2350
	Core Scan Results (cpm):	
3	8 - 12'	VOID 2350 2200 2200
	Core Scan Results (cpm):	
4	12' - 16'	VOID 2300 2300 2200
	Core Scan Results (cpm):	
5	16' - 20'	A N
	Core Scan Results (cpm):	

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Used hand auger for (0-1.5) Ft.
9 µR/hr - Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB2-Su14-04
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/24/07	Rock Refusal Depth:
Method: 4' MACROCORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/24/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16	Casing Size:
Logged By: DA	Checked By:		Core Size: 1.5" X 4'
Date/Time: 5/24/07		S/N NaI- 190205	BKG NaI (cpm) 1858
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 9uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2115		Soil	9uR/hr @ bore hole				
	2		2164							
	3		2305							
	4		2166							
	5		1762							
	6		1753							
	7		1654							
	8		2146							
	9		1683							
	10		1674							
	11		1878							
	12		1387							
	13		1448							
	14		1175							
	15		1111							
	16		1176							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SW14-05
Total Depth: 24'
Page: 1 of 2

Date/Time: 5/24/07
Instr. Model / SN: 2221 W/44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 2065 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top: VOID / ~~2250~~ 2050 / 1950 / 2000 :Bottom
		Core Scan Results (cpm):
2	4' - 8'	VOID / 2100 / 2100 / 1950 / 1950
		Core Scan Results (cpm):
3	8 - 12'	VOID / 2100 / 2050 / 1950
		Core Scan Results (cpm):
4	12' - 16'	VOID / 2100 / 2250 / 2100
		Core Scan Results (cpm):
5	16' - 20'	VOID / 2050 / 2000 / 2100
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00
Location ID: SBR1-SW14-05
Total Depth: 24'
Page: 2 of 2

Date/Time: 5/24/07
Instr. Model / SN: 2221 w/44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 2065 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	20' 24'	Top √OID 2050 1950 1950 Bottom
		Core Scan Results (cpm):
2	4' - 8'	
		Core Scan Results (cpm):
3	8 - 12'	
		Core Scan Results (cpm):
4	12' - 16'	
		Core Scan Results (cpm):
5	16' - 20'	
		Core Scan Results (cpm):

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, post-recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 5321-SW14-05
Page No.: 1 of 1

Contractor: E-E	Driller: ZEBRA	Date Started: 5/24/07	Rock Refusal Depth:	
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/24/07	Rock Cored (FT):	
Elevation: N/A	Soil Drilled:	Total Depth: 24'	Casing Size:	
			Core Size:	
Logged By: DA	Checked By: [illegible]			
Date/Time: 5/24/07		S/N NaI- 190205	BKG NaI (cpm) 1685	
		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 8	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		2400		Soil	8 µR/hr @ bore hole				
	2		2823							
	3	N	2444							
	4		1939							
	5		1457	N						
	6		2065							
	7		1578							
	8		2092							
	9		3211							
	10		2540							
	11		1581							
	12	A	1235							
A	13		1488	A						
	14		1269							
	15		1009							
	16		1049							
N	17		1032							
	18	N	1002							
	19		1030							
	20		946	N						
	21		915							
	22		973							
	23		907							
	24		1041							
N										
A		A	N							
			A	A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SB12-13
Total Depth: 12'
Page: 1 of 1

Date/Time: 5/24/07
Instr. Model / SN: 2221 w/44-10 108762
Cal Due: 04-30-08
Ambient Bkg: 1672 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		[illegible]	1700	1650	1700
		Core Scan Results (cpm):	void			
2	4' - 8'		1725	1675	1750	1700
		Core Scan Results (cpm):				
3	8 - 12'		[illegible]	1600	1675	1625	1700
		Core Scan Results (cpm):	6" void			
4	12' - 16'					
		Core Scan Results (cpm):				
5	16' - 20'					
		Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

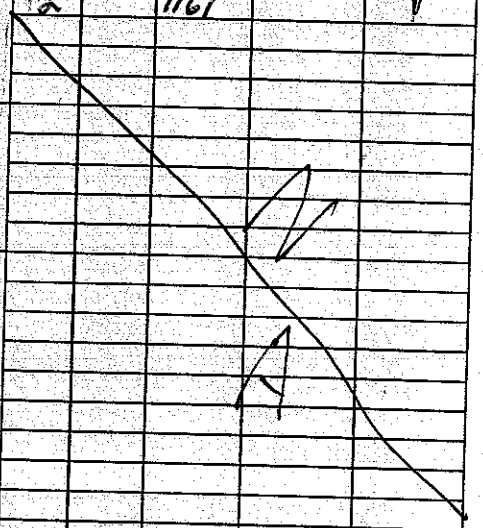
PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU12-13
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. CABELLARO	Date Started: 5/24/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/24/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 12'	Casing Size:
Logged By: RMA, AC	Checked By: GMA	METER INFO	Core Size:
Date/Time: 05/24/07		2221 w/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
			BKG 5 wk/hr CON. 5 wk/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1038		SOIL					
	2		1796							
	3		3092							
	4		3222							
	5		3092							
	6		3060							
	7		3204							
	8		1634							
	9		2220							
	10		2021							
	11		1570							
	12		1161							



Notes BKG 830

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU12-12
Total Depth: 91
Page: 1 of 1

Date/Time: 5/24/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1614 cpm
Technician Init: LMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		[illegible]	1700	1600	1650
		Core Scan Results (cpm):	12" void			
2	4' - 8'		1700	1650	1500	1500
		Core Scan Results (cpm):				
3	8 - 12'		1550	[illegible]	[illegible]	[illegible]
		Core Scan Results (cpm):	IN Bucket Crushed liner			
4	12' - 16'					
		Core Scan Results (cpm):				
5	16' - 20'					
		Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

geo probe in operable w/ barrel & rods in hole.
will attempt to ~~to~~ DHG log when fixed.

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00
Location ID: SBR1-SW19-06
Total Depth: 16
Page: ~~16 DA~~ 1 of 1

Date/Time: 5/29/07
Instr. Model / SN: 2221 w/44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 2060 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	VOID	2200	2050	2100	1950
	Core Scan Results (cpm):					
2	4' - 8'		2100	2000	2000
	Core Scan Results (cpm):					
3	8 - 12'		2150	2000	1950
	Core Scan Results (cpm):					
4	12' - 16'	VOID	2200	2000	1900
	Core Scan Results (cpm):					
5	16' - 20'	N	A		
	Core Scan Results (cpm):					

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

8 µR/hr BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SC114-B6
Page No.: 1 of 1

Contractor: E & E	Driller: ZEBRA	Date Started: 5/24/07	Rock Refusal Depth:
Method: 4' Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 5/24/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: [illegible]		
Date/Time: 5/24/07		S/N NaI- 190205	BKG NaI (cpm) 1666
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 8

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2250		Soil	8 µR/hr @ bore hole				
	2		2688							
	3		2312							
	4		2137							
	5		1368							
	6		1338							
	7		1671							
	8		1947							
	9		2642							
	10		1981							
	11		1891							
	12		1327							
	13		1496							
	14		1393							
	15		1085							
	16		1046							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ ~~07-1022.00~~ II
Location ID: SBR1-SU14-08
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/24/07
Instr. Model / SN: 2221 W/44-10, SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1826 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		1900	1850	1600	1750
		Core Scan Results (cpm):	USED HAND AUGER (0-4)ft			
2	4' - 8'		1750	1600	1700	1650
		Core Scan Results (cpm):				
3	8 - 12'		VOID	1800	1800	1650
		Core Scan Results (cpm):				
4	12' - 16'		VOID	1650	1850	1550
		Core Scan Results (cpm):				
5	16' - 20'			A		
		Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues: e.g. refusal, groundwater, poor recovery, etc. here)

(0-4)ft Hand Auger

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 5321-SU14-68
Page No.: 1 of 1

Contractor: E & E	Driller: ZEBRA	Date Started: 5/24/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/24/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: ~~10~~ 14 GWA	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By: GWA	S/N NaI- 190205	BKG NaI (cpm) 1555
Date/Time: 5/24/07		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 7

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1	N	2428	N	Soil	7 MR/hr @ bore hole	N	N	N	N
	2		3366							
	3		1900							
	4		1388							
	5		1470							
	6		1744							
	7		1414							
	8		2231							
	9		1631							
	10		1916							
	11		1587							
	12		1229							
	13		1477							
	14		1461							
A		A		A						A
N			N		N					N
			A		A					
A		A			A					A

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 12-09
Total Depth: 8'-16'
Page: 1 of 1

Date/Time: 05/24/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1,777 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top … Bottom
		Core Scan Results (cpm): 1ST 8' ALREADY SCANNED & LOGGED BY
2	4' - 8'	
		Core Scan Results (cpm): GMT & DA (SEE LOG FOR TIME & DATE DETAILS) KMA
3	8 - 12'	1650 | 1700 | XX | 1675 | 1760
		Core Scan Results (cpm): 6" void void 9"
4	12' - 16'	1660 | 1640 | 1600 | 1600
		Core Scan Results (cpm):
5	16' - 20'	
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU 12-09
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABRERA	Date Started: 5/24/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished:	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 12'	Casing Size:
		MICRO NOMAD	Core Size:
Logged By: RMA AC	Checked By:	2221 W/GI 216482	MODEL 19 # 221521
Date/Time: 05/24/07		CAL DUE 05-04-08	CAL DUE 10-15-07
			BKG 4 uR/hr, CON. 5 uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		897		SOIL					
	2		1028							
	3		1332							
	4	N	2653							
	5	A	2170							
	6	~~2403~~	2403							
	7	~~2644~~	2644							
	8	~~1457~~	1457							
	9	~~1731~~	1731							
	10	~~1462~~	1462							
	11	~~2654~~	2654							
	12	~~1455~~	1455							
		N/A								

Put Data in wrong column 5/24/07

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-102.00 II
Location ID: SB21-5410-04
Total Depth: 12
Page: 1 of 1

Date/Time: 5/29/07
Instr. Model / SN: 2221/44-10 SN # 163685
Cal Due: 10/27/07
Ambient Bkg: 1578 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	1555	1600	1450	1400
	Core Scan Results (cpm):				
2	4' - 8'	1450	1550	1550	1650
	Core Scan Results (cpm):				
3	8 - 12'	1650	1450	1400	1500
	Core Scan Results (cpm):				
4	12' - 16'				
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

6 µR/hr @ Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 5321-SU10-04
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/25/07	Rock Refusal Depth:	
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/25/07	Rock Cored (FT):	
Elevation: N/A	Soil Drilled:	Total Depth: 11.5	Casing Size:	
			Core Size: 1.5" x 4'	
Logged By: DA	Checked By:			
Date/Time: 5/25/07		S/N NaI- 190205	BKG NaI (cpm) 878 cpm	
		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 6 uR/hr	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		2235		Soil	6 uR/hr @ bore hole				
	2		2257							
	3		2158							
	4		2351							
	5		2501							
N	6		3119							
	7		4046							
	8		2201							
	9		1490							
	10		1400							
	11		1238							
	[illegible]									
	N		N		N					
A										
N/A	A	A	A	A	A					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SU10-05
Total Depth: 11'
Page: 1 of 1

Date/Time: 5/25/07
Instr. Model / SN: 2221 w/ 44-10 SN# 163685
Cal Due: 10/29/07
Ambient Bkg: 1446 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	VOID | 1600 | 1500 | 1500 | 1500
		Core Scan Results (cpm):
2	4' - 8'	VOID | 1400 | 1550 | 1500 | 1450
		Core Scan Results (cpm):
3	8 - 12'	1400 | 1550 | 1600 | 1700
		Core Scan Results (cpm):
4	12' - 16'	
		Core Scan Results (cpm):
5	16' - 20'	
		Core Scan Results (cpm):

N/A

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)*

6 µR/hr @ Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBRI-SOIL-B5
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started:	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished:	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 11'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By:		
Date/Time: 5/25/07		S/N NaI- 190205	BKG NaI (cpm) 950
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6

Sample Information										
Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2593		SOIL	6 μR/hr @ bore hole				
	2		3652							
	3		3036							
	4		1796							
	5		2306							
	6		1910							
	7		1789							
	8		2073							
	9		3604							
	10		1919							
	11		1818							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-102200 II
Location ID: SB21-SU10-06
Total Depth: 16
Page: 1 of 1
Date/Time: 5/29/07
Instr. Model / SN: 2221 W/44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1701 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	VOID	1500	1300	1400	1450
	Core Scan Results (cpm):					
2	4' - 8'	1700	1550	1475	1450
	Core Scan Results (cpm):					
3	8 - 12'	1700	1600	1550	1800
	Core Scan Results (cpm):					
4	12' - 16'	VOID	1450	1400	1350	1400
	Core Scan Results (cpm):					
5	16' - 20'					
	Core Scan Results (cpm):	N				A

Comments: *(record any drilling/sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

6 µR/hr @ Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU10-06
Page No.: 1 of 1

Contractor: ESE	Driller: ZEBRA	Date Started: 5/29/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/29/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 13'	Casing Size:
			Core Size: 1.5" x 3'
Logged By: DA/GMF	Checked By: GMF		
Date/Time: 5/29/07		S/N NaI- 190205	BKG NaI (cpm) 1969 821
		S/N Mod19- 1018602	BKG Mod19 (uR/hr) NA

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		2123		SOIL	6 µR/hr @ borehole	N/A	N/A	N/A	
	2	N/A	2854							
	3		1853							
	4		1674	N/A						
	5		1633							
	6		1794							
	7		1794							
	8		2122							
	9		1608							
	10		1591							
	11		1413							
	12	N/A	1384	N/A						
	13		1463							
N/A										
N/A		N/A	N/A							
		A								
N/A		N/A								

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 5/29/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-SU10-01
Cal Due: 10/27/07
Total Depth: 9'
Ambient Bkg: 1480 cpm
Page: 1 of 1
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info
1	0'-3'	Top VOID | 1450 | 1425 | 3ft liner Bottom
	Core Scan Results (cpm):	
2	3'-6'	1450 | 1550 | 1500
	Core Scan Results (cpm):	
3	6'-9'	1450 | 1400 | 1400
	Core Scan Results (cpm):	
4	9'-12'	
	Core Scan Results (cpm):	
5	12'-15'	
	Core Scan Results (cpm):	

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Using 3ft. Cores (3 ft. Liners)
5μR/hr = Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBH-SW18-01
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/29/07	Rock Refusal Depth:
Method: 3' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/29/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth:	Casing Size:
			Core Size: 1.5" x 3'
Logged By: DA/GMT	Checked By:		
Date/Time: 5/29/07		S/N NaI- 190205	BKG NaI (cpm) 1060
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 5

Sample Information: Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2004		SOIL	5 μR/hr @ Bore hole				
	2		2069	N						
	3		1960							
	4		1865							
	5		1319							
	6		1822	A						

Notes

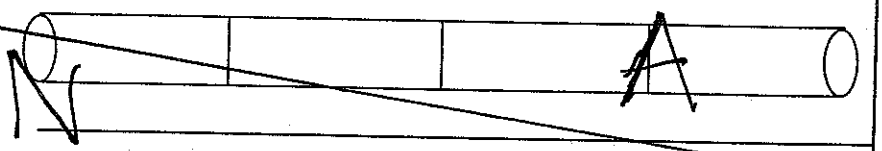
CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 TI
Location ID: SBR1-SU1B-07
Total Depth: 12'
Page: 1 of 1

Date/Time: 5/29/07
Instr. Model / SN: 2221 W/ 44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1600 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info
1	0'-3'	Top: VOID | 1600 | 1500 | 3Ft Liners Bottom Core Scan Results (cpm):
2	3'-6'	VOID | 1500 | 1560 | 1500 Core Scan Results (cpm):
3	6-9'	1575 | 1600 | 1600 Core Scan Results (cpm):
4	9'-12'	1450 | 1550 | 1500 Core Scan Results (cpm):
5	16'-20'	 Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

Using 3Ft Cores (3 Ft. Liners)
6 μR/hr = Bkgd.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU18-07
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/29/07	Rock Refusal Depth:
Method: 3' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/29/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size: 1.5" x 3'
Logged By: DA	Checked By:		
Date/Time: 5/29/07		S/N NaI- 190205	BKG NaI (cpm) 977
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6µR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1887		SOIL	6µR/hr @ bore hole				
	2		2060							
	3		2355							
	4		2178							
	5		2540							
	6		2826							
	7		4070							
	8		4182							
	9		2726							
Z	10		2106							
	11	Z	2271							
	12	A	1990							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SU1[illegible]-08
Total Depth: 9
Page: 1 of 1

Date/Time: 5/29/07
Instr. Model / SN: 2221 w/ 44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1594 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0'-3'	Top | 1500 | 1700 | 1550 | 3ft. liner Bottom
		Core Scan Results (cpm):
2	3'-6'	1550 | 1550 | 1450
		Core Scan Results (cpm):
3	6'-9'	1500 | 1400 | 1450
		Core Scan Results (cpm):
4	9'-16'	N | A
		Core Scan Results (cpm):
5	16' - 20'	N | A
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Bkgd = 6 μR/hr ; 3 Ft. Cores (Liners)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SB10-08
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/29/07	Rock Refusal Depth:
Method: 3" MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/29/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 7'	Casing Size:
			Core Size: 1.5" x 3'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 5/29/07		S/N NaI- 190205	BKG NaI (cpm) 1017
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		4056		SOIL	6μR/hr @ bore hole				
	2		3862							
	3		3428							
	4		1772							
	5		1524							
	6		1563							
	7		1648							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU12-16
Total Depth: 13'
Page: 1 of 1

Date/Time: 5/09/07 1505
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1642 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		1600	1550	1500	1575
		Core Scan Results (cpm):	6" Voids			
2	4' - 8'		1600	1650	1550	1550
		Core Scan Results (cpm):				
3 *	8 - 12'		1550	1500	1600	1550
		Core Scan Results (cpm):				
4	12' - 16'					
		Core Scan Results (cpm):				
5	16' - 20'					
		Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc.here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU12-16
Page No.: of

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 5/29/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/29/07	Rock Cored (FT):
Elevation:	Soil Drilled: SAND, SILT	Total Depth: 13'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, AC	Checked By:	2221 w/GI 216482	MODEL 19 #221521
Date/Time: 05/29/07 1600		CAL DUE 05-04-08	CAL DUE 10/15/07
			BKG 4 ur/hr. CON 4 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1455		SOIL					
	2		2146							
	3		3055							
	4		3087							
	5		2006							
	6		1587							
	7		1878							
	8		2189							
	9		1774							
	10		1692							
	11		1643							
	12		1267							
	13		1311			REFUSAL @ THIS DEPTH, DUE TO LANGIN				

Notes BKG 815

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SW 12-18
Total Depth: 12'
Page: 1 of 1

Date/Time: 05/29/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1602 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info			
		Top 1550			Bottom
1	0' - 4'	~~1550~~	1600	1750	1700
	Core Scan Results (cpm):	4' void			
2	4' - 8'	1600	1550	1650	1725
	Core Scan Results (cpm):				
3	8 - 12'	1625	1700	1600	1650
	Core Scan Results (cpm):				
4	12' - 16'				
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU 1218
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 05/29/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 05/29/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 8'	Casing Size:
Logged By: KMA, AC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 5/29/07		2221 W/GI 216482	MODEL 19 #221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
			BKG. 4 mr/hr. CON. 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1311		SOIL					
	2		2944							
	3		3028							
	4		2928							
	5		1715							
	6		1491							
	7		1653							
	8		1787			REFUSAL DEPTH DUE TO CAVE, IN				

Notes

KY

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 12-15
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/29/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1630 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'	~~[illegible]~~	1600	1450	1650
	Core Scan Results (cpm):	12" void			
2	4' - 8'	1550	1500	1600	1700
	Core Scan Results (cpm):				
3	8 - 12'	1500	1550	1600	1550
	Core Scan Results (cpm):				
4	12' - 16'	1550	1600	1450	1600
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU 12-15
Page No.: 1 of 1

Contractor: ZEBRA	Driller:	Date Started: 5/29/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation:	Date Finished:	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth:	Casing Size:
Logged By: alGraig	Checked By: gmt	METER INFO 2221 w/GI 216482 CAL DUE 05-04-08	Core Size:
Date/Time: 5/29/07			

Elevation	Depth (feet)	Casing Blows/Foot (DHG cpm)	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	1128								
	2	1758								
	3	2226								
	4	1808								
	5	1728								
	6	1941								
	7	1653								
	8	2630								
	9	1309								
	10	1421								
	11	1682								
	12	1289								

Notes BKG 847

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 5/30/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10; SN#163685
Location ID: SBR1-SU1Ø-12
Cal Due: 10/27/07
Total Depth: 12'
Ambient Bkg: 1618 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info			
1	0'-3'	Top VOID 1375	1450	1450	*3' liners Bottom
Core Scan Results (cpm):					
2	3'-6'	1475	1500	1450	*
Core Scan Results (cpm):					
3	6'-9'	VOID 1550	1500	1450	*
Core Scan Results (cpm):					
4	9'-12'	1500	1650	1600	*
Core Scan Results (cpm):					
5	16' - 20'		A		*
Core Scan Results (cpm):		N			

Comments (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Bkgd-6 μR/hr ; *using 3' MACROCORE (LINERS)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SB10-12
Page No.: 1 of

Contractor: E&E	Driller: ZEBRA	Date Started: 5/30/07	Rock Refusal Depth:
Method: 3" MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/30/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size: 1.5" x 3'
Logged By: DA/GMT	Checked By: GMT		
Date/Time:		S/N NaI- 190205	BKG NaI (cpm) 8[illegible]
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2649		SOIL	6 uR/hr @ Bore Hole				
	2		3455							
	3		2888	N						
	4		3104	A						
	5		4052							
	6		3793							
	7		3448							
	8		2136	N						
	9		2010	A						
	10		3382							
	11	2	4287							
	12		2956	N						
	N/A	A	N/A	A						
	N/A		N/A	N/A						
	N/A			N/A						
	N/A			N/A						

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SU18-13
Total Depth: 9'
Page: 1 of 1

Date/Time: 5/30/07
Instr. Model / SN: 2221 w/ 44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1600 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 3'	Top VOID | 1450 | 1450 Bottom
	Core Scan Results (cpm):	
2	3' - 6'	1700 | 1800 | 1650
	Core Scan Results (cpm):	
3	6 - 9'	VOID | 1650 | 1750
	Core Scan Results (cpm):	N 7" VOID, 1300's
4	9 - 12	
	Core Scan Results (cpm):	A
5	16' - 20'	N
	Core Scan Results (cpm):	

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

3 Ft. Cores & Liners
approximately 1 Ft. concrete
6 µR/hr @ Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SB10-13
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/30/07	Rock Refusal Depth:
Method: 3" MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/30/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 9'	Casing Size:
			Core Size: 1.5" x 3'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 5/30/07		S/N NaI- 190205	BKG NaI (cpm) 920
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 6

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2769		SOIL	6 uR/hr @ Borehole				
	2		3582							
	3		3171							
	4		2285							
	5		2635							
	6		3022							
	7		4069							
	8		2226							
	9		1918							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SU10-09
Total Depth: 6'
Page: 1 of 1

Date/Time: 5/30/07
Instr. Model / SN: 2221 w/ 44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: ~~648~~ 1616 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0-3	Top void 1450 1350 Bottom
		Core Scan Results (cpm):
2	3'-6'	1500 1450 1350
		Core Scan Results (cpm):
3	8 - 12'	
		Core Scan Results (cpm):
4	12' - 16'	
		Core Scan Results (cpm):
5	16' - 20'	
		Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

3' x 1.5" Core tubes

6μR/hr = Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SB10-04
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/30/07	Rock Refusal Depth:
Method: 3' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/30/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 4'	Casing Size:
			Core Size: 1.5" x 3'
Logged By: gmt / DA	Checked By: gmt		
Date/Time: 5/30/07		S/N NaI - 190205	BKG NaI (cpm) 728
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 6

Sample Information						Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type					
	1		2031		SOIL	6µR/hr @ borehole				
	2		1993	N						
	3		2478	A						
	4		2033							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SOIL-07
Total Depth: 16
Page: 1 of 1

Date/Time: 5/30/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1546 cpm
Technician Init: DA/ GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top VOID | 1500 | 1300 | 1300 Bottom
		Core Scan Results (cpm):
2	4' - 8'	1600 | 1600 | 1450 | 1400
		Core Scan Results (cpm):
3	8 - 12'	
		Core Scan Results (cpm): NO RECOVERY
4	12' - 16'	1400 | 1400 | 1600 | 1550
		Core Scan Results (cpm):
5	16' - 20'	| A | |
		Core Scan Results (cpm): N

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)*

5μR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SBR1-SB11-07
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/30/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/30/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 5/30/07		S/N NaI- 190205	BKG NaI (cpm) 752
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 5uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1852		SOIL	5uR/hr @ Borehole				
	2		2948							
	3		2231							
	4		1909							
	5		2011							
	6		1859							
	7		1441							
	8		2141							
	9		1586							
	10		1208							
	11		1190							
	12		1191							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-102200
Location ID: SBR1-SW11-08
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/30/07
Instr. Model / SN: 2221 w/44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 158-1 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info			
		Top			Bottom
1	0' - 4'	VOID	1450	1600	1450
	Core Scan Results (cpm):				
2	4' - 8'	1500	1450	1400	1400
	Core Scan Results (cpm):				
3	8 - 12'	VOID	1450	1325	1375	1375
	Core Scan Results (cpm):				
4	12' - 16'	VOID	1550	1600	1400	1500
	Core Scan Results (cpm):				
5	16' - 20'		A		
	Core Scan Results (cpm):	N			

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)*

BKGD = 5μR/hr

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB[redacted]-SU1-08
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/30/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: NA	Date Finished: 5/30/07	Rock Cored (FT):
Elevation: NA	Soil Drilled:	Total Depth: 6'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA/GMT	Checked By:		
Date/Time: 5/30/07		S/N NaI- 190205	BKG NaI (cpm) 723
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 5uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1407		SOIL	5μR/hr @ Borehole				
	2		2526							
	3		3103							
	4		3065							
	5		1616							
	6		1483							

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 12-10
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/30/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1593 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'	1400	1400	1550	1625
	Core Scan Results (cpm):	9" void			
2	4' - 8'	1550	void		
	Core Scan Results (cpm):				
3	8 - 12'	1500	1550	1600	1350
	Core Scan Results (cpm):				
4	12' - 16'	1450	1600		
	Core Scan Results (cpm):	No recovery from 14'-16'			
5	16' - 20'	1550	1675	1450	1500
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU 12-10
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABBIANO	Date Started: 5/30/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/30/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 10'	Casing Size:
		MODEL NO. 2221 S/N 216482	Core Size:
Logged By: KMA, AC	Checked By:	CAL DUE 05-01-08	MODEL 19 #22152
Date/Time: 05/30/07 1210		BKG. 858 CPM.	CAL DUE 10/15/07
			BKG 9 uR/hr, CAL 4 uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1162		SOIL					
	2		1389							
	3		3053							
	4		3106							
	5		1786							
	6		1710							
	7		1813							
	8		2001							
	9		1715							
	10		1481							
						HOLE CAVED-IN @ THIS DEPTH.				
			N	A						

Notes BKG 858

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 12-06
Total Depth: 20'
Page: 1 of 1

Date/Time: 5/30/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1593 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1550	1500	1550
	Core Scan Results (cpm):	0"-1' VOID			
2	4' - 8'	1475	1400	1425	1450
	Core Scan Results (cpm):				
3	8 - 12'	1500	1600	1650	1600
	Core Scan Results (cpm):				
4	12' - 16'	1500	1500	1450	1350
	Core Scan Results (cpm):				
5	16' - 20'	1425	1350	1400	1400
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

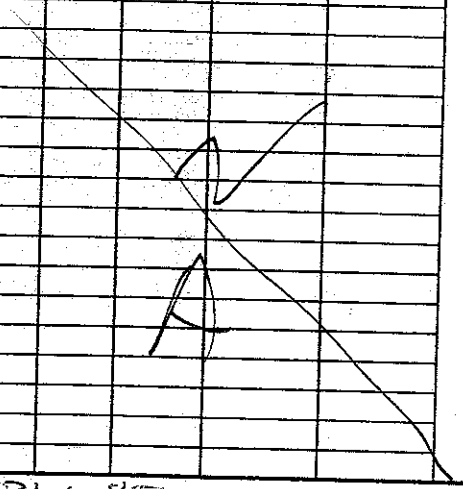
CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU 12-06
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 5/30/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/30/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 13'	Casing Size:
Logged By: KMA, AC	Checked By: [illegible]	METER INFO	Core Size:
Date/Time: 05/30/07		2221 w/GI 216482	MODEL 19 #221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
			BKG. 4 ur/hr. Con 4 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2659		SOIL					
	2		1485							
	3		2689							
	4		1686							
	5		1417							
	6		1719							
	7		1886							
	8		2290							
	9		1639							
	10		1432							
	11		1498							
	12		1315							
	13	12	1526							



Notes BKG 850

KX

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 12-05
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/30/08
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1506 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top)			(Bottom)
1	0' - 4'	void	→	1550	1700
Core Scan Results (cpm):		2 Ft			
2	4' - 8'	1500	~~XXXX~~	1650	1500
Core Scan Results (cpm):			9 in void		
3	8 - 12'	1600	1500	~~XXXXXX~~	~~XX~~ 1500
Core Scan Results (cpm):				1'-6" void	
4	12' - 16'	1450	1500	1400	1450
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU 12-05
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. CABELLARO	Date Started: 5/30/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/30/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 11"	Casing Size:
Logged By: KMA, AC	Checked By: [illegible]	METER INFO	Core Size:
Date/Time: 05/30/07 1600		2221 w/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 761	BKG: 4 ur/hr CON 4 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1744		SOIL					
	2		2131							
	3		3555							
	4		1957							
	5		1634							
	6		1713							
	7		1962							
	8		1723							
	9		1558							
	10		1280							
	11		1267			REFUSAL/CAVE-IN @ 11" DEPTH				

Notes BKG 761

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SU10-10
Total Depth: 20'
Page: 1 of 1

Date/Time: 5/31/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1635 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top VOID | 1400 | 1450 | 1450 Bottom
		Core Scan Results (cpm):
2	4' - 8'	1500 | 1350 | 1450 | 1250
		Core Scan Results (cpm):
3	8 - 12'	VOID | 1300 | 1350 | 1400 | VOID
		Core Scan Results (cpm):
4	12' - 16'	VOID | 1300 | 1350 | 1400 | VOID
		Core Scan Results (cpm):
5	16' - 20'	1300
		Core Scan Results (cpm): SLEEVE deformed 1' no recovery from somewhere in 16-20'

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

4µR/hr @ BKG

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU10-40
Page No.: 1 of 1

Contractor: E	Driller: ZEBRA	Date Started: 5/31/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/31/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By:	S/N NaI- 190205	BKG NaI (cpm) 1818
Date/Time: 5/31/07		S/N Mod19- 1018623	BKG Mod19 (uR/hr) 4

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1959		SOIL	4 μR/hr @ bore hole				
	2		2070							
	3		3438							
	4		3299							
	5		1931							
	6		1693							
	7		2141							
	8		1897							
	9		2180							
	10		1353							
N/A	11		1569					N/A		
	12		1802							
	13		1115							
	14		1243							
	15		1160							
	16		1162							
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB21-SU10-18
Total Depth: 16
Page: 1 of 1

Date/Time: 5/31/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1433 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	0' - 4'	Top VOID	1300	1300	1350	Bottom
	Core Scan Results (cpm):					
2	4' - 8'	VOID	1300	1400	1400	1500
	Core Scan Results (cpm):					
3	8 - 12'		1300	1400	1250	1300
	Core Scan Results (cpm):					
4	12' - 16'	VOID	1250	1500	1350	1450
	Core Scan Results (cpm):					
5	16' - 20'		N		A	
	Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

4 mR/hr @ BLGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU10-18
Page No.: 1 of 1

Contractor: E-S-E	Driller: ZEBRA	Date Started: 5/31/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/31/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth:	Casing Size:
			Core Size:
Logged By: DA	Checked By: DWT		
Date/Time: 5/31/07		S/N NaI- 190205	BKG NaI (cpm) 827
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		889		Soil	4 μR/hr @ bore hole				
	2	N	1609	N						
N	3		2179					N		
	4		2184							
	5		2501							
	6		1643							
	7		1486							
	8		1946							
	9		1630							
	10		2053	A						
	11	A	1379						A	
	12		1261							
	13		1958							
N	14		1507							

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB11-SW11-19
Total Depth: 16
Page: 1 of 1

Date/Time: 5/31/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 13 68 cpm
Technician Init: OA

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	VOID	1450	1600	1500
	Core Scan Results (cpm):				
2	4' - 8'	VOID	1500	1400	1350	1400
	Core Scan Results (cpm):				
3	8 - 12'	VOID	1300	1400	1350	1500
	Core Scan Results (cpm):				
4	12' - 16'	VOID	1400	1400	1250	1300
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g. refusal, groundwater encountered, etc. here)*

4 mR/hr = BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU11-19
Page No.: 1 of 1

Contractor: E-E	Driller: ZEBRA	Date Started: 5/31/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/31/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 15'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA	Checked By:		
Date/Time: 5/31/07		S/N NaI- 190205	BKG NaI (cpm) 752
		S/N Mod19- 1016G2	BKG Mod19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1977		Soil	4μR/hr @ bore hole				
	2		2998							
	3		3435							
	4		4475							
	5		2985							
	6		1776							
	7		1534							
	8		2134							
	9		2963							
	10		1570							
	11		1233							
	12		1589							
	13		1187							
	14		1186							
	15		1260							

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRII-5411-20
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/31/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1440 cpm cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	0' - 4'	Top VOID	1300	1275	1400	Bottom
	Core Scan Results (cpm):					
2	4' - 8'	1400	1475	1350	1250	
	Core Scan Results (cpm):					
3	8 - 12'	VOID 1250	1275	1250	1100	
	Core Scan Results (cpm):					
4	12' - 16'	VOID	1300	1300	1350	
	Core Scan Results (cpm):					
5	16' - 20'		A			
	Core Scan Results (cpm):	N				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

4μR/hr = BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU11-BD
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 5/31/07	Rock Refusal Depth:
Method: 4' Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 5/31/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 13'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA/GMT	Checked By:	S/N NaI- 190205	BKG NaI (cpm) 843
Date/Time: 5/31/07		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1498		Soil	4 μR/hr @ Borehole				
	2	N	3223							
	3		2058	N						
	4		2126							
	5		1685							
N/A	6		1670							
	7		1520							
	8		1773							
	9		2042							
	10		1529							
N/A	11		1342							
	12		1059	A				N		
	13	A	992						A	
N/A	N/A		N/A		N/A					
N/A		N								
N/A				A						
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SW11-16
Total Depth: 20'
Page: 1 of 1

Date/Time: 5/31/07
Instr. Model / SN: 2221 w/ 44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1394 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	20' - 24'	VOID	1350	1300	1325
2	4' - 8'	VOID 1400	1350	1300	1325
3	8 - 12'	VOID	VOID	VOID	1350
4	12' - 16'	VOID	VOID	VOID	1250
5	16' - 20'	1325	1325	1275	1250

Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

4 μR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 5321-SW11-16
Page No.: 1 of 1

Contractor: F&E	Driller: ZEBRA	Date Started: 5/31/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 5/31/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 19	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA/GMT	Checked By:	S/N NaI- 190205	BKG NaI (cpm)
Date/Time: 5/31/07		S/N Mod19- 101662	BKG Mod19 (uR/hr)

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1	N	1443		SOIL	4 μR/hr @ Borehole		N		
	2		2497							
	3		3526					A		
	4		2094							
	5		1854							
	6		1652							
	7		0289	N						
	8		2006							
	9		1876							
	10		1402							
	11		1695							
	12		1952							
	13		1339							
	14		1124							
	15		1181							
	16		1107							
	17		1092							
	18		969							
	19		980							
		N	N							
		A	A	A						
N		A								

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU12-03-I
Total Depth: 35'
Page: 1 of 2

Date/Time: 5/31/07, 10:10
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2069 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top)			(Bottom)
1	0' - 4'	~~[illegible]~~	2000	2000	2300
Core Scan Results (cpm):		void 12"			
2	4' - 8'	2250	~~[illegible]~~	~~[illegible]~~ 2300	2150
Core Scan Results (cpm):			void 1.5'		
3	8 - 12'	2100	2250	VOID	VOID
Core Scan Results (cpm):					
4	12' - 16'	VOID	2150	2350	VOID
Core Scan Results (cpm):					
5	16' - 20'	VOID	VOID	VOID	2150
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU12-03-I
Total Depth: 35'
Page: 2 of 2

Date/Time: 5/31/07 1130
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2069 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info
1	20'-~~25~~	Top — VOID — Bottom
	Core Scan Results (cpm):	
2	~~4'-8'~~ 25-30'	VOID
	Core Scan Results (cpm):	
3 *	~~8'-12'~~ 30'-32'	void
	Core Scan Results (cpm):	
4	12' - 16'	N/A
	Core Scan Results (cpm):	
5	16' - 20'	N/A
	Core Scan Results (cpm):	

Comments: *(record any drilling or sampling issues e.g. refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU 12-03-I
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 05/31/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 05/31/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 28'	Casing Size:
Logged By: KMA, AC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 5/31/07		2221 w/GI 216482	MODEL 19 # 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 992	BKG 5 UR/HR, CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1476		SOIL					
	2		2946							
	3		3146							
	4		3319							
	5		3006							
	6		2387							
	7		1588							
	8		1369							
	9		1900							
	10		1970							
	11		1922							
	12		1960							
	13		2767							
	14		1836							
	15		2373			- 2½ x's BKG CPM				
	16		9607			- 10 x's BKG CPM				
	17		4322			- 3½ to 4 x's BKG CPM				
	18		1508							
	19		1891							
	20		1315							
	21		1311							
	22		1268							
	23		1254							
	24		1284							
	25		1681							
	26		1213							
	27		1067							
	28		1009							
			N/A			INACCESSABLE FROM THIS DEPTH DUE TO HOLE COLLAPSE				

Notes BKG 992

KY

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 12-02
Total Depth: 20'
Page: 1 of 1

Date/Time: 05/31/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2069 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'	Core Scan Results (cpm):	~~2100~~	2250	2150	2200
			Void 12"			
2	4' - 8'	Core Scan Results (cpm):	2300	2100	2150	2100
3	8 - 12'	Core Scan Results (cpm):	2200	1900	2100	2200
4	12' - 16'	Core Scan Results (cpm):	2050	2150	2000	////
						Void
5	16' - 20'	Core Scan Results (cpm):	////2150	2050	2000	1950
			Void			

Comments: (record any drilling/sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SD12-02
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLERO	Date Started: 05/31/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 05/31/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth:	Casing Size:
Logged By: KMA, AC	Checked By:	METER INFO	Core Size:
Date/Time: 05/31/07		2221 W/GL 216482	MODEL 19 #22152
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 992 cpm	BKG 5 uR/hr, CON 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1985		SOIL					
	2		1675							
	3		3528							
	4		2197							
	5		1901							
	6		2009							
	7		2045							
	8		1985							
	9		1377							
	10		1520							
	11		1359			AFTER 11' DEPTH HOLE COLLAPSED AND WAS INACCESSABLE. KMA				
			N/A							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DR-K
Total Depth: 20'
Page: 1 of 1

Date/Time: 5/31/07 1345
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2151 cpm
Technician Init: KM1, AC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		XXXX	2250	2175	2200
		Core Scan Results (cpm):	VOID 12"			
2	4' - 8'		250	2250	2100	2000
		Core Scan Results (cpm):	6" VOID FROM 4' TO 4'6"			
3 *	8 - 12'				2100	2300
		Core Scan Results (cpm):	VOID FROM 8' TO 10'			
4	12' - 16'					2800
		Core Scan Results (cpm):	VOID FROM 12' TO 15'			
5	16' - 20'				2150	2200
		Core Scan Results (cpm):	VOID 1.5'			

Comments: * (recovery, drilling or sampling issues; e.g., soil, groundwater, poor recovery, etc.)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: DR-K
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 5/31/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/31/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT ROCK	Total Depth: 17'	Casing Size:
Logged By: KMA AC	Checked By:	METER INFO	Core Size:
Date/Time: 05/31/07		2221 w/GI 216482	MODEL 19 # 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 872 cpm	5 ur/hr BKG 5 ur/hr Con.

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		900							
	2		1302							
	3		2114							
	4		3460							
	5		3059							
	6		1997							
	7		1722							
	8		2002							
	9		2097							
	10		2362							
	11		2490							
	12		2384							
	13		3461							
	14		2210							
	15		2292							
	16		3977							
	17		1573							

Notes

4864 cpm γ @ 16' 6" INTERVAL.

KY

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DR-L
Total Depth: 16'
Page: 1 of 1

Date/Time: 5/31/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2151 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'	void		2100	2150
Core Scan Results (cpm):					
2	4' - 8'	2150	2200	2300	2300
Core Scan Results (cpm):					
3 *	8 - 12'	void ~~2250~~	2200	2050	2000
Core Scan Results (cpm):		1' void			
4	12' - 16'	2100	2050	2000	2250
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DR-L
Page No.: of

Contractor: ZEBRA	Driller: L. CARRILLO	Date Started: 5/31/07	Rock Refusal Depth:	
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 5/31/07	Rock Cored (FT):	
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 15'	Casing Size:	
		MODEL NO 2221 W/GI 216482	Core Size:	
Logged By: RHA, AC	Checked By:	CAL DUE 05-04-08	MODEL # 221521	
Date/Time: 05/31/07		BKG 1198 cpm	CAL DUE 10/15/07	
			BKG 6 UR, CON 6 UR	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2499		SOIL					
	2		2867							
	3		2569							
	4		2059							
	5		2039							
	6		1894							
	7		1748							
	8		2168							
	9		1819							
	10		1471							
	11		1509							
	12		1132							
	13		1280							
	14		1296							
	15		1038			LAST 1' (16' DEPTH)				
			N							
				A						

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DR-J
Total Depth: 16'
Page: 1 of 1

Date/Time: 05/31/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2151 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	2200 / 2250
	Core Scan Results (cpm):	Top 2' void
2	4' - 8'	2050 / 2150
	Core Scan Results (cpm):	2' void from 4' to 6'
3	8 - 12'	2100 / 2300 / 2200
	Core Scan Results (cpm):	1'6" void from
4	12' - 16'	2075 / 2050 / 2050
	Core Scan Results (cpm):	1' void from 12' - 13'
5	16' - 20'	
	Core Scan Results (cpm):	

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: DR-J
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 05/31/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 05/31/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 14	Casing Size:
Logged By: KMA, AC	Checked By: [illegible]	METER INFO	Core Size:
Date/Time: 05/31/07,		2221 w/GI 216482	MODEL 19 #221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 1142 cpm	BKG 5 uR/hr CON 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		4046							
	2		2411							
	3		1799							
	4		1689							
	5		2120							
	6		3452							
	7		3190							
	8		2751							
	9		2827							
	10		2525							
	11		1775							
	12		1659							
	13		1497							
	14		1328							

N/A

Notes

KX

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/1/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-SU11-14
Cal Due: 10/27/07
Total Depth:
Ambient Bkg: 1493 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	~~0'-4'~~ (0-5')	Top VOID	VOID	1400	1450	Bottom 1300
Core Scan Results (cpm):						
2	~~4'-8'~~ (5-10')	VOID	1200	1250	1350	1350
Core Scan Results (cpm):						
3	~~8-12'~~ (10-15')					
Core Scan Results (cpm):						
4	12' - 16'					
Core Scan Results (cpm):						
5	16' - 20'					
Core Scan Results (cpm):						

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

4 µR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SW21-SOIL-14
Page No.: 1 of 1

Contractor: E & E	Driller: ZEBRA	Date Started: 6/1/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/1/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth:	Casing Size:
			Core Size: 3" x 5'
Logged By: DA/GMT	Checked By:		
Date/Time: 6/1/07		S/N NaI- 190205	BKG NaI (cpm) 80K
		S/N Mod19- 1018162	BKG Mod19 (uR/hr) 4

Sample Information									
Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
						4 uR/hr @ Bore hole	N/A		N/A	

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-BH2C
Total Depth: 20
Page: 1 of 1

Date/Time: 6/1/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1500 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info			
		Top			Bottom
1	0' - 4'	VOID	1325	1275	1500
	Core Scan Results (cpm):				
2	4' - 8'	1450	1400	1300	1450
	Core Scan Results (cpm):				
3	8 - 12'	VOID 1375	1400	1450	VOID
	Core Scan Results (cpm):	inverse void space			
4	12' - 16'	VOID	VOID	VOID	1400
	Core Scan Results (cpm):				
5	16' - 20'	1550	1400	1200	1300
	Core Scan Results (cpm):				

Comments: *(record anything of sampling issues, e.g. retrieval, poor recovery, etc.)*

5 µR/hr @ BKG

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SW21-DR-C
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/1/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/1/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 18'	Casing Size:
			Core Size: 1.5" x 4
Logged By: DA/GMT	Checked By: gmt		
Date/Time: 6/1/07		S/N NaI- 190205	BKG NaI (cpm) 790
		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1540		Soil	5μR/hr @ bore hole	N/A		N/A	
	2		2540							
	3		2365							
	4		1838							
	5		1491							
	6		1537							
	7	N/A	1597	N/A						
	8		2086							
	9		1648							
	10		1296							
	11		1700							
	12		1699							
	13		1197							
	14		190							
	15		1158							
	16		1103							
	17		1112							
	18		1015							
N/A			N/A							
				N/A						
			N/A							
				N/A						

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-102300 II
Location ID: DR-E
Total Depth: 16
Page: 1 of 1

Date/Time: 6/1/07
Instr. Model / SN: 2221 w/ 44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1440 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'			1350	1400
	Core Scan Results (cpm):				
2	4' - 8'	1400	1400	1300	1275
	Core Scan Results (cpm):				
3	8 - 12'	1275	1300	1375	1300
	Core Scan Results (cpm):				
4	12' - 16'	1400	1250	1300	
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

4 µR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 5321-BH-E
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/1/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/1/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 11'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: DA/GMT	Checked By:		
Date/Time: 6/1/07		S/N NaI- 190205	BKG NaI (cpm) 906-643
		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N/A	1121	N/A	Soil	4 µR/hr @ Borehole	N/A	N/A	N/A	
	2		1429							
	3		1695							
	4		1793							
	5		1667							
	6		1668							
	7		1561							
	8		2065							
	9		1480							
	10		1661							
	11		1575							
	11		1575		DA					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/1/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBRI-SU11-15
Cal Due: 10/27/07
Total Depth: 16
Ambient Bkg: 1356 cpm
Page: 1 of 1
Technician Init: gmt

Sleeve #	Depth Range	Core & Scan Info				
1	0' - 4'	Top VOID 1300	1300	1400	1450	Bottom
	Core Scan Results (cpm):					
2	4' - 8'	VOID 1400	1375	1300	1250	
	Core Scan Results (cpm):					
3	8 - 12'	VOID 1475	1375	1350	1350	VOID
	Core Scan Results (cpm):					
4	12' - 16'					
	Core Scan Results (cpm):	1475, ½ GALLON OF SOIL Collected, Entire distance				
5	16' - 20'		A			
	Core Scan Results (cpm):	N				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SB11-15
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/1/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/1/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 13'	Casing Size:
			Core Size: 1.5" x 4'
Logged By: BA / GMT	Checked By: GMT		
Date/Time: 6/1/07		S/N NaI- 190205	BKG NaI (cpm) 732
		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 4

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		1102		SOIL	4 μR/hr @ Borehole	N	A	N	A
	2		1431							
	3	N	3301	N						
	4		2525							
	5		1603							
	6		1330							
	7		1880							
	8		1916	A						
	9	A	1848							
	10		1207							
	11		1846							
	12		2013							
	13		1203							
			N							
				A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DR-U
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/01/07, 1020
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1590 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	1450 | 1550 | 1675
	Core Scan Results (cpm):	1' VOID
2	4' - 8'	1550 | 1790 | 1520 | 1645
	Core Scan Results (cpm):	6" VOID
3	8 - 12'	1550 | 1600
	Core Scan Results (cpm):	1' VOID 1' VOID
4	12' - 16'	1500 | 13'6" | 14'6" | 1570 | 1675
	Core Scan Results (cpm):	1' VOID 1' VOID
5	16' - 20'	
	Core Scan Results (cpm):	

Comments *(record any drilling or sampling issues, e.g., retrieval, groundwater, poor recovery, etc., here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: DR-U
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 06/01/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/01/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 14'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA	Checked By: [illegible]	2221 w/GI 216482	MODEL 19 #221521
Date/Time: 06/01/07 1040		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 965 cpm	BKG 5 ur/hr, Con 5 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1579		SOIL					
	2		2008							
	3		3356							
	4		3757							
	5		3344							
	6		2124							
	7		1723							
	8		1604							
	9		1914							
	10		1434							
	11		1418							
	12		1421							
	13		1164							
	14		1124		SOIL					

N/A

Notes

KY

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: BR-H
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/01/07, 0935
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1590 cpm
Technician Init: KHA, AC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	[hatched] | 1450 | 1400 | 1450
	Core Scan Results (cpm):	1' VOID
2	4' - 8'	[hatched] | 1500 | 1450 | 1475 | 1550
	Core Scan Results (cpm):	6" VOID
3	8 - 12'	[hatched] | 1460 | 1650 | 1525
	Core Scan Results (cpm):	1' VOID
4	12' - 16'	[hatched] | 1450 | 1475 | 1400
	Core Scan Results (cpm):	1' VOID
5	16' - 20'	| | | |
	Core Scan Results (cpm):	

Comments: *(record any drilling or sampling issues e.g. refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DR-H
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. CABRERA	Date Started: 06/01/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/01/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 14'	Casing Size:
		MODEL 1000	Core Size:
Logged By: KMA, RC	Checked By:	2221 W/GL 216482	MODEL A 22521
Date/Time: 06/01/07		CAL DUE 05-04-08	CAL. DUE 10/15/07
		BKG 965	BKG 5 uR/hr, CON 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1938		SOIL					
	2		1678		↑					
	3		2177							
	4		2499							
	5		2591							
	6		2788							
	7		2290							
	8		2043							
	9		2114							
	10		1596							
	11		1450							
	12		1596							
	13		1264		↓					
	14		1099		SOIL					
			N	A						

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DR - I
Total Depth: 20'
Page: 1 of 1

Date/Time: 06/01/07, 08
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1558 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1450	1550	1625
	Core Scan Results (cpm):	1ST 12" VOID			
2	4' - 8'	1475	1600	1750	1575
	Core Scan Results (cpm):				
3	8 - 12'		1550	1475	1500
	Core Scan Results (cpm):	1' VOID			
4	12' - 16'		1600	1525	1425
	Core Scan Results (cpm):	1' VOID			
5	16' - 20'			1700	1375
	Core Scan Results (cpm):	2' VOID			

Comments (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DC-1
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABRERA	Date Started: 06/01/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/01/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 16'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, AC	Checked By:	2221 W/GI 216482	MODEL 19 # 221521
Date/Time: 06/01/07		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 429 cpm	BKG 5 uR/Hr, CONT 5 uR/Hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1266		SOIL					
	2		1775							
	3		2838							
	4		2323							
	5		2258							
	6		1976							
	7		1986							
	8		1890							
	9		1427							
	10		1425							
	11		1243							
	12		1212							
	13		1478							
	14		1249							
	15		1095							
	16		919		SOIL	HOLE COLLAPSED AFTER THIS DEPTH				
			N/A							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DR - M
Total Depth: 12'
Page: 1 of 1

Date/Time: 06/01/07 1120
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1859 cpm
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1800	1725	1770
	Core Scan Results (cpm):	1' VOID			
2	4' - 8'	1800	1800	1800	1600
	Core Scan Results (cpm):	9" VOID			
3 *	8 - 12'	1750	1850	1800	1800
	Core Scan Results (cpm):				
4	12' - 16'	← N/A →			
	Core Scan Results (cpm):	NO SAMPLES OR SCANS BARRELS STUCK IN HOLE.			
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/1/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1 - ~~SB~~ DR-D
Cal Due: 10/27/07
Total Depth: 8'
Ambient Bkg: 1572 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	0' - 4'	Top VOID		1250	1250	1300 Bottom
	Core Scan Results (cpm):					
2	4' - 8'	VOID	1350	1300	1375	1275
	Core Scan Results (cpm):					
3	8 - 12'					
	Core Scan Results (cpm):	REFUSAL @ 8 ft				
4	12' - 16'					
	Core Scan Results (cpm):	A				
5	16' - 20'	N				
	Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

5 μR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SR21-DR-D
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/1/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/1/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth:	Casing Size:
			Core Size: 1.5" X 4'
Logged By: DA/GMF	Checked By: gw		
Date/Time: 6/1/07		S/N NaI- 190205	BKG NaI (cpm) 733
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 5

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A						uR/hr @ bore hole	N/A		N/A	

Notes

Borehole collapsed, no DHG possible

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DRY-E
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/04/07, 1530
Instr. Model / SN: 2221 W/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1620 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1650	1650	1550
	Core Scan Results (cpm):	1' VOID			
2	4' - 8'	1600	1450	1500	1500
	Core Scan Results (cpm):				
3	8 - 12'		1525	1535	1440
	Core Scan Results (cpm):	8'-9' VOID			
4	12' - 16'		1525	1500	1525
	Core Scan Results (cpm):	12'-13' VOID			
5	16' - 20'		N		
	Core Scan Results (cpm):	A			

Comments: (recorder, drilling or sampling issues, e.g. refusal, groundwater, cor recovery, etc. here)

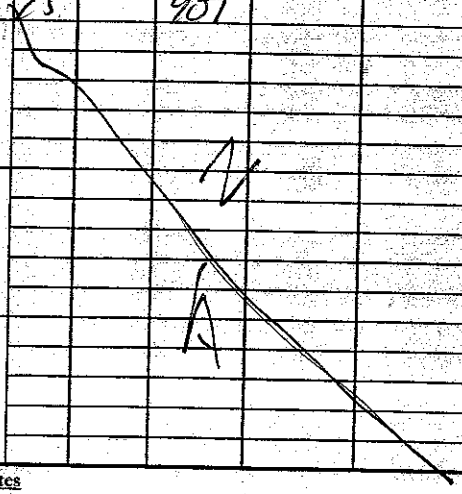
CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DTY-E
Page No.: 1 of 1

Contractor: ZEBRA	Driller:	Date Started: 6/4/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 6/4/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 15'	Casing Size:
		METER INFO	Core Size:
Logged By: RMA, AJC	Checked By: [illegible]	2221 w/GI 216482	MODEL 19 221521
Date/Time: 06/04/07, 1600		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 1239	BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1639							
	2		1478							
	3		1592							
	4		1637							
	5		1869							
	6		1620							
	7		2150							
	8		1771							
	9		1663							
	10		1124							
	11		1289							
	12		1046							
	13		943							
	14		1008							
	15		907							



Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/04/07
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: SU 10-17
Cal Due: 04-30-08
Total Depth: 9'
Ambient Bkg: 2204 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'			1700	1700
	Core Scan Results (cpm):	2' VOID			
2	4' - 8'	1750	1850	1750	1700
	Core Scan Results (cpm):				
3 *	8 - ~~12'~~ 9'	1850	9'	N/A	
	Core Scan Results (cpm):	REFUSAL @ 9' DEPTH, KMA			
4	12' - 16'		N	A	
	Core Scan Results (cpm):				
5	16' - 20'		N	A	
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.	PROJECT NAME: Sylvania-Corning FUSRAP LOCATION: Hicksville, NY CLIENT: E & E	BORING LOG Location ID: SU10-17 Page No.: of

Contractor: ZEBRA	Driller:	Date Started: 06/04/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/04/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 2'	Casing Size:
		MODEL 1000	Core Size:
Logged By: RMA, AJC	Checked By: GW	2221 W/GI 216482	MODEL 19 #22152
Date/Time: 06/04/07		CAL DUE 05-01-08	CAL DUE 10/15/07
		BKG 1239	BKG 5 uR/hr, Conv. 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1680		SOIL					
	2		1008		SOIL	- REFUSAL @ THIS DEPTH FOR LOGS, HOLE COLLAPSED - CASED-IN.				
			N	A						

Notes BKG 555

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 10-16
Total Depth: 12'
Page: 1 of 1

Date/Time: 06/04/07, 930
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2204 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)
1	0' - 4'	1900 | 1900 | 1750 | 1875
	Core Scan Results (cpm):	6" VOID … 9" VOID
2	4' - 8'	1825 | 1825 | 1775 | 1780
	Core Scan Results (cpm):	
3 *	8 - 12'	1890 | 1900 | 1850 | 1825
	Core Scan Results (cpm):	
4	12' - 16'	← | N | A →
	Core Scan Results (cpm):	
5	16' - 20'	← | N | A →
	Core Scan Results (cpm):	

Comments: *(recent any drilling or sampling issues (e.g. refusal, groundwater, poor recovery, etc.) here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU 10-16
Page No.: of

Contractor: ZEBRA	Driller:	Date Started: 06/04/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/04/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 10'	Casing Size:
		MODEL 1000	Core Size:
Logged By: KMA ; AJC	Checked By: CW	2221 W/GL 216482	MODEL 19 221527
Date/Time: 06/04/07		CAL DUG 05-01-08	CAL DUG 10/15/07
		BKG 1239 cpm	BKG 5 ur/hr, CON 5 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		3565		SOIL					
	2		3261							
	3		1862							
	4		1633							
	5		1736							
	6		2509							
	7		2848							
	8		2272							
	9		2305							
	10		1877		SOIL	HOLE COLLAPSED @ 10' DEPTH				
			N							
				A						

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/04/07 1025
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: SU 10-14
Cal Due: 04-30-08
Total Depth: 14'
Ambient Bkg: 2204 cpm
Page: 1 of 1
Technician Init: RMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	1700 / 1750
	Core Scan Results (cpm):	0" - 1'6" VOID NO -
2	4' - 8'	2075
	Core Scan Results (cpm):	RECOVERY 3'-6', VOID 6'-7'
3	8 - 12'	2000 / 1700 / 1675
	Core Scan Results (cpm):	VOID ~~@70~~ 9'-10'
4	12' - 16'	14' / 1800 / 1825
	Core Scan Results (cpm):	NO RECOVERY / REFUSAL @ 14'
5	16' - 20'	
	Core Scan Results (cpm):	

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB10-14
Page No.: 1 of 1

Contractor: ZEBRA	Driller:	Date Started: 06/04/07	Rock Refusal Depth: 14'
Method: DIRECT PUSH	Water Elevation: N.A	Date Finished: 06/04/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 13'	Casing Size:
	ROCK	MOBILE INTO	Core Size:
Logged By: KMA, AJC.	Checked By:	2221 W/GI 216482	MODEL 19 22521
Date/Time: 06/04/07 1100		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 1239 CPM	BKGD 5 uR/hr CON 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1924		SOIL					
	2		1869							
	3		1942							
	4		2006							
	5		2107							
	6		1995							
	7		1939							
	8		2136							
	9		1541							
	10		1976							
	11		2023							
	12		1886							
	13		1220		SOIL					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/04/07
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: SU 11-02
Cal Due: 04-30-08
Total Depth: 12'
Ambient Bkg: 1620 cpm
Page: 1 of 1
Technician Init: KMA, AC

Sleeve #	Depth Range	Core & Scan Info (Top)			(Bottom)
1	0' - 4'	XX/X/	1700	1780	1550
Core Scan Results (cpm):		void 12"			
2	4' - 8'	1675	1725	1650	1600
Core Scan Results (cpm):					
3	8 - 12'	1750	1600	1625	1625
Core Scan Results (cpm):					
4	12' - 16'		N		
Core Scan Results (cpm):					
5	16' - 20'		A		
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU11-02
Page No.: 1 of 1

Contractor: ZEBRA	Driller:	Date Started: 06/04/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A.	Date Finished: 06/04/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 10'	Casing Size:
		MODEL 1000	Core Size:
Logged By: KMA, AJC	Checked By:	2221 W/GL 216482	MODEL 19 #221521
Date/Time: 06/04/07 1215		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG ~~nefw~~	BKG 11 ur/hr CON 4 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		3251		SOIL					
	2		3251							
	3		2806							
	4		1906							
	5		1631							
	6		1861							
	7		1557							
	8		1886							
	9		1865							
	10		1430		SOIL					

Notes

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU 11-06
Page No.: 1 of 1

Contractor: ZEBRA	Driller:	Date Started: 06/04/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/04/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 7'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, AJC	Checked By: [illegible]	2221 w/GI 216482	MODEL PI #221 SL1
Date/Time: 06/04/07		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 958	BKG 5 ur/hr Con 5 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		3829		SOIL					
	2		3636							
	3		3404							
	4		2549							
	5		1421							
	6		1584							
	7	~~1840~~	1890		SOIL					

N

A

Notes BKG 958

KX

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 11-06
Total Depth: 9'
Page: 1 of 1

Date/Time: 06/04/07
Instr. Model / SN: 2221 w/44-10 108762
Cal Due: 04-30-08
Ambient Bkg: 1620 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0' - 4'		1625	1700	1800	1700
		Core Scan Results (cpm):				
2	4' - 8'		1650	1650	1550	1550
		Core Scan Results (cpm):				
3	8 - 12'		1550			
		Core Scan Results (cpm):				
4	12' - 16'					
		Core Scan Results (cpm):	N/A			
5	16' - 20'			N/A		
		Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues e.g. refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/04/07
Project #: 07-1005.00
Instr. Model / SN: 2221 W/44-10 108862
Location ID: SU 11-01
Cal Due: 04-30-08
Total Depth: 16'
Ambient Bkg: 1620 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1825	1850	1875
	Core Scan Results (cpm):	1' VOID			
2	4' - 8'	1550	1575	1650	1750
	Core Scan Results (cpm):				
3	8 - 12'		1550	1650	1700
	Core Scan Results (cpm):	8'-9' VOID			
4	12' - 16'	1550	1600	1450	1525
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, log recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU11-07
Page No.: 1 of 1

Contractor: ZEBRA	Driller:	Date Started: 6/4/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: NA	Date Finished: 06/04/07	Rock Cored (FT):
Elevation: 0.G	Soil Drilled: SAND, SILT	Total Depth: 15	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, AJC	Checked By: [illegible]	2221 W/GI 216482	MODEL 19 221521
Date/Time: 06/04/07		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 945	BKG 5 UR/HR CON 5 UR/HR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2196							
	2		3534							
	3		2569							
	4		1633							
	5		1429							
	6		1350							
	7		1447							
	8		1456							
	9		1769							
	10		1521							
	11		1452							
	12		1367							
	13		1228							
	14		1127							
	15		1019							

NA

Notes BKG 985

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/4/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SB11-SU11-14
Cal Due: 10/27/07
Total Depth: 32'
Ambient Bkg: 1447 cpm
Page: 1 of 2
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info					
1	~~10'-15'~~ 8-13' **	Top / VOID	1550	1325	1350	1375	Bottom 1300
Core Scan Results (cpm):							
2	~~15'-20'~~ 13-16'	VOID			1300	1275	1325
Core Scan Results (cpm):							
3	16'-20'	VOID		VOID	VOID	1400	1400
Core Scan Results (cpm):							
4	20'-24	VOID		VOID	1400	1350	1375
Core Scan Results (cpm):							
5	24'-28'	VOID		1400	1400	1300	1300
Core Scan Results (cpm):							

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

* Continuation of Last week.

** 5ft borings for sleeve, #1

* 4 ft depth for sleeve #2 etc... (Sleeves are 5' though.)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB21-4411-14
Total Depth: 32'
Page: 2 of 2

Date/Time: 6/4/07
Instr. Model / SN: 2221/W/44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1447 cpm cpm
Technician Init: DA/GNT

Sleeve #	Depth Range	Core & Scan Info
1	28-32'	Top JOINT 1550 1500 1300 1500 Bottom
	Core Scan Results (cpm):	
2	4' - 8'	
	Core Scan Results (cpm):	
3	8 - 12'	
	Core Scan Results (cpm):	
4	12' - 16'	
	Core Scan Results (cpm):	
5	16' - 20'	
	Core Scan Results (cpm):	

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

BKG @ 4 µR/hr

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SW1-SB11-14
Page No.: 1 of 1

Contractor: E-E	Driller: ZEBRA	Date Started: 6/4/07	Rock Refusal Depth:
Method: 5' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/4/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 2.0" x 5'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 6/4/07		S/N NaI- 190205	BKG NaI (cpm) 731
		S/N Mod 19- 101862	BKG Mod 19 (uR/hr) 4uR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		1446		SOIL	4 µR/hr @ BKG hole	N	A	N	A
	2		3219							
	3		2260							
	4		1558							
	5		1538							
	6		1625							
	7	N	1662	N						
	8	A	1730	A						
	9		1447							
	10		1402							
	11		2040							
	12		1352							
	13		1285							
	14		1325							
	15		1085							
	16		1294							
			N							
				A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/4/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-SU11-13
Cal Due: 10/27/07
Total Depth: (491) 50
Ambient Bkg: 1465 cpm
Page: 1 of 2
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	0'-~~4'~~ 5	Top VOID	VOID	1450	1400	Bottom VOID
	Core Scan Results (cpm):					
2	5'-10' ~~4'-8'~~	VOID	1400	1500	1450	1450
	Core Scan Results (cpm):					
3	10'-15'	VOID	VOID	1350	1400	1400
	Core Scan Results (cpm):					
4	15'-20'		1400	1500	1300	1350
	Core Scan Results (cpm):					
5	~~16'-20'~~ 20-25			1400	1550	1400
	Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

BKGD.@ 4mR/hr

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-102200 II
Location ID: SBR1-SW11-13
Total Depth: 49' ~~50~~ 50
Page: 2 of 2

Date/Time: 6/4/07
Instr. Model / SN: 2221 w/ 4440; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1465 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	20' ~~25~~		1300	1300	1325
	Core Scan Results (cpm):				
2	25-30		1450	1350	1400
	Core Scan Results (cpm):				
3	~~8-12'~~ 30-35	VOID	1450	1300	1400
	Core Scan Results (cpm):				
4	~~12'-16'~~ 35-40	VOID	1500	1350	1380
	Core Scan Results (cpm):				
5	~~16'-20' BA~~ 40-45		1300	1350	1350
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU 11-13
Page No.: 1 of 2

Contractor: E&E	Driller: ZEBRA	Date Started: 6/4/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/4/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled: 50	Total Depth: 50	Casing Size:
			Core Size: 2" x 5'
Logged By: 6/4/07	Checked By: SMT		
Date/Time: SMT		S/N NaI- 190205	BKG NaI (cpm) 834
		S/N Mod19- 1018662	BKG Mod19 (uR/hr) 4

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	1544	→		SOIL	4 μR/hr @ bore hole				
	2	1700	→							
	3	2072	→							
	4	1486	→							
	5	1567	→							
	6	2018	→							
	7	1638	→							
	8	2357	→							
	9	2220	→							
	10	1620	→							
	11	1625	→	N			N	A	N	A
	12	1876	→							
	13	1504	→							
	14	1206	→							
	15	1600	→	A						
	16	1134	→							
	17	1116	→							
	18	929	→							
	19	872	→							
	20	892	→							
	21	920	→							
	22	1007	→							
	23	859	→							
	24	964	→							
	25	1044	→							
	26	880	→							
	27	841	→							
	28	791	→							
	29	915	→							
	30	734	→		▽					

Notes

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SB11-13
Page No.: 2 of 2

Contractor: E&E	Driller: ZEBRA	Date Started: 6/4/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: "	Rock Cored (FT):
Elevation: N/A	Soil Drilled: 50	Total Depth: 50'	Casing Size:
			Core Size: 2" x 5'
Logged By: GMT	Checked By: GMT		
Date/Time: 6/21/07		S/N NaI- 190205	BKG NaI (cpm) 834
		S/N Mod19- 1018628	BKG Mod19 (uR/hr) 4uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	31	730	→							
	32	881	→							
	33	1044	→							
	34	937	→							
	35	725	→							
	36	827	→							
	37	855	→							
	38	818	→							
	39	875	→							
	40	1099	→							
	41	1156	→							
	42	934	→							
	43	820	→	N						
	44	842	→							
	45	1036	→		A					
	46	734	→							
	47	690	→							
	48	623	→							
	49	827	→							
	50	958	→		↓					
							N	A	N	A
		N			N					
			A			A				

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/4/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221W/44-10 ; SN #163685
Location ID: DR-0
Cal Due: 10/27/07
Total Depth: 20'
Ambient Bkg: ~~1382~~ DA 1382 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)				
1	~~0'-4'~~ 0-5	VOID	1650	1550	1475	1300
Core Scan Results (cpm):						
2	~~4'-8'~~ 5-10	VOID	VOID	VOID	1350	1300
Core Scan Results (cpm):						
3	~~8'-12'~~ 10-15'	VOID		1225	1350	1400
Core Scan Results (cpm):						
4	~~12'-16'~~ 15'-20'	VOID	VOID	1325	1300	1450
Core Scan Results (cpm):						
5	~~16'-20'~~ 20'-25'			A		
Core Scan Results (cpm):		N				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

Bkgd @ 4mR/hr
5ft' liners

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~SB1-0~~ DR-0
Page No.: 1 of 1

Contractor: E	Driller: ZEBRA	Date Started: 6/4/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/4/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 20	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 6/4/07		S/N NaI- 190205	BKG NaI (cpm)
		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1	2278	→		Soil	4 μR/hr @ Borehole				
	2	2368	→							
	3	1849	→							
	4	2111	→	N						
	5	2218	→							
	6	2235	→							
	7	2180	→							
	8	2085	→							
	9	1787	→							
	10	1478	→							
	11	1415	→	A						
	12	1367	→							
	13	1239	→							
	14	1148	→							
	15	957	→							
	16	1061	→							
	17	1069	→							
	18	962	→							
	19	1012	→							
	20	936	→							
							N	A	N	A
			N							
				A						

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/4/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: DR-N
Cal Due: 10/27/07
Total Depth: 15
Ambient Bkg: 1531 cpm
Page: 1 of 1
Technician Init: JA

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)	Core Scan Results (cpm)
1	~~0'-4'~~ 0-5	1480 / 1375	
2	~~4'-8'~~ 5-10	1450 / 1550 / 1350	
3	~~8-12'~~ 10-15	VOID / VOID / 1250 / 1350 ~~1250~~ / 1350	
4	~~12'-16'~~ ~~15-20~~		
5	~~16'-20'~~ 20-25	N	

Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, non-recovery, etc. here)

1 μR/hr @ Bkg
5' cores (Liners)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SW21-DG-N
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/4/07	Rock Refusal Depth:
Method: 4' Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/4/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 11'	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: GMT	S/N NaI- 190205	BKG NaI (cpm) 994
Date/Time: 6/4/07		S/N Mod 19- 1018602	BKG Mod 19 (uR/hr) 4u

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1	N	2321	N/A	Soil	4μR/hr @ bore hole	N	A	N	A
	2		2425							
	3		2534							
	4		2334							
	5		2476							
	6		2290							
	7		1815							
	8		1969							
	9		1768							
	10	A	1461							
	11		1392		↓					
			N	N/A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/5/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBRI - SU11-17
Cal Due: 10/27/07
Total Depth: 20
Ambient Bkg: 1473 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)				
1	~~0'-4'~~ (0-5)'	VOID	1550	1575	1600	1500
Core Scan Results (cpm):						
2	~~4'-8'~~ (5-10)'	VOID	1450	1475	1450	1450	1550
Core Scan Results (cpm):						
3	~~8-12'~~ (10-15)'	VOID		1350	1400	1480
Core Scan Results (cpm):						
4	~~12'-16'~~ (15-20)'	VOID		1350	1400	1300
Core Scan Results (cpm):						
5	~~16'-20'~~ (20-25)'					
Core Scan Results (cpm):						

Comments: record any drilling or sampling issues e.g. refusal, groundwater, poor recovery, etc. here

BKGD @ 5 μR/h.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SB11-17
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/5/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/5/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 20'	Casing Size:
			Core Size:
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 6/5/07		S/N NaI- 190205	BKG NaI (cpm) 859
		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1470		Soil	5μR/hr @ Bore hole				
	2		3485							
	3		2330							
	4		1790							
	5		1785							
	6		1797							
	7		1827							
	8		2541							
	9	N	2162							
	10	A	1439	N/A			N			
	11		1424							
	12		1182							
	13		1953							
	14		1171							
	15		1061							
	16		1076							
	17		1033							
	18		982							
	19		847							
	20		970							
								A		
									N	
				N						
				A						

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/05/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBRI-SU11-21
Cal Due: 10/27/07
Total Depth: 11'
Ambient Bkg: 1503 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
		Top				Bottom
1	~~0'-4'~~ (0-5)'	VOID	1350	1375	1600	1450
	Core Scan Results (cpm):					
2	(5-10) ~~4'-8'~~	VOID	1350	1400	1250	1300
	Core Scan Results (cpm):					
3	~~8-12~~ (10-15)'	VOID	VOID	VOID	1300	1425
	Core Scan Results (cpm):					
4	12' - 16'		A			
	Core Scan Results (cpm):					
5	16' - 20'					
	Core Scan Results (cpm):					

Comments: Record any drilling or sampling issues e.g. refusal, groundwater encountered, etc. here.

Bkgd 4 mR/hr
Refusal @ 11 ft.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG gmt
Location ID: 5921-SU11-B21
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/5/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/5/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 11	Casing Size:
			Core Size: 2" x 5'
Logged By: gmt	Checked By: gmt		
Date/Time: 6/5/07		S/N NaI- 190205	BKG NaI (cpm) 925
		S/N Mod19- 1018662	BKG Mod19 (uR/hr) 4μR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1716		Soil	4μR/hr @ bore hole				
	2		2420							
	3		3743							
	4		2874							
	5	N	1599	N/A						
N/A	6		1596							
	7	A	1856							
	8		2714							
N/A	9		2017							
	10		1708							
	11		1100		▼		N	A	N	A
N/A										
N/A			N							
N/A				A						
N/A										

Notes: Refusal @ 11 ft bgs.

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/5/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-SU11-18
Cal Due: 10/27/07
Total Depth: 20'
Ambient Bkg: 1676 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)				
1	~~0'-4'~~ (0-5)'	VOID	1250	1275	1350	1375
Core Scan Results (cpm):						
2	~~4'-8'~~ (5-10)'	VOID	1325	1450	1450	1400
Core Scan Results (cpm):						
3	~~8-12'~~ (10-15)'		1425	1300	1300	1300
Core Scan Results (cpm):						
4	12' - 16'				1375	1375
Core Scan Results (cpm):						
5	~~16'-20'~~					
Core Scan Results (cpm):						

Comments: record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here

4μR/h @ BKGD

last push ~ to 17' bgs

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SR21-SU11-18
Page No.: 1 of 1

Contractor: F&E	Driller: ZEBRA	Date Started: 6/5/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/5/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 18'	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 6/5/07		S/N NaI- 190205	BKG NaI (cpm) 890
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1014		Soil	4 uR/hr @ Bore hole				
	2		2148							
	3		3472							
	4		2035							
	5		1672							
N/A	6	N	1841							
	7		2263							
	8		1446							
	9		1567							
	10		1311	N						
N/A	11	A	1070				N	A		
	12		1107							
	13		1183						N	A
	14		951	A						
	15		980							
N/A	16		946							
	17		865							
	18		837							
	N/A		~~834~~							
N/A			N							
N/A				A						

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/5/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-~~SU18~~ SU11-12
Cal Due: 10/27/07
Total Depth: 20
Ambient Bkg: 1532 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top)				Bottom
1	0' - ~~4~~ 5	1350	1450	1800	1450	1350
Core Scan Results (cpm):						
2	5-10' ~~4' - 8'~~	1350	1300	1500	1500	1450
Core Scan Results (cpm):						
3	10-15' ~~8 - 12'~~	VOID 1350	1300	1400	1450	1400
Core Scan Results (cpm):						
4	~~12' - 16'~~ 15-20			1200	1300	1225
Core Scan Results (cpm):						
5	16' - 20'	N	A			
Core Scan Results (cpm):						

Comments: record any drilling & sampling issues, e.g. repeat groundwater, poor recovery, etc. here.

4 μR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU1-12
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/5/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/5/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 20'	Casing Size:
			Core Size: 2" x 5'
Logged By: 6/5/07 DN/CMT	Checked By: GMT	S/N NaI- 190205	BKG NaI (cpm) 740
Date/Time: 6/5/07		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 4 uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N	1835	N	Soil	4 uR/hr @ BKGD	N	A	N	A
	2		2695							
	3		3147							
	4		2449							
	5		2189							
N/A	6	A	1893	A						
	7		1894							
	8		2165							
	9		1578							
	10		1412							
N/A	11	N	1837	N						
	12		1248							
	13		1248							
	14		1260							
	15		1021							
N/A	16	A	1099	A						
	17		950							
	18		878							
	19		931							
	20		927							
N/A			N							
N/A				A						

Notes

CABRERA SERVICES

RADIOLOGICAL - ENVIRONMENTAL - REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: ~~SBKI-SUH~~ DR-G
Total Depth: 20'
Page: 1 of

Date/Time: 6/5/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1352 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - ~~4~~ 5	Top VOID 1350 1450 1350 Bottom 1200
	Core Scan Results (cpm):	
2	~~4' - 8~~ 5-10	1250 ~~1400~~ 600 1400 1375 1300
	Core Scan Results (cpm):	
3	10-15 ~~8-12~~	VOID 1400 1400 1300 1375
	Core Scan Results (cpm):	
4	15-20 ~~12'-16'~~	VOID VOID 1325 1350 1200
	Core Scan Results (cpm):	
5	16' - 20'	A
	Core Scan Results (cpm):	N

Comments: 4 mR/hr @ Bkgd

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-DA-GT
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/5/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/5/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 20'	Casing Size:
			Core Size: 2" X 5'
Logged By: DA/GMT	Checked By: GMT	S/N NaI- 190205	BKG NaI (cpm) 883
Date/Time: 6/5/07		S/N Mod19- 1018602	BKG Mod19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1266		SOIL	4μR/hr @ bore hole				
	2		2803							
	3		3105							
	4		1918							
	5		1806							
N/A	6		1590							
	7	N	1770							
	8		1900							
	9	A	1556							
	10		1494	N			N	A	N	A
N/A	11		1457							
	12		1290	A						
	13		1170							
	14		980							
	15		1165							
N/A	16		1051							
	17		1007							
	18		900							
	19		977							
	20		831							
N/A										
			N							
				A						
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/5/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-SU11-10
Cal Due: 10/27/07
Total Depth: 14
Ambient Bkg: 1322 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	0-5 ~~0' - 4'~~	Top VOID	1450	1500	1400	Bottom 1400
Core Scan Results (cpm):						
2	5-10 ~~4' - 8'~~	1450	1300	1250	1475	1300
Core Scan Results (cpm):						
3	10-15 ~~8 - 12'~~			1600	1300	1200
Core Scan Results (cpm):						
4	12' - 16'					
Core Scan Results (cpm):						
5	16' - 20'	N				
Core Scan Results (cpm):						

A

Comments: Record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here.

4 μR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU11-10
Page No.: 1 of 1

Contractor: F-S E	Driller: ZEBRA	Date Started: 6/5/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/5/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 14'	Casing Size:
			Core Size: 2" x 5'
Logged By: BA/GMT	Checked By: GMT		
Date/Time: 6/5/07		S/N NaI- 190205	BKG NaI (cpm)
		S/N Mod19- 101602	BKG Mod19 (uR/hr) 4 µR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1267		Soil					
	2		2090							
	3		3001							
	4		2807							
	5		1831							
N/A	6		1742							
	7		1789							
	8		1858							
	9		1706							
	10		1613							
N/A	11		1861				N	A	N	A
	12		1488							
	13		1208							
	14		972							
N/A										
			N							
N/A				A						
N/A										
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DRY-D
Total Depth: 32'
Page: 1 of 2

Date/Time: 06/05/07 0820
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: KMA ~~3408~~ 2377 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		2250	2100	2050
	Core Scan Results (cpm):	1' VOID			
2	4' - 8'	2400	2300	2400	2150
	Core Scan Results (cpm):				
3	8 - 12'		2300	2250	2225
	Core Scan Results (cpm):	1' VOID			
4	12' - 16'		2400	2175	2125
	Core Scan Results (cpm):	1' VOID			
5	16' - 20'		2350	2000	1925
	Core Scan Results (cpm):	1' VOID			

Comments: (recording drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/05/07 0820
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: DR4 - D
Cal Due: 04-30-08
Total Depth: 32'
Ambient Bkg: 2377 cpm
Page: 2 of 2
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	20'-24'		2450	2500	2100
	Core Scan Results (cpm):	1'; 6" VOID			
2	24'-28'		2100	1875	1900
	Core Scan Results (cpm):	1' 3" VOID			
3	28-32'		2000	2050	1900
	Core Scan Results (cpm):	1' VOID			
4	32'-36'		N	A	
	Core Scan Results (cpm):				
5	36'-40'		N	A	
	Core Scan Results (cpm):				

Comments: (recordable drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. where)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: DLY-D
Page No.: 1 of 2

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/05/07	Rock Refusal Depth:	
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/05/07	Rock Cored (FT):	
Elevation: Q.G.	Soil Drilled: SAND, SILT	Total Depth: 32'	Casing Size:	
Logged By: KMA, AJC	Checked By: SW	MODEL 1000	Core Size:	
Date/Time: 06/05/07, 1010		2221 W/GI 216482	MODEL A 221521	
		CAL DUE 05-01-08	CAL DUE 10/15/07	
		BKG 6PM 1253	BKG 5 UR/HR CPM 5 UR/HR	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2695		SOIL					
	2		1706							
	3		1566							
	4		1446							
	5		1375							
	6		1637							
	7		1924							
	8		2600							
	9		1606							
	10		1197							
	11		1056							
	12		1233							
	13		1175							
	14		1006							
	15		1071							
	16		1132							
	17		950							
	18		846							
	19		792							
	20		796							
	21		882							
	22		883							
	23		939							
	24		940							
	25		933							
	26		763							
	27		750							
	28		846							
	29		917							
	30		804		SOIL					

Notes

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DRY-D
Page No.: 2 of 2

Contractor: ZEBRA	Driller: C. GLEGN	Date Started: 06/05/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N.A.	Date Finished: 06/05/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 52'	Casing Size:
		MODEL NO.	Core Size:
Logged By: KMA, AJC	Checked By:	2221 W/GI 216482	MODEL A 221521
Date/Time: 06/05/07, 1010		CAL DUE 05-01-08	CAL DUE 10/15/07
		BKG CPM	BKG 5 UR/HR CON 5 UR/HR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	31		822		SOIL					
	32		899		SOIL					

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/05/07 1/10
Project #: 07-1005.00
Instr. Model / SN: 2221 N/44-10 108862
Location ID: LP-HB
Cal Due: 04-30-08
Total Depth: 16'
Ambient Bkg: 2150 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		2100	2050	2150
	Core Scan Results (cpm):	1' void			
2	4' - 8'		2150	2050	2100
	Core Scan Results (cpm):	1' void			
3	8 - 12'		2050	2050	2100
	Core Scan Results (cpm):	1' void			
4	12' - 16'		2025	2075	2000
	Core Scan Results (cpm):				
5	16' - 20'		N	A	
	Core Scan Results (cpm):				

Comments: (record any drilling, sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: LPH-B
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/05/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N.A.	Date Finished: 06/05/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 16'	Casing Size:
Logged By: KMA, AJC	Checked By: GMT	METER INFO	Core Size:
Date/Time: 06/05/07		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM	BKG 6 UR/HR CON 6 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1725		SOIL					
	2		2548							
	3		2399							
	4		2363							
	5		2021							
	6		1972							
	7		1892							
	8		1996							
	9		1790							
	10		1391							
	11		1231							
	12		1289							
	13		1155							
	14		921							
	15		1043							
	16		1180		SOIL					

NA

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 1305/06/05/07
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: SM4-B
Cal Due: 04-30-08
Total Depth: 16'
Ambient Bkg: 2150 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1975	2050	1975
	Core Scan Results (cpm):	1' VOID			
2	4' - 8'		2000	2025	2050
	Core Scan Results (cpm):	1' VOID			
3	8 - 12'			2025	1925
	Core Scan Results (cpm):	2' VOID			
4	12' - 16'		2000	2050	2075
	Core Scan Results (cpm):	1' VOID			
5	16' - 20'		N A		
	Core Scan Results (cpm):				

Comments: (recovery, drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DR4-B
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/05/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N.A.	Date Finished: 06/05/07	Rock Cored (FT):
Elevation: Q.G.	Soil Drilled: SAND, SILT	Total Depth: 16	Casing Size:
Logged By: KMA, AJC	Checked By: gmt	METER INFO	Core Size:
Date/Time: 06/05/07 1335		2221 w/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 1295	BKG 7 UR/HR CON 7 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1512		SOIL					
	2		1405							
	3		1335							
	4		1808							
	5		1542							
	6		1403							
	7		1607							
	8		1651							
	9		1597							
	10		1862							
	11		1531							
	12		1274							
	13		1253							
	14		1130							
	15		1105							
	16		1082		SOIL					

N
A

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/05/07, 1425
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: DRY H-A
Cal Due: 04-30-08
Total Depth: 16'
Ambient Bkg: 2252 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		2150	2200	2100
	Core Scan Results (cpm):				
2	4' - 8'	2000	2250	2325	2450
	Core Scan Results (cpm):				
3	8 - 12'	2100	2300	2250	2250
	Core Scan Results (cpm):				
4	12' - 16'		2400	2300	2225
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: (recordable drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc.) here

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DRY H.A
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/05/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N.A.	Date Finished: 06/05/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 15'	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 06/05/07, 1500		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 1090	BKG 8 UR/HR CON 7 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1215		SOIL					
	2		1171							
	3		2112							
	4		3501							
	5		3371							
	6		1961							
	7		1695							
	8		2058							
	9		1770							
	10		1581							
	11		1232							
	12		1306							
	13		1290							
	14		1304							
	15		1237		SOIL					

N A

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 1535, 06/05/07
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: DR-U
Cal Due: 04-30-08
Total Depth: 16'
Ambient Bkg: 1738 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1625	1600	1750
	Core Scan Results (cpm):	1' VOID			
2	4' - 8'	1650	1650	1650	1675
	Core Scan Results (cpm):				
3	8 - 12'		1800	1700	1550
	Core Scan Results (cpm):	1' VOID			
4	12' - 16'			1550	1625
	Core Scan Results (cpm):	2' VOID			
5	16' - 20'		N	A	
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

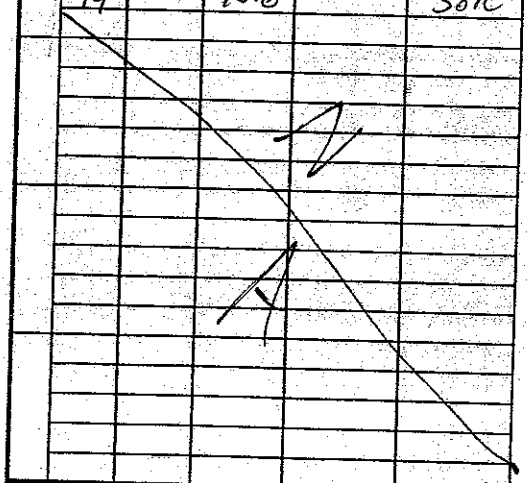
CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DR-U
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/05/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation:	Date Finished: 06/05/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 14'	Casing Size:
		MODEL INSTO	Core Size:
Logged By: KMA, AJC	Checked By: GW	2221 W/GI 216482	MODEL PA 221521
Date/Time: 06/05/07 1615		CAL DUE 05-01-08	CAL DUE 10/15/07
		BKG CPM 1171	BKG 5 UR/HR CON 6 UR/HR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2267		SOIL					
	2		2677							
	3		3315							
	4		1938							
	5		2096							
	6		1496							
	7		1877							
	8		2802							
	9		1540							
	10		1908							
	11		1361							
	12		1222							
	13		1202							
	14		1316		SOIL					



Notes

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DR A2
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/05/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N.A	Date Finished: 06/05/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND SILT	Total Depth: 10'	Casing Size:
Logged By: KMA, AJC	Checked By: [illegible]	METER INFO	Core Size:
Date/Time: 06/05/07		2221 w/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 709	BKG 5 UR/HR CON 6 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1529		SOIL					
	2	57	5757							
	3		5431			2.5', 6,237 cpm				
	4		4035							
	5		2570							
	6		2088							
	7		1783							
	8		1935							
	9		2413							
	10		2085		SOIL					
						REFUSAL				

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/05/07, 1635
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: DR A-2
Cal Due: 04-30-08
Total Depth: 16'
Ambient Bkg: 1717 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	1650 / 1850
	Core Scan Results (cpm):	2' 6" VOID
2	4' - 8'	1700 / 1950
	Core Scan Results (cpm):	2' 9" VOID
3 *	8 - 12'	1650 / 1500 / 1700
	Core Scan Results (cpm):	15" void
4	12' - 16'	1925 / 1550
	Core Scan Results (cpm):	2' VOID
5	16' - 20'	N
	Core Scan Results (cpm):	A

Comments: (recommend drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/6/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: DR-F
Cal Due: 10/27/07
Total Depth: 20'
Ambient Bkg: 1370 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top)				Bottom
1	~~0'-4'~~ (0-5)'		1400	1400	1350	1450
	Core Scan Results (cpm):					
2	~~4'-8'~~ (5-10)'		1375	1350	1400	1350
	Core Scan Results (cpm):					
3	~~8-12'~~ (10-15)'		1400	1400	1200	1350
	Core Scan Results (cpm):					
4	~~12'-16'~~ (15-20)'			1400	1350	1250
	Core Scan Results (cpm):					
5	~~16'-20'~~ (20-25)'	N	A			
	Core Scan Results (cpm):					

Comments: [illegible]

4 μR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~SB21-SB1~~ DR-F
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/6/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/6/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 20'	Casing Size:
			Core Size: 2" x 5'
Logged By: DA	Checked By: gmk		
Date/Time: 6/6/07		S/N NaI- 190205	BKG NaI (cpm) 826
		S/N Mod19- 101862	BKG Mod19 (uR/hr) 4

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1047		Soil	4 mR/hr				
	2		2130							
	3		2906							
	4		1780	N						
	5	N	1531							
N/A	6		1649							
	7		1524							
	8		2264							
N/A	9		1913							
	10		1371							
	11		1553				N	A	N	A
	12		1823							
N/A	13		1167							
	14		1080							
	15		983							
N/A	16		1080	A						
	17		1253							
	18	A	987							
	19		782							
	20		751							
N/A			N							
				A						
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/6/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN # 163685
Location ID: SBRI - HSU11-11
Cal Due: 10/27/07
Total Depth: 20
Ambient Bkg: 1479 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top)					Bottom
1	0-5 ~~0' - 4'~~		1600	1325	1600		1600
Core Scan Results (cpm):							
2	5-10 ~~4' - 8'~~	1600	1350	1200	1550		1400
Core Scan Results (cpm):							
3	10-15 ~~8 - 12'~~		1275	1300	1250		1450
Core Scan Results (cpm):							
4	15-20 ~~12' - 16'~~			1350	1425		1350
Core Scan Results (cpm):							
5	~~16' - 20'~~		A				
Core Scan Results (cpm):		N					

Comments: (record any timing of sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

4 μR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SB11-11
Page No.: 1 of 1

Contractor: E-E	Driller: ZEBRA	Date Started: 6/6/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/6/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 20'	Casing Size:
			Core Size: 2" X 5'
Logged By: DA/GMT	Checked By: [illegible]		
Date/Time: 6/6/07		S/N NaI- 190205	BKG NaI (cpm) 761
		S/N Mod19- 101662	BKG Mod19 (uR/hr) 4

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1460		Soil	4 μR/hr @ Borehole				
	2		2482							
	3		3338							
	4		1831							
	5		1349							
N/A	6	N	1747							
	7		1786							
	8		2002							
	9	A	1748	N						
	10		1376							
N/A	11		2257				N	A	N	A
	12		1579							
	13		1470	A						
	14		1170							
	15		1012							
N/A	16		1087							
	17		923							
	18		958							
	19		835							
	20		954		∅					
N/A										
			N							
N/A				A						

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/6/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: DRYH-F
Cal Due: 10/27/07
Total Depth: 20'
Ambient Bkg: 1462 cpm
Page: 1 of 1
Technician Init: JA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)				
1	0-5 ~~0'-4'~~			1500	1500	1450
Core Scan Results (cpm):						
2	5-10 ~~4'-8'~~	1400	1400	1300	1600	1400
Core Scan Results (cpm):						
3	10-15 ~~8-12'~~		1400	1250	1225	1300
Core Scan Results (cpm):						
4	15-20 ~~12'-16'~~			1300	1250	1300
Core Scan Results (cpm):						
5	16'-20'	N/A				
Core Scan Results (cpm):						

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

4 μR/hr @ BKGD

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DRYHSG-DRYH-F
Page No.: 1 of 1

Contractor: F&E	Driller: ZEBRA	Date Started: 6/6/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/6/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 26'	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: [illegible]		
Date/Time: 6/6/07		S/N NaI - 190205	BKG NaI (cpm) 733
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 4 uR/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1425		Soil	4 µR/hr @ borehole				
	2		2670							
	3		2088							
	4		2403							
	5		3207							
	6		1932							
	7		1758							
	8		2013							
	9		1713	N						
	10		1312	A						
	11		1211							
	12		1106							
	13		1194				N	A	N	A
	14		1162							
	15		1192							
	16		1141							
	17		1083							
	18		879							
	19		989							
	20		937							
			N	A						

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/6/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10; SN# 163685
Location ID: DR-P
Cal Due: 10/27/07
Total Depth: 20'
Ambient Bkg: 1554 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0-5 ~~0-4'~~	Top 1400 1300 Bottom 1500
	Core Scan Results (cpm):	
2	5-10 ~~4'-8'~~	1450 1500 1550
	Core Scan Results (cpm):	
3	10-15 ~~8-12'~~	1600 1425 1250 1250
	Core Scan Results (cpm):	
4	15-20 ~~12'-16'~~	1300 1350 1400
	Core Scan Results (cpm):	
5	16'-20'	
	Core Scan Results (cpm):	

Comments:

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~DB-50~~ (DBGP)
Page No.: 1 of 1

Contractor: E&E
Driller: ZEBRA
Method: 4" MACRO CORE GEOPROBE
Water Elevation: N/A
Elevation: N/A
Soil Drilled:
Logged By: DA/MT
Checked By: gwt
Date/Time: 6/6/07
Date Started: 6/6/07
Date Finished: 6/6/07
Total Depth: 18'
S/N NaI- 190205
S/N Mod19- 101662
Rock Refusal Depth:
Rock Cored (FT):
Casing Size:
Core Size: 2" x 5'
BKG NaI (cpm) 796
BKG Mod19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
M	1		2276		Soil	4 mR/hr @ Borehole				
	2		2438							
	3		2562							
	4		2623							
	5		2525							
A	6	N	2456	N						
	7		1904							
	8		1913							
	9		1863							
	10	A	1453							
N	11		1526							
	12		1200							
	13		1125							
	14		1143							
	15		942	A			N	A	N	A
	16		961							
	17		1060							
[A	18		872							
	N/A	N/A	N/A	N/A	N/A					
N										
		N		A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/6/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SBR1-5411-05
Cal Due: 10/27/07
Total Depth: 12
Ambient Bkg: 1431 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)				
1	0' - 4'		1450	1550		1550
Core Scan Results (cpm):						
2	4' - 8'	1350	1400	1500	1475	1450
Core Scan Results (cpm):						
3	8 - 12'					1400
Core Scan Results (cpm):						
4	12' - 16'					
Core Scan Results (cpm):						
5	16' - 20'					
Core Scan Results (cpm):						

NA

Comments: (Record any trailing or sampling issues, e.g. Vensar, groundwater, poor recovery, etc. here)

Refusal 12'

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SU11-05
Page No.: 1 of 1

Contractor: E-E	Driller: ZEBRA	Date Started: 6/6/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/6/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By:	S/N NaI- 190205	BKG NaI (cpm) 785
Date/Time: 6/6/07		S/N Mod19- 1016602	BKG Mod19 (uR/hr) 4

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		3308		SU11	4 mR/hr @ Borehole				
	2		3003							
	3		1964							
N	4		1466							
	5		1584							
	6		2217	N						
	7		1978							
A	8		2029	A						
	9		1492							
	10		1739							
	11		1151							
N	12		1118				N	A	N	A
			N							
A										
				A						
N										
A										

Notes

Refusal @ 12" bgs.

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/6/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221m / 44-10 ; SN # 163685
Location ID: SBR1-SU11-09
Cal Due: 10/27/07
Total Depth: 20
Ambient Bkg: 1503 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Top & Scan Info				Bottom
1	~~0' - 4'~~ (0-5)'		1275	1350	1350	1400
	Core Scan Results (cpm):					
2	~~4' - 8'~~ (5-10)'		1550	1500	1400	1450	1350
	Core Scan Results (cpm):					
3	~~8 - 12'~~ (10-15)'	VOID	1350	1300	1400	1450
	Core Scan Results (cpm):					
4	~~12' - 16'~~ (15-20)'			1450	1300	1250
	Core Scan Results (cpm):					
5	16' - 20'					
	Core Scan Results (cpm):					

Comments:

5 µR/hr @ Bkg

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB01-SB11-09
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/6/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/6/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 20'	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: GMT	S/N NaI - 190205	BKG NaI (cpm) 728
Date/Time: 6/6/07		S/N Mod 19 - 1018602	BKG Mod 19 (μR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1378		SOIL	5μR/hr @ BKGD				
	2		3063							
	3	N	3142	N						
	4		1989							
	5		1619							
	6		1912	N						
	7		1787							
	8		1956							
	9		1613							
	10	1	1384							
	16		1469							
	18		1180	A						
	13		1370							
	14		1088							
	15	A	1078				N	A	N	A
	16		938							
	17		941							
	18		942							
	19		862							
NA	20		948							
N										
			N	A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SW11-04
Total Depth: 20'
Page: 1 of 1

Date/Time: 6/6/07
Instr. Model / SN: 2221w/44-10; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1547 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	~~0' - 4'~~ 0-5	Top VOID	1550	1450	1300	Bottom 1450
	Core Scan Results (cpm):					
2	~~4' - 8'~~ 5-10	1350	1400	1450	1450	1350
	Core Scan Results (cpm):					
3	~~8' - 12'~~ 10-15		1350	1375	1575	1300
	Core Scan Results (cpm):					
4	~~12' - 16'~~ 15-20			1350	1300	1450
	Core Scan Results (cpm):					
5	16' - 20'	N	A			
	Core Scan Results (cpm):					

Comments:

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB1-SB11-04
Page No.: 1 of 1

Contractor: E&E
Driller: ZEBRA
Date Started: 6/06/07
Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE
Water Elevation: N/A
Date Finished: 6/06/07
Rock Cored (FT):
Elevation: N/A
Soil Drilled:
Total Depth: 20
Casing Size:
Core Size: 2" x 5'
Logged By: DA/GMT
Checked By: GMT
S/N NaI - 190205
BKG NaI (cpm) 734
Date/Time: 6/6/07
S/N Mod19 - 1018602
BKG Mod19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1221		Soil	5μR/hr @ Bore hole.				
	2		2734	•						
	3		2215							
	4		1855							
	5		1588							
N/A	6		1584	•						
	7		1627							
	8		2149	N/A						
	9	N/A	1584							
	10		1464							
N/A	11		1281							
	12		1215							
	13		1252							
	14		1001							
	15		1265		●					
N/A	16		1509							
	17		1150							
	18		942							
	19		1061							
	20		872	•	▼					
N/A			N/A	N/A						

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/6/07 1630
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: SU8-10
Cal Due: 04-30-08
Total Depth: 20'
Ambient Bkg: 2427 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	2350 / 2275 / 2275
	Core Scan Results (cpm):	1'6" VOID
2	4' - 8'	2200 / 2300 / 2150
	Core Scan Results (cpm):	1'9" VOID
3	8 - 12'	2250 / 2425 / 2350
	Core Scan Results (cpm):	1' VOID
4	12' - 16'	2100 / 2150 / 2250
	Core Scan Results (cpm):	
5	16' - 20'	2050 / 2100 / 2200
	Core Scan Results (cpm):	

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU8-10
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 6/6/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 6/6/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 19'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, AJC	Checked By: [signature]	2221 w/GI 216482	MODEL 19 221521
Date/Time: 06/06/07, 1650		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM	BKG 5 ur/hr CAN 5 ur/hr

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2338		SOIL					
	2		2491							
	3		1745							
	4		1756							
	5		1924							
	6		2223							
	7		1663							
	8		2795							
	9		2756							
	10		1550							
	11		1130							
	12		1256							
	13		1133							
	14		1119							
	15		1180							
	16		986							
	17		785							
	18		981							
	19		918		SOIL					

N/A

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DR-14A1
Total Depth: 15'
Page: 1 of 1

Date/Time: 06/06/07, 0830
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1570 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1600	2000	1750
	Core Scan Results (cpm):	1' VOID			
2	4' - 8'	1500	1475	1450	1600
	Core Scan Results (cpm):				
3	8 - 12'	1550	1575	1500	1475
	Core Scan Results (cpm):	8'-8'4" VOID 9'-9'6" VOID			
4	12' - 16'				
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: (recordable drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: DRHA 1
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/06/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/06/07	Rock Cored (FT):
Elevation: D.G.	Soil Drilled: SAND, SILT	Total Depth: 12'	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 06/06/07, 0920		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 891	BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1492		SOIL					
	2		3790							
	3		5236							
	4		2952							
	5		1612							
	6		1612							
	7		1724							
	8		1641							
	9		1552							
	10		1421							
	11		1273							
	12		1124		SOIL					

N/A

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: DR H-B
Total Depth: 20
Page: 1 of 1

Date/Time: 06/06/07, 1030
Instr. Model / SN: 2221 N/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1786 cpm
Technician Init: KMA, AJC

Sleeve #:	Depth Range	Core & Scan Info	Top			Bottom
1	0-5 ~~0'-4'~~		1800	1750	1900	1850
	Core Scan Results (cpm):	6" VOID				
2	5-10 ~~4'-8'~~		1900	1850	1800	1650
	Core Scan Results (cpm):					
3	10-15 ~~8'-12'~~			2000	1975	1850
	Core Scan Results (cpm):	1" VOID				
4	15-20 ~~12'-16'~~		1725	1775	1650	1800
	Core Scan Results (cpm):	2" VOID				
5	16' - 20'					
	Core Scan Results (cpm):					

Comments: *Record any drilling or sampling issues e.g. refusal, groundwater, poor recovery, etc. here.*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: DR-H-B
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/06/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N.A.	Date Finished: 06/06/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 15'	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time:		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 889	BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1939		SOIL					
	2		2139							
	3		2424							
	4		2229							
	5		1916							
	6		1996							
	7		2425							
	8		2046							
	9		2877							
	10		1924							
	11		1345							
	12		1180							
	13		1097							
	14		1121							
	15		1348		SOIL					

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/06/07, 1330
Project #: 07-1005.00
Instr. Model / SN: 2221 W/44-10 108862
Location ID: SU8-089
Cal Due: 04-30-08
Total Depth: 20'
Ambient Bkg: 2427 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top → Bottom)			
1	0' - 4'	2400	2325	2500	2300
	Core Scan Results (cpm):				
2	4' - 8'	2350	////, 2575	2400	2250
	Core Scan Results (cpm):	9" VOID			
3	8 - 12'	2175	2250	//////	2350
	Core Scan Results (cpm):	1' VOID			
4	12' - 16'	2300	2250	2050	//////
	Core Scan Results (cpm):	1' VOID			
5	16' - 20'	//////	//////	//, 2250	2100
	Core Scan Results (cpm):	2' 6" VOID			

Comments: (recorded, drilling or sampling sites, e.g. refusal, groundwater, poor recovery, etc. here)

POOR RECOVERY FROM 15' TO 18' 6"

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU 8-09
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/06/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/06/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 20'	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 06/06/07, 1450		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 1294	BKG 6 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1821		SOIL					
	2		2153							
	3		2559							
	4		2264							
	5		1586							
	6		1655							
	7		2188							
	8		1653							
	9		1751							
	10		1467							
	11		1259							
	12		1062							
	13		1192							
	14		1167							
	15		1053							
	16		1041							
	17		944							
	18		904							
	19		936							
	20		758		SOIL					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/6/07, 1530
Project #: 07-1005.00
Instr. Model / SN: 2221 N/44-10 108862
Location ID: SU 8-13
Cal Due: 04-30-08
Total Depth: 20
Ambient Bkg: 2427 cpm
Page: 1 of 1
Technician Init: KML, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	2450 / 2200
	Core Scan Results (cpm):	2' VOID
2	4' - 8'	2100 / 2350 / 2300
	Core Scan Results (cpm):	1'6" VOID
3	8 - 12'	2350 / 2150 / 2150 / 2250
	Core Scan Results (cpm):	
4	12' - 16'	2225 / 2075 / 2100
	Core Scan Results (cpm):	1' VOID
5	16' - 20'	2175 / 2050 / 2025
	Core Scan Results (cpm):	1' VOID

Comments: (recordable drilling or sampling issues, e.g. refusal, groundwater, no recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 5U8-13
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/06/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/06/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 20'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, AJC	Checked By: [illegible]	2221 W/GI 216482	MODEL 19 221521
Date/Time: 06/06/07		CAL DUE 05-04-08	CAL DUE 10-15-07
		BKG CPM 1178	BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2151		SOIL					
	2		1985							
	3		1748							
	4		1888							
	5		2291							
	6		2180							
	7		2779							
	8		2970							
	9		3102							
	10		2228							
	11		1259							
	12		1189							
	13		1265							
	14		1297							
	15		1001							
	16		1043							
	17		990							
	18		946							
	19		892							
	20		970		SOIL					

N

A

Notes

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: 100-07
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/07/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/07/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 17'	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 06/07/07		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 1120	BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1973		SOIL					
	2		2462							
	3		2162							
	4		2915							
	5		3395							
	6		1764							
	7		1585							
	8		1857							
	9		1992							
	10		1303							
	11		1469							
	12		1268							
	13		1313							
	14		1323							
	15		1257							
	16		968							
	17		788		SOIL					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/07/07
Project #: 07-1005.00
Instr. Model / SN: 2221 W/44-10 108862
Location ID: 100-07
Cal Due: 04-30-08
Total Depth: 17
Ambient Bkg: 1916 cpm
Page: 1 of 1
Technician Init: KMA

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'			2000	1975
	Core Scan Results (cpm):	2' VOID			
2	4' - 8'	1875		2000	2000
	Core Scan Results (cpm):	1' 6" VOID			
3 *	8 - 12'	1975	1875		1950
	Core Scan Results (cpm):	1' VOID			
4	12' - 16'	1900	1875	1900	1850
	Core Scan Results (cpm):				
5	16' - 20'		N		
	Core Scan Results (cpm):	A			

Comments: * (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 100-08
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/07/07, 1340
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1916 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)				
1	0' - 4'			1900	1900	2050
	Core Scan Results (cpm):	1' 6" VOID				
2	4' - 8'	2050			2050	1950
	Core Scan Results (cpm):	1' VOID				
3	8 - 12'	1850	1875			
	Core Scan Results (cpm):	2' VOID				
4	12' - 16'	1900	1900	1850	1775	
	Core Scan Results (cpm):					
5	16' - 20'		N	A		
	Core Scan Results (cpm):					

Comments: (recording drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 100-08
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/07/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/07/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 17'	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO 2221 w/GI 216482	Core Size:
Date/Time: 06/07/07		CAL DUE 05-04-08	MODEL 19 221521
		BKG CPM	CAL DUE 10/15/07
			BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1160		SOIL					
	2		1673							
	3		3014							
	4		3542							
	5		1789							
	6		2010							
	7		2285							
	8		2390							
	9		1688							
	10		1220							
	11		1054							
	12		1077							
	13		1243							
	14		1417							
	15		1042							
	16		985							
	17		1062		SOIL					

N/A

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 100 - 09
Total Depth: 17
Page: 1 of 1

Date/Time: 06/07/07 1130
Instr. Model / SN: 2221 W/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1916 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	1900 / 1900 / 1725
	Core Scan Results (cpm):	1' 9" VOID
2	4' - 8'	19500 / 1750 / 1775
	Core Scan Results (cpm):	1' 6" VOID
3 *	8 - 12'	1800 / 2025 / 1850
	Core Scan Results (cpm):	1' VOID
4	12' - 16'	1825 / 2100 / 1885 / 2000
	Core Scan Results (cpm):	
5	16' - 20'	N / A
	Core Scan Results (cpm):	

Comments: (recordable drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: 100-09
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/07/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/07/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth:	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 06/07/07		2221 w/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 1178	BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1465		SOIL					
	2		1361							
	3		1630							
	4		1679							
	5		1444							
	6		1368							
	7		1419							
	8		1793							
	9		1517							
	10		1355							
	11		2492							
	12		1512							
	13		1164							
	14		1360							
	15		978							
	16		982							
	17		816		SOIL					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 140-10
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/07/07, 1010
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1916 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	1815 / 1925 / 1925
	Core Scan Results (cpm):	1'6" UOID
2	4' - 8'	1900 / 1850 / 1825
	Core Scan Results (cpm):	1'6" UOID
3 *	8 - 12'	1850 / 1725
	Core Scan Results (cpm):	
4	12' - 16'	1850 / 1775 / 1800 / 2000
	Core Scan Results (cpm):	
5	16' - 20'	N / A
	Core Scan Results (cpm):	

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: 140-10
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/07/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/07/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth:	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 06/07/07 1035		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM	BKG 5 UR/HR CON 4 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2708		SOIL					
	2		3604							
	3		2347							
	4		1767							
	5		1563							
	6		1791							
	7		2569							
	8		2095							
	9		1705							
	10		1226							
	11		1167							
	12		1135							
	13		1170							
	14		1135							
	15		1073							
	16		1160							
	17		966		SOIL					
			N/A							

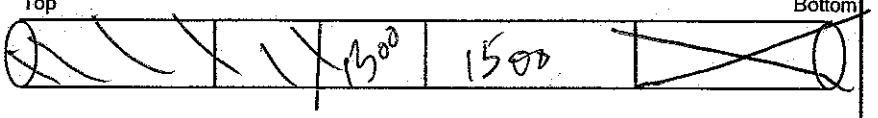
Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

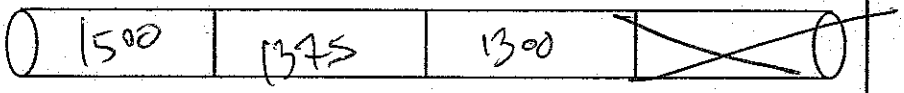
SOIL CORE SCAN LOG

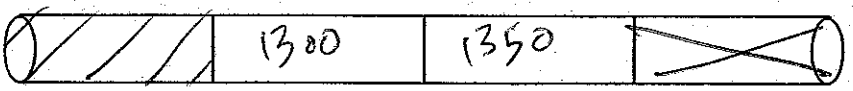
Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/7/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10, SN #163685
Location ID: SBRI-SU10-02
Cal Due: 10/27/07
Total Depth: 11'
Ambient Bkg: 1562 cpm
Page: 1 of 1
Technician Init: DA/GMT

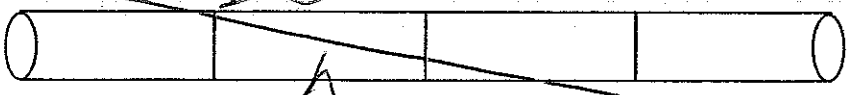




Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0-3 ~~0'-4'~~		1300	1500	
Core Scan Results (cpm):					
2	3-6 4'-8'		1475	1300	
Core Scan Results (cpm):					
3	6-9 8-12'	1500	1375	1300	
Core Scan Results (cpm):					
4	9-12 ~~12'-16'~~		1300	1350	
Core Scan Results (cpm):					
5	16'-20'				
Core Scan Results (cpm):					







Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SD1-SB18-02
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/7/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/7/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 9	Casing Size:
			Core Size: 1.5" x 3
Logged By: PA/GMT	Checked By:	S/N NaI - 190205	BKG NaI (cpm) 958
Date/Time: 6/7/07		S/N Mod 19 - 101602	BKG Mod 19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N/A	1950	N/A	Soil		N	A	N	A
	2		2204							
	3		2104							
	4		1774							
	5		1705							
	6		1946							
	7		2121							
	8		1780							
	9		2513							
N/A			N/A	N/A						
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 140 - 11
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/07/07 0930
Instr. Model / SN: 2221 W/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1916 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'			2300	2100
	Core Scan Results (cpm):	2' VOID			
2	4' - 8'	2150			1750
	Core Scan Results (cpm):	2' VOID			
3 *	8 - 12'	1925	1800		1850
	Core Scan Results (cpm):	1' 9" VOID			
4	12' - 16'	2000	1975	2050	1925
	Core Scan Results (cpm):				
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: (recommend drilling/sampling types, e.g. refusal, groundwater, soil recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: 140-11
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/07/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N.A	Date Finished:	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth:	Casing Size:
Logged By: KMA, AJC	Checked By: [illegible]	METER INFO	Core Size:
Date/Time: 06/07/07 0955		2221 w/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM	BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2106		SOIL					
	2		2986							
	3		3357							
	4		1922							
	5		1395							
	6		1515							
	7		2018							
	8		2505							
	9		2024							
	10		1909							
	11		1156							
	12		1101							
	13		1104							
	14		1216							
	15		960							
	16		995							
	17		996		SOIL					

N
A

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/7/07 0830
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: SUB-15
Cal Due: 04-30-08
Total Depth: 16'
Ambient Bkg: 1916 cpm
Page: 1 of 1
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1900	1950	1850
	Core Scan Results (cpm):	1' VOID			
2	4' - 8'	1950		1950	1850
	Core Scan Results (cpm):	1'.6" void			
3 *	8 - 12'	1750	1850		1950
	Core Scan Results (cpm):	1' VOID			
4	12' - 16'	1950	1750	1700	2000
	Core Scan Results (cpm):				
5	16' - 20'		N		
	Core Scan Results (cpm):	A			

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB-15
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREGG	Date Started: 6/7/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 6/7/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 17'	Casing Size:
		MODEL NO 2221 W/GI 216482	Core Size:
Logged By: KMA, AYC	Checked By: GNN	CAL DUE 05-01-08	MODEL # 221521
Date/Time: 06/07/07, 0905		1095 BKG CPM	CAL DUE 10/15/07
			BKG 5 UR/HR CO2 6 UR/HR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2540		SOIL					
	2		3468							
	3		3358							
	4		1899							
	5		2098							
	6		1749							
	7		1757							
	8		2110							
	9		1654							
	10		1578							
	11		1241							
	12		1409							
	13		1120							
	14		967							
	15		1038							
	16		1075							
	17		990		SOIL					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 100 - 11
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/07/07, 1520
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1916 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'			2000	3700
	Core Scan Results (cpm):	2' VOID			
2	4' - 8'	2300		2200	2200
	Core Scan Results (cpm):	2' VOID			
3 *	8 - 12'	3000	2300		
	Core Scan Results (cpm):	2' VOID			
4	12' - 16'				2150
	Core Scan Results (cpm):	3' VOID			
5	16' - 20'				
	Core Scan Results (cpm):				

Comments: (recovery, drilling, sampling, sides, e.g. wet/sat, groundwater, no recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 100-11
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 6/7/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation:	Date Finished: 06/07/07	Rock Cored (FT):
Elevation: 0.G.	Soil Drilled:	Total Depth: 13'	Casing Size:
Logged By: RMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time:		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 0.20	BKG 5 UR/HR CON 7 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1965							
	2		4655							
	3		7833							
	4		4135							
	5		4081							
	6		6019							
	7		6485							
	8		4370							
	9		2207							
	10		1257							
	11		1332							
	12		1299							
	13		1482							

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/7/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN # 163685
Location ID: SMP 1
Cal Due: 10/27/07
Total Depth: 20
Ambient Bkg: 1535 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
		Top				Bottom
1	~~0' - 4'~~ (0-5)'		1475	1350	1300	1300
	Core Scan Results (cpm):					
2	~~4' - 8'~~ (5-10)'		1400	1400	1450	1300
	Core Scan Results (cpm):					
3	~~8 - 12'~~ 10-15	1350	1400	1300	1300	1400
	Core Scan Results (cpm):					
4	~~12' - 16'~~ 15-20			1400	1300	1450
	Core Scan Results (cpm):					
5	~~16' - 20'~~ 20-25					
	Core Scan Results (cpm):					

Comments: (record any unusual or sampling issues, e.g., refusal, groundwater, poor recovery, or other)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~SB2~~ SUP-1
Page No.: 1 of 1

Contractor: F&E	Driller: ZEBRA	Date Started: 6/8/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/9/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 20	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 6/9/07		S/N NaI- 190205	BKG NaI (cpm) 831
		S/N Mod 19- 1018602	BKG Mod 19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		1153		Soil	5 μR/hr @ Borehole				
	2		1984							
	3		3058							
	4		1629							
	5		1650							
A	6		1917							
	7		1735							
	8		1722							
	9	N	2005	N						
	10		1782							
	11	A	1497	A						
	12		1134							
N	13		1231							
	14		1232							
	15		1253				N	A	N	A
	16		1149							
	17		1091							
	18		956							
	19		879							
	20		873							
			N							
				A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SW11-03
Total Depth: 8'
Page: 1 of 1
Date/Time: 6/7/07
Instr. Model / SN: 2221 w/ 44-10, SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1464 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info
1	0' - 4'	Top 1300 1450 1425 Bottom
	0-3	
	Core Scan Results (cpm):	
2	4' - 8'	1550 1600 1625
	3-6	
	Core Scan Results (cpm):	
3	8 - 12'	
	6-9	
	Core Scan Results (cpm):	* See COMMENTS
4	12' - 16'	
	9-12	
	Core Scan Results (cpm):	
5	16' - 20'	
	Core Scan Results (cpm):	

Comments: (record any drilling or sampling issues such as refusal, groundwater, poor recovery, etc. here)

*Refusal @ 8' bgs. Acetate sleeve ~~st~~ stuck in core barrel. soil "tapped" out on plastic and scanned w/ 44-9 probe. Scan results ranged from 40-60 cpm.
44-9 #229377; Bkg 40cpm.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: S221-SU11-03
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/7/07	Rock Refusal Depth:
Method: 4' MICRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/7/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth:	Casing Size:
			Core Size: 1.5 x 3'
Logged By: DN/GMT	Checked By: SMT		
Date/Time: 6/7/07		S/N NaI-190205	BKG NaI (cpm) 1139
		S/N Mod19-101662	BKG Mod19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		2934		Soil	5 mR/hr @ Bore hole				
	2		3804							
	3	N	2925							
	4		1692							
	5	A	1424	N						
	6		1694							
	7		1623							
	8		1748	A						
	N/A		N/A		N/A					
			N							
				A						
N/A										
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/7/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10, SN#163685
Location ID: SBRI-SU11-22
Cal Due: 10/27/07
Total Depth: 8'
Ambient Bkg: 1413 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0-3 ~~0'-4'~~		1325	1350	
Core Scan Results (cpm):					
2	3-6 ~~4'-8'~~	1260	1400	1350	
Core Scan Results (cpm):					
3	6-9 ~~8-12'~~	1400	1450	1500	
Core Scan Results (cpm):					
4	12' - 16'				
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

N/A

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Bkgd @ 4mR/hr Refusal @ 8' bgs per driller.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SOIL-22
Page No.: 1 of 1

Contractor: C-E	Driller: CABRERA	Date Started: 6/7/07	Rock Refusal Depth:
Method: 4" MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/7/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 7	Casing Size:
			Core Size: 1.5" x 3'
Logged By: DA/GNT	Checked By:		
Date/Time: 6/7/07		S/N No.1 - 190205	BKG No.1 (cps) 1016
		S/N No.2 - 101862	BKG No.2 (cps) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1005	N/A	Soil	4μR/hr @ bore hole	N/A	N/A	N/A	N/A
	2		2210							
	3		3419							
	4		1858							
	5		1424							
	6		1675							
	7		2503							
	8									

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/ 7 /07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10, SN #163685
Location ID: DR-R1/R2
Cal Due: 10/27/07
Total Depth: 8'
Ambient Bkg: 1492 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0-3 ~~0'-4'~~			1500	
Core Scan Results (cpm):					
2	3-6 ~~4'-8'~~	1550	1525	1500	
Core Scan Results (cpm):					
3	6-9 ~~8-12~~	1450	1550	1450	
Core Scan Results (cpm):					
4	12' - 16'				
Core Scan Results (cpm):		N			
5	16' - 20'		A		
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

Refusal at 8' bgs per drillers.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SB DR-R1/R2
Page No.: 1 of 1

Contractor: E&E
Method: 4" Macro Core Geoprobe
Elevation: N/A

Driller: Zebra
Water Elevation: N/A
Soil Drilled:

Logged By: DA/GMT
Date/Time: 6/6/07

Checked By: SMW

Date Started: 6/6/07
Date Finished: 6/6/07
Total Depth:

S/N NaI - 190205
S/N Mod 19 - 101662

Rock Refusal Depth:
Rock Cored (FT):
Casing Size:
Core Size: 1.5" X 3'

BKG NaI (cpm) 1128
BKG Mod 19 (uR/hr) 4

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N/A	1386	N/A	Soil	µR/hr @ borehole	N	A	N	A
	2		1655							
	3		2503							
	4		2755							
	5		2331							
	6		1745							
	7		1850							
			N/A							
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-SW10-11
Total Depth: 11'
Page: 1 of 1

Date/Time: 6/8/07
Instr. Model / SN: 2221 w/ 44-10, SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1987 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info	Top			Bottom
1	~~0' - 4'~~ 0 - 3	Core Scan Results (cpm):	1875	1900	1900	
2	~~4' - 8'~~ 3 - 6	Core Scan Results (cpm):	2000	1950	1950	
3	8 - ~~12'~~ 6 - 9	Core Scan Results (cpm):	2150	2100	2125	
4	~~12' - 16'~~ 9 - 12	Core Scan Results (cpm):	1908	1875	1825	
5	16' - 20'	Core Scan Results (cpm):		N/A		

Comments: (Record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

6 µR/hr @ BKGD. Refusal @ 11' bgs

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SO19-11
Page No.: 1 of 1

Contractor: E-E
Method: 4" Macro Core Geoprobe
Elevation: N/A
Logged By: DA/PG/MT
Date/Time: 6/8/09

Driller: ZEBRA
Water Elevation: N/A
Soil Drilled:
Checked By: SMT

Date Started: 6/8/09
Date Finished: 6/9/09
Total Depth: 9'

S/N NaI - 190205
S/N Mo19 - 101862

Rock Refusal Depth:
Rock Cored (FT):
Casing Size:
Core Size: 1.5" x 3'

BKG NaI (cpm) - 1373
BKG Mo19 (uR/hr) 6

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2157		SOIL	6μR/hr @ Borehole				
	2		2158							
	3	N	1864							
	4		2387							
	5		2893	N						
	6	A	3809	A						
	7		2983							
	8		1883							
	9		2358							
	∞		N/A		N/A					
							N	A	N	A
			N	A						

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI - SU10-15
Total Depth: 1
Page: 1 of 1

Date/Time: 6/8/07
Instr. Model / SN: 2221 w/ 44-10, SN #163685
Cal Due: 10/27/07
Ambient Bkg: 2056 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0-3 ~~0'-4'~~		2000	~~195~~ 1925	
Core Scan Results (cpm):					
2	3-6 ~~4'-8'~~		2100	1900	
Core Scan Results (cpm):					
3	6-9 ~~8-12'~~	2025	1875	1850	
Core Scan Results (cpm):					
4	9-12 ~~12'-16'~~	2000	1875	2150	
Core Scan Results (cpm):					
5	16' - 20'		N/A		
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

6 μR/hr @ BKhD
3' sample liners
Refusal @ 11'

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: S321-SU10-15
Page No.: 1 of 1

Contractor: F&E	Driller: ZEBRA	Date Started: 6/8/07	Rock Refusal Depth:
Method: 4' Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/8/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 5'	Casing Size:
			Core Size: 1.5" x 3'
Logged By: ~~6/08/07~~ DA/GMT	Checked By: gmt		
Date/Time: 6/08/07		S/N NaI-190205	BKG NaI (cpm) 1490
		S/N Mod 19-101662	BKG Mod 19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N/A	2027	N/A	Soil	5μR/hr	N/A	N/A	N/A	N/A
	2		2489							
	3		2488							
	4		2471							
	5		2561							

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/ 8 /07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10; SN #163685
Location ID: SBRI-SV10-19
Cal Due: 10/27/07
Total Depth: 11
Ambient Bkg: 1129 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0-3' ~~0'-4'~~		2100	1925	
Core Scan Results (cpm):					
2	3'-6' ~~4'-8'~~		1975	2000	
Core Scan Results (cpm):					
3	6'-9' ~~8'-12'~~	2200	1800	1850	
Core Scan Results (cpm):					
4	9'-12' ~~12'-16'~~	1850	2100	1850	
Core Scan Results (cpm):					
~~5~~	~~16'-20'~~		NA		
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Bkgd @ 6 μR/hr
Refusal @ 11'
using 1.5" x 3' cores

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: S221-SU10-19
Page No.: 1 of 1

Contractor: F&E	Driller: ZEBRA	Date Started: 6/8/07	Rock Refusal Depth:
Method: 4' Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/8/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 9'	Casing Size:
			Core Size:
Logged By: DAVGIRT	Checked By: SMT		
Date/Time:		S/N NaI-190205	BKG NaI (cpm) 1129
		S/N Mod19-101862	BKG Mod19 (uR/hr) 6

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N/A	2159	N/A	Soil	6 µR/hr @ bore hole	N/A	N/A	N/A	
	2		2810							
	3		3392							
	4		2557							
	5		2364							
N/A	6		1585							
	7		1280							
	8		1525							
	9		1758							
N/A										
N/A										
N/A										

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SU10-03
Total Depth: 8'
Page: 1 of 1

Date/Time: 6/8/07
Instr. Model / SN: 2221 w/44-10; SN #163685
Cal Due: 10/27/07
Ambient Bkg: 2042 cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'		1900	1875	
	Core Scan Results (cpm):				
2	4' - 8'	1950	2000	1825	
	Core Scan Results (cpm):				
3	8 - 12'		1850	1825	
	Core Scan Results (cpm):				
4	12' - 16'		A		
	Core Scan Results (cpm):				
5	16' - 20'	N			
	Core Scan Results (cpm):				

Comments: (recommend any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

6 μR/hr @ BKGD
15" x 3' Cores
REFUSAL @ 8 ft

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-3010-03
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6-8-07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6-8-07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 6'	Casing Size:
			Core Size: 1.5" x 3'
Logged By: DA	Checked By: [illegible]		
Date/Time: 6/08/07		S/N NaI - 190205	BKG NaI (cpm) 1238
		S/N Mod19 - 101262	BKG Mod19 (mR/hr) 6

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2514		SB1					
	2	N	2403							
N	3		1717	N						
	4		1819							
	5	A	1596							
	6		1748	A			N	A	N	A
A										
N										
A										

Notes

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 508-07
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/08/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/08/07	Rock Cored (FT):
Elevation:	Soil Drilled: SAND & SILT	Total Depth:	Casing Size:
		MODEL 1000	Core Size:
Logged By: KMA, AJC	Checked By:	2221 W/GI 216482	MODEL 19 221521
Date/Time: 06/08/07, 1410		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 1108	BKG 5 uR/hr CON 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1728		SOIL					
	2		1908							
	3		2383							
	4		2206							
	5		1942							
	6		1893							
	7		1862							
	8		1703							
	9		1347							
	10		1194							
	11		1322							
	12		1102							
	13		987							
	14		954							
	15		1053							
	16		719		SOIL					

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 08-07
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/08/07
Instr. Model / SN: 2221 W/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2631 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'	2575	2750	2850	2725
Core Scan Results (cpm):					
2	4' - 8'	2700			
Core Scan Results (cpm):		3' VOID			
3	8 - 12'	2825	2700		2650
Core Scan Results (cpm):		1' VOID			
4	12' - 16'	2775	2650	2400	2350
Core Scan Results (cpm):					
5	16' - 20'		N	A	
Core Scan Results (cpm):					

Comments: (recommend drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

1ST 3' INTERVAL WAS HAND AUGERED IN 1' SECTIONS
3RD INTERVAL, 1' VOID @ 10' TO 11'.

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 100 · 10
Total Depth: 16'
Page: 1 of 1

Date/Time: 06/08/07, 0830
Instr. Model / SN: 2221 W/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1981 cpm
Technician Init: KMA, ATC

Sleeve #	Depth Range	Core & Scan Info			
		Top			[redacted]
1	0' - 4'	//////	2000	2100	2250
	Core Scan Results (cpm):	VOID			
2	4' - 8'	2100	~~XXXX~~	2100	2000
	Core Scan Results (cpm):	void			
3	8 - 12'	1950	2000	\\\\\	1925
	Core Scan Results (cpm):	void			
4	12' - 16'	1925	2100	2050	1850
	Core Scan Results (cpm):				
5	16' - 20'	—	— N	A —	—
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, cog recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 100-10
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 06/08/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A.	Date Finished: 06/08/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 15'	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 06/08/07		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG CPM 1155	BKG 5 UR/HR CON 5 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1554		SOIL					
	2		2764							
	3		2977							
	4		2787							
	5		1529							
	6		1582							
	7		1539							
	8		1497							
	9		1656							
	10		1177							
	11		1190							
	12		1181							
	13		1251							
	14		1099							
	15		1022		SOIL					

N/A

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 8-12
Total Depth: 16'
Page: 1 of 1

Date/Time: 6/8/07, 0945
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 2631 cpm
Technician Init: KMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'			2550	2750
	Core Scan Results (cpm):	2' VOID			
2	4' - 8'	2600	2600	2550	2550
	Core Scan Results (cpm):	4" VOID			
3 *	8 - 12'	2500	2450	2300	2450
	Core Scan Results (cpm):				
4	12' - 16'	2400	2325	2275	2250
	Core Scan Results (cpm):				
5	16' - 20'		N	A	
	Core Scan Results (cpm):				

Comments: (recordable drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. where)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: S08-12
Page No.: of

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 6/8/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 6/8/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 16'	Casing Size:
Logged By: KMA, AJC	Checked By: [signature]	METER INFO	Core Size:
Date/Time: 06/08/07, 1025		2221 W/GI 216482	MODEL 19 221521
		CAL DUE 05-04-08	CAL DUE 10/15/07
		BKG 1026	BKG 5 UR/HR CON 6 UR/HR

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		3193		SOIL					
	2		3679							
	3		2451							
	4		1568							
	5		1406							
	6		1772							
	7		1443							
	8		1592							
	9		1277							
	10		1204							
	11		1167							
	12		1277							
	13		1145							
	14		1007							
	15		1051							
	16		722		SOIL					

N

A

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/8/07, 1110
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: SU8-8
Cal Due: 04-30-08
Total Depth: 16'
Ambient Bkg: 2631 cpm
Page: 1 of 1
Technician Init: RMA, AJC

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	2450 / 2475
	Core Scan Results (cpm):	2' VOID
2	4' - 8'	2575 / 2500
	Core Scan Results (cpm):	2' 6" VOID
3	8 - 12'	2625 / 2325 / 2400 / 2375
	Core Scan Results (cpm):	6" VOID
4	12' - 16'	2325 / 2150 / 2450 / 2450
	Core Scan Results (cpm):	
5	16' - 20'	N / A
	Core Scan Results (cpm):	

Comments: (recordary drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU8-08
Page No.: 1 of 1

Contractor: ZEBRA	Driller: C. GREEN	Date Started: 6/8/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 6/8/07	Rock Cored (FT):
Elevation:	Soil Drilled: SAND, SILT	Total Depth: 16'	Casing Size:
Logged By: KMA, AJC	Checked By:	MODEL NO 2221 W/GL 216482	Core Size:
Date/Time: 6/8/07, 1130		CAL DUE 05-01-08	MODEL NO 221521
		BKG. CPM 996	CAL DUE 10/15/07
			BKG 5 UR/HR CPM 5 UR/HR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
		N	N							
	1		2382		Soil					
	2		1915							
	3		2110							
	4		2226							
	5		2479							
	6		1731							
	7		1387							
	8		1062							
	9		1144							
	10		1039							
	11		1112							
	12		1164							
	13		1062							
	14		992							
	15		967							
	16		869		Soil					
			N	1						

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/11/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/44-10, SN#163685
Location ID: SBR1 ~~[illegible]~~ (SU08-06)
Cal Due: 10/27/07
Total Depth: 16
Ambient Bkg: 2317 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)				
1	0' - 4' 0-5	* 2585				2150
Core Scan Results (cpm):		* Sample from (1-2)' Bag Sample				
2	~~4' - 8'~~ 5-10			2450	2250	2000
Core Scan Results (cpm):						
3	8 - 12' 10-15			2200	2250	2050 / 1450
Core Scan Results (cpm):						
4	~~12' - 16'~~ ~~16~~					
Core Scan Results (cpm):						
5	16' - 20'					
Core Scan Results (cpm):						

Comments: (recordably drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Hand auger used from (1-4)'

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
SBR1-SU08-06
Location ID: [redacted]
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/11/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/11/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 2.4 x 5'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 6/11/07		S/N NaI - 190205	BKG NaI (cpm) 1647
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 8

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1097		Soil	8 μR/hr @ Bore hole				
	2		1883							
	3		2027							
	4		2075							
	5		1732							
	6		1590							
	7		1978							
	8		1576							
	9		1419							
	10		1420							
	11		1320							
	12		1324							
	13		1257							
	14		1167							
	15		1036							
	16		846							

NA NA NA NA NA

Notes

CABRERA SERVICES

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SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/ \\ /07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10; SN #163685
Location ID: SBR1-SW08-B4
Cal Due: 10/27/07
Total Depth: 12'
Ambient Bkg: 1612 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	0-4; 4-5' ~~0-4~~	Top	HAND AUGER		1 ft sample core	Bottom
		1525	1525		1325	
	Core Scan Results (cpm):	(0-2)' Hand Auger 1 gal Zip lock Bag				
2	5-10' ~~4-8'~~		1450	1500	1400	1250
	Core Scan Results (cpm):					
3	10-15 ~~8-12'~~					1450
	Core Scan Results (cpm):					
4	12' - 16'					
	Core Scan Results (cpm):					
5	16' - 20'					
	Core Scan Results (cpm):					

A

N

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

Hand augered 0-4'. ~~FS~~ First core was 4-5' to complete interval.

Refusal @ 12'.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SW01-SB08-04
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/11/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/11/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth:	Casing Size:
			Core Size:
Logged By: DA/GMT	Checked By: GMT	S/N NaI - 190205	BKG NaI (cpm) 558
Date/Time: 6/11/07		S/N Mod19- 1018628	BKG Mod19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		1517		Soil	5 μR/hr @ Borehole				
	2		2198							
	3	N	1689							
	4		1545							
	5		1546	N						
	6		1908							
	7		1921							
	8		1705	A						
	9		1666							
	10	A	1525							
	11		1394							
A	12		1306							
							N	A	N	A
N		N		A						
A										

Notes

CABRERA SERVICES

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SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/11/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10, SN #163685
Location ID: SBR1-SU08-03
Cal Due: 10/27/07
Total Depth: 16
Ambient Bkg: 1531 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top)				(Bottom)
1	0-4.4-5 ~~0'-4'~~	1375	1375		1400	
	Core Scan Results (cpm):					
2	5-10 ~~4'-8'~~		1500	1450	1350	1350
	Core Scan Results (cpm):					
3	10-15 ~~8-12'~~	1400	1375	1350	1250	1300
	Core Scan Results (cpm):					
4	12' - 16'					
	Core Scan Results (cpm):					
5	16' - 20'					
	Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Hand auger first 4 ft bgs. First core tube collected 4-5 ft. bgs.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SW08-03
Page No.: 1 of 1

Contractor: F-S E	Driller: ZEBRA	Date Started: 6/11/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/11/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 6/11/07		S/N NaI - 190205	BKG NaI (cpm) ~~550~~ 1022
		S/N Mod 19 - 1018602	BKG Mod 19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1		1655		SOIL	5 μR/hr @ Bore hole				
	2		1773							
	3		1922							
	4		1883							
	5	N	2409							
	6		3683							
	7		1957							
	8		1297	N/A						
	9		1425							
	10	N	1335							
N/A	11		1021							
	12		1835				N			
	13		1294							
	14		1135							
	15		979							
	16		1078							
N/A			N	N/A				A	N	A

Notes

CABRERA SERVICES

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SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/11/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10; SN #163685
Location ID: SBR1-SU08-05
Cal Due: 10/27/07
Total Depth: 16'
Ambient Bkg: 2201 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)					
1	~~0' - 4'~~	* 1650	x				1600
Core Scan Results (cpm):		* Bag Sample					
2	~~4' - 8'~~ ~~10-15~~ 5-10			1650	1750		1900
Core Scan Results (cpm):							
3	~~8 - 12'~~ 10-16		1600	1350	1550	1500	1625
Core Scan Results (cpm):							
4	12' - 16'						
Core Scan Results (cpm):							
5	16' - 20'						
Core Scan Results (cpm):							

NA

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

BKGD @ mR/hr

*(0-2)' used Hand Auger, placed Sample in 1 GAL. BAG

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG SUOB-05
Location ID: [redacted] 100 #1
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/11/07	Rock Refusal Depth:
Method: 4" Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/11/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 2" x 5
Logged By: DA/GMT	Checked By: GMT		
Date/Time: 6/11/07		S/N NaI- 190205	BKG NaI (cps) 1018
		S/N Mod 19- 1018602	BKG Mod 19 (uR/hr) 5

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N/A	1748	N/A	SOIL	5 µR/hr @ bore hole				
	2		2050							
	3		2023							
	4		2145							
	5		2207							
	6		2503							
	7		2098							
	8		1928							
	9		1936							
	10		1615							
	11		1289							
	12		1112							
	13		1229							
	14		1082							
	15		1009							
	16		1076							
N/A										
N/A			N/A	N/A						

Notes

CABRERA SERVICES

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SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SU06-01
Total Depth: 16
Page: 1 of 1

Date/Time: 6/12/07
Instr. Model / SN: 2221 w/ 44-10, SN #163685
Cal Due: 10/27/07
Ambient Bkg: _____ cpm
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info					
		Top				Bottom	
1	0' - 4' ; 4-5						No Recovery
Core Scan Results (cpm):		HAND Augur — ~~1650~~ 1450					
2	~~4'-8'~~ 5-10	VOID		1700	1550		1400
Core Scan Results (cpm):							
3	~~8-12'~~ ~~10-15~~ 10-16	VOID	1400	1375	1500	1400	1350
Core Scan Results (cpm):							
4	12' - 16'						
Core Scan Results (cpm):		N					
5	16' - 20'		A				
Core Scan Results (cpm):							

Comments: (recordings, drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

HAND Augur 0-4'. First core 4'-5' No Recovery. Sleeve 10'-16' was overdriven to include extra foot.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SB21-SW19-02
Page No.: 1 of 1

Contractor: E-E
Method: 4" Macro Core Geoprobe
Elevation: N/A
Logged By: DA / GMT
Date/Time: 6-12-07

Driller: ZEBRA
Water Elevation: N/A
Soil Drilled:
Checked By: GMT

Date Started: 6-12-07
Date Finished: 6-12-07
Total Depth: 16'

S/N NaI - 190205
S/N MacIS - 1018602

Rock Refusal Depth:
Rock Cored (FT):
Casing Size:
Core Size: 2" x 5'

BKG NaI (cpm) 1039
BKG MacIS (uR/hr) 5

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1	N	1878	N	Soil	5 μR/hr @ Borehole	N	N	N	N
	2		1903							
	3		1910							
	4		1974							
	5		2148							
	6		2135							
	7		1825							
	8		1705							
	9		1612							
	10		1750							
	11	A	1621	A			A	A	A	A
	12		1265							
	13		1183							
	14		1226							
	15		1211							
N	16		1261							
A			N							
RJ				A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/12/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/44-10; SN#163685
Location ID: 140-06
Cal Due: 10/27/07
Total Depth: 16'
Ambient Bkg: 1585 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info				
1	~~0-4'~~ 0-5	Top void	1600	2550	1550	1550
Core Scan Results (cpm):						
2	~~4'-8'~~ 5-10	1500	1600	1500	1450	~~1700~~ 1700
Core Scan Results (cpm):						
3	8 - 12'	1500	1500	1600	1500	1500
Core Scan Results (cpm):						
4	12' - 16'					
Core Scan Results (cpm):						
5	16' - 20'					
Core Scan Results (cpm):						

N A

Comments: (recording drilling, sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

6 mR/hr @ BKGD
Elevated band of soil at the 3' depth. Scan of sample jar was 180 cpm w/ BKGD of 40 cpm.

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~SAT~~ ~~SCP~~ 140-010
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6-12-07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6-12-07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth:	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: SMT		
Date/Time: 6-12-07		S/N NaI - 190205	BKG NaI (cpm) 1149
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 6

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2059		Soil	6 uR/hr @ Bore hole				
	2		2321							
N	3		3564							
	4		3963							
	5	N	1792							
	6		1815							
	7		2004							
	8		1675	N						
	9		1657	A			N	A		
	10		1646							
	11		1243							
	12		1176							
A	13	A	1295						N	A
	14		1469							
	15		1278							
	16		1249							
N										
			N							
				A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/12/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/44-10, SN#163685
Location ID: 140-08
Cal Due: 10/27/07
Total Depth: 16'
Ambient Bkg: 1729 ~~1585~~ cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info					
		Top				Bottom	
1	0-5 ~~0'-4'~~			1750	1800		1750
Core Scan Results (cpm):							
2	5-10 ~~4'-8'~~			1500	1725		1650
Core Scan Results (cpm):							
3	10-16 ~~8-12'~~		1575	1525	1450		1500
Core Scan Results (cpm):							
4	12' - 16'		X				
Core Scan Results (cpm):							
5	16' - 20'						
Core Scan Results (cpm):							

Comments: (record by drilling, sampling issues, etc. refusal, groundwater, poor recovery, etc. here)

Bkgd @ 5 pm/hr

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SAI-SCA 140-18
Page No.: 1 of 1

tractor: E&E	Driller: ZEBRA	Date Started: 6-12-07	Rock Refusal Depth:
hod: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6-12-07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size: 2" x 5'
Logged By: DA/GMT	Checked By: gmt		
Date/Time: 6-12-07		S/N NaI - 190205	BKG NaI (cpm) 1281
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1681		Soil	5 uR/hr @ Bore hole				
	2		2810							
N	3		3468							
	4		3572							
	5		2286							
	6	N	1713							
	7		2329	N						
	8		2294							
	9		1636	A						
	10	A	1332							
	11		1208							
	12		1239							
A	13		1150							
	14		1170							
	15		1246							
N	16		1141							
			N							
				A						
A										

Notes

CABRERA SERVICES

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Rest early lift - [illegible]

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBRI-SW09-03
Total Depth: 13
Page: 1 of 1

Date/Time: 6/12/07
Instr. Model / SN: 2221 w/44-10, SN #163685
Cal Due: 10/27/07
Ambient Bkg: 1479 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top / Bottom)				
1	0' - 4' ~~0-5~~					
Core Scan Results (cpm):						
2	4' - 8' 5-10					
Core Scan Results (cpm):						
3	~~8 - 12'~~ 10 - 13			1450	1500	1400
Core Scan Results (cpm):						
4	12' - 16'					
Core Scan Results (cpm):						
5	16' - 20'					
Core Scan Results (cpm):						

A

N

A

N

Comments (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

* Resample

CABRERA SERVICES

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SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SBR1-5409 - 13
Total Depth: 15'
Page: 1 of 1

Date/Time: 6/12/07
Instr. Model / SN: 2221 w/ 44-10, SN#163685
Cal Due: 10/27/07
Ambient Bkg: 1938 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top / Bottom)				
1	0' - 4' 0-5					
Core Scan Results (cpm):		A				
2	4' - 8' 5-10	N				
Core Scan Results (cpm):						
3*	8 - 12' 10-15	VOID	1450	1400	1400	1500 / 1450
Core Scan Results (cpm):						
4	12' - 16'					
Core Scan Results (cpm):		A				
5	16' - 20'	N				
Core Scan Results (cpm):						

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

* Resample

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/12/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/44-10, SN#163685
Location ID: SBR1 SU09-02
Cal Due: 10/27/07
Total Depth: 0-5
Ambient Bkg: 1938 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info				
		Top void				Bottom
1 *	~~0'-4'~~ 0-5	1650	1700	1600	1500	1950
Core Scan Results (cpm):						
2	4' - 8'					
Core Scan Results (cpm):						
3	8 - 12'					
Core Scan Results (cpm):						
4	12' - 16'	N				
Core Scan Results (cpm):						
5	16' - 20'					
Core Scan Results (cpm):						

A

Comments: (record by drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

* Resample

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: 100-01
Total Depth: 11'
Page: 1 of 1

Date/Time: 6/13/07
Instr. Model / SN: 2221 w/44-10, SN #163655
Cal Due: 10/27/07
Ambient Bkg: 1360 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top / Bottom)			
1	~~0'-4'~~ 0-3		1450	1500	
Core Scan Results (cpm):					
2	~~4'-8'~~ 3-6	1200	1250	1200	
Core Scan Results (cpm):					
3	~~8-12'~~ 6-9	1350	1425	1375	
Core Scan Results (cpm):					
4	~~12'-16'~~ 9-12	1200	1250	1350	
Core Scan Results (cpm):					
5	16' - 20'		N/A		
Core Scan Results (cpm):					

Comments: (record by drilling, sampling issues, etc. refusal, groundwater, poor recovery, etc. here)

BKGD @ 5μR/hr
refusal @ 11ft

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: S221-S4 100-01
Page No.: 1 of 1

Contractor: F&E	Driller: ZEBRA	Date Started: 6-13-07	Rock Refusal Depth:
Method: 3' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6-13-07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 9'	Casing Size:
Logged By: DA / GMT	Checked By: [signature]		Core Size: 1.5" x 3'
Date/Time: 6-13-07		S/N NaI - 190205	BKG NaI (cpm) 790
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) ~~790~~ 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1	N/A	1994	N/A	Soil	5 μR/hr @ Bore hole	N	A	N	A
	2		2000							
	3		2009							
	4		1971							
	5		2010							
	6		2414							
	7		2765							
	8		1979							
	9		1442							
A										
N			N	A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: 100-04
Total Depth: 8'
Page: 1 of 1

Date/Time: 6/13/07
Instr. Model / SN: 2221 w/ 44-10, SN #163685
Cal Due: 10/27/07
Ambient Bkg: 1316 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top / Bottom)				
1	~~0'-4'~~ 0-3		1250	1350	1325	
Core Scan Results (cpm):						
2	~~4'-8'~~ 3-6		1225	1325	1275	
Core Scan Results (cpm):						
3	~~8-12'~~ 6-9		1400	1200	1250	
Core Scan Results (cpm):						
4	12'-16'					
Core Scan Results (cpm):						
5	16'-20'					
Core Scan Results (cpm):						

N

A

Comments (recovery, drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Refusal @ 8ft

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~SA21~~ SU 100-04
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6-13-07	Rock Refusal Depth:
Method: 4' MICRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6-13-07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 8'	Casing Size:
Logged By: DA/GMT	Checked By: [illegible]		Core Size: 1.5" x 3
Date/Time: 6-13-07		S/N NaI - 190205	BKG NaI (cpm) 1127
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 5

Sample Information

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		1604		Soil	5 μR/hr @ Bkgd				
	2		2599							
	3	N	2634							
	4		2828	N						
	5	A	2912	A						
	6		2330							
	7		1404							
	8		1758							
A							N	A	N	A
N										
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: 100-05
Total Depth: 12'
Page: 1 of 1

Date/Time: 6/13 /07
Instr. Model / SN: 2221 w/44-10, SN#163685
Cal Due: 10/27/07
Ambient Bkg: 1370 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top)			(Bottom)
1	~~0'-4'~~ 0-3	1350	1375	1400	
Core Scan Results (cpm):					
2	~~4'-8'~~ 3-6	1375	1500	1400	~~1375~~
Core Scan Results (cpm):					
3	~~8-12'~~ 6-9	1300	1425	1400	
Core Scan Results (cpm):					
4	~~12'-16'~~ 9-12	1450	1600	1450	
Core Scan Results (cpm):					
5	16'-20'				
Core Scan Results (cpm):					

Comments: (recorded, drilling or sampling series, e.g. refusal, groundwater, poor recovery, etc. here)

Refusal @ 12'
BKGD @ 5 μR/hr

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SU 100-05
Page No.: 1 of 1

tractor: E&E	Driller: ZEBRA	Date Started: 6/13/07	Rock Refusal Depth:
hod: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/13/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 12'	Casing Size:
Logged By: DA/GMT	Checked By: GMT		Core Size: 1.5" x 3'
Date/Time: 6/13/07		S/N NaI - 190205	BKG NaI (cpm) 1138
		S/N Mod 19 - 101862	BKG Mod 19 (uR/hr) 5

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		2238		Soil					
	2		3324			5μR/hr @ BLED				
	3		3400							
N	4		3084							
	5		2822							
	6	N	2335							
	7		2658							
	8		3844	N						
	9	A	4340	A						
	10		4377							
	11		2286							
A	12		1434				N	A	N	
N									A	
		N								
				A						
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: 140-03
Total Depth: 9'
Page: 1 of 1

Date/Time: 6/13/07
Instr. Model / SN: 2221 w/ 44-10, SN#163685
Cal Due: 10/27/07
Ambient Bkg: 1278 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top / Bottom)			
1	0-3 ~~0'-4'~~	1500	1550	1300	
Core Scan Results (cpm):					
2	4' - 8'	1400	1350	1200	
Core Scan Results (cpm):					
3	8 - 12'	1350	1200	1225	
Core Scan Results (cpm):					
4	12' - 16'				
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

A

N

Comments: (recycled, drilling or sampling series, e.g. refusal or undwater poor recovery etc. here)

BKWD @ 4 μR/hr
hole closed up @ 9ft

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 5221-SU 140-03
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/13/07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/13/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 5'	Casing Size:
Logged By: DA / GMT	Checked By: [signature]		Core Size: 1.5" x 3'
Date/Time: 6/13/07		S/N NaI - 190205	BKG NaI (cpm) 726
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N/A	1889	N/A	Soil	4 μR/hr @ bore hole	N/A	N/A	N/A	N/A
	2		2638							
	3		2394							
	4		1852							
	5		1499							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: 140-05
Total Depth: 11'
Page: 1 of 1

Date/Time: 6/13/07
Instr. Model / SN: 2221 w/ 44-10, SN#163685
Cal Due: 10/27/07
Ambient Bkg: 1342 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top)			(Bottom)
1	~~0'-4'~~ (0-3)'	1375	1450	1300	X
Core Scan Results (cpm):					
2	~~4'-8'~~ (3-6)'	1400	1400	1300	X
Core Scan Results (cpm):					
3	~~8-12'~~ (6-9)'	1325	1300	1375	X
Core Scan Results (cpm):					
4	~~12'-16'~~ (9-12)'	VOID 1300	1275	1225	X
Core Scan Results (cpm):					
5	16' - 20'	N	A		
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

BKGD @ 4mR/hr

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: SA-SA 100-05
Page No.: 1 of 1

tractor: E&E	Driller: ZEBRA	Date Started: 6/13/05	Rock Refusal Depth:
thod: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6/13/05	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 10	Casing Size:
Logged By: DA/GMT	Checked By: [illegible]		Core Size: 1.5" x 3'
Date/Time: 6/13/05		S/N NaI - 190205	BKG NaI (cpm) 911
		S/N Mod 19 - 101862	BKG Mod 19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N/A	1	N/A	2637	N/A	Soil	4μR/hr @ Borehole	N/A	N/A	N/A	N/A
	2		2582							
	3		2864							
	4		3297							
	5		3987							
	6		4557							
	7		4389							
	8		4374							
	9		4154							
	10		2285							
	11		2376							

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: ~~07-1005.00~~
Location ID: SBR1-SUP9 -09
Total Depth: 15'
Page: 1 of 1

Date/Time: 6/14/07
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1496 cpm
Technician Init: DA / GMT

Sleeve #	Depth Range	Core & Scan Info: Top			Bottom
1	~~0' - 4'~~ 0 - 5				
	Core Scan Results (cpm):	N/A			
2	~~4' - 8'~~ 5 - 10				
	Core Scan Results (cpm):	N/A			
3	~~8 - 12'~~ 10 - 14	1456	1400	1525	~~1350~~
	Core Scan Results (cpm):				
4	12' - 16'				
	Core Scan Results (cpm):				
5	16' - 20'	N			
	Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

5 µR/hr @ BKGD
RESAMPLE

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/14/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10 ; SN# 163685
Location ID: SU10-19
Cal Due: 10/27/07
Total Depth: 11'
Ambient Bkg: 1603 cpm
Page: 1 of 1
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	~~0' - 4'~~ (0 - 3)		1425	1475	
2	~~4' - 8'~~ (3-6)'		1450	1500	
3	~~8 - 12'~~ (6-9)'	1400	1475	1375	
4	~~12' - 16'~~ (9-12)'	1500	1425	1550	
5	16' - 20'	N		A	

Core Scan Results (cpm):

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

5 µR/hr @ BKGD

RESAMPLE

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/14/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221-w / 44-10 ; SN# 163685
Location ID: SBR1-SW10-15
Cal Due: 10/27/07
Total Depth: 10'
Ambient Bkg: 1648 cpm
Page: 1 of 1
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0-3 ~~0-4~~		1550	1500	
Core Scan Results (cpm):					
2	3-6 ~~4-8~~	1550	1450	1600	
Core Scan Results (cpm):					
3	6-9 ~~8-12~~	1475	1550	1500	
Core Scan Results (cpm):					
4	12' - 16'				
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

NA

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

* Resample
4 mR/hr @ Bkgd

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/14/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/44-10, SN#163655
Location ID: SBR1-~~SU10-11~~ SU10-11
Cal Due: 10/27/07
Total Depth: 11'
Ambient Bkg: 1499 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	~~0' - 4'~~ 0-3	1650	1675	1500	
Core Scan Results (cpm):					
2	~~4' - 8'~~ 3-6	1500	1450	1550	
Core Scan Results (cpm):					
3	~~8 - 12'~~ 6-9	1500	1575	1550	
Core Scan Results (cpm):					
4	~~12' - 16'~~	1500	1475	1500	
Core Scan Results (cpm):					
5	~~16' - 20'~~	N	A		
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

* Bkg @ 4 mR/hr
* Resample
* Stop @ 11'

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/14/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/44-10, SN#163685
Location ID: 140-04
Cal Due: 10/27/07
Total Depth: 11'
Ambient Bkg: 1249 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve	Depth Range	Core Scan Info (Top / Bottom)			
1	0' - ~~4'~~ 3'	1250	1200	1300	
Core Scan Results (cpm):					
2	~~4' - 8'~~ 3' - 6'	1100	1075	1275	
Core Scan Results (cpm):					
3	~~8 - 12'~~ 6' - 9'	1225	1175	1200	
Core Scan Results (cpm):					
4	~~12' - 16'~~ 9' - 12'	1125	1250	1200	
Core Scan Results (cpm):					
5	16' - 20'	N	A		
Core Scan Results (cpm):					

Comments: (recorded by drilling, sampling, sides, e.g. refusal, groundwater, poor recovery, etc. here)

BKGD @ 4 mR/hr
Refusal @ 11'

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~SB-SU~~ 140-04
Page No.: 1 of 1

Contractor: F&E	Driller: ZEBRA	Date Started: 6-14-07	Rock Refusal Depth:
Method: 4' MACRO CORE GEOPROBE	Water Elevation: N/A	Date Finished: 6-14-07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 10'	Casing Size:
			Core Size: 1.5" x 30
Logged By: DA	Checked By: [illegible]		
Date/Time: 6-14-07		S/N NaI - 190205	BKG NaI (cpm) 876
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 4

Sample Information

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		2887		Soil	4 mR/hr @ Borehole				
	2		2305							
	3		1992							
	4	N	1946							
	5		1709							
	6		1876							
	7	A	2679							
	8		2496	N A						
	9		1809							
	10		1659							
A									N A	
N										
A										

Notes

CABRERA SERVICES

RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/14/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/44-10, SN#163685
Location ID: 140-02
Cal Due: 10/27/07
Total Depth: 1
Ambient Bkg: 1260 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'	1200	1450	1300	
Core Scan Results (cpm):					
2	4' - 8'		1225	1275	
Core Scan Results (cpm):					
3	8 - 12'	1225	1275	1300	
Core Scan Results (cpm):					
4	12' - 16'	1125	1150	1150	
Core Scan Results (cpm):					
5	16' - 20'	A			
Core Scan Results (cpm):		N			

Comments: (recordable drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

BKgD @ 9 [illegible] hr
REFWN @ 11'

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: ~~SRI-SH~~ 140-02
Page No.: 1 of 1

Contractor: E&E	Driller: ZEBRA	Date Started: 6/14/07	Rock Refusal Depth:
Method: Macro Core Geoprobe	Water Elevation: N/A	Date Finished: 6/14/07	Rock Cored (FT):
Elevation: N/A	Soil Drilled:	Total Depth: 6'	Casing Size:
Logged By: DA	Checked By: [illegible]		Core Size: 1.5" x 3'
Date/Time: 6/14/07		S/N NaI - 190205	BKG NaI (cpm) 769
		S/N Mod 19 - 101662	BKG Mod 19 (uR/hr) 4

Elevation	Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
N	1		1657			4 μR/hr @ Bore hole				
	2		2842							
	3	N	2796	N						
	4	A	2852							
	5		1524	A						
	6		1485							
A			N					N	A	
				A						
N										
A										

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SB21-SW08-07
Total Depth: 16'
Page: 1 of 1

Date/Time: 6/14/07
Instr. Model / SN: 2221/44-10, SN 163685
Cal Due: 6/27/07
Ambient Bkg: 1367 cpm
Technician Init: DA

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom	
1	~~0'-4'~~ (0-5)'	Core Scan Results (cpm):	1250	1175	1200	1325	1325
2	~~4'-8'~~ (5-10)'	Core Scan Results (cpm):	VOID		1200	1150	1175
3	8-12' (10-16)'	Core Scan Results (cpm):		1200	1200	1250	1125
4	12'-16'	Core Scan Results (cpm):					
5	16'-20'	Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)

7pm/hr @ BKGD
RESAMPLE

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning-FUSRAP Site
Project #: ~~07-1005.00~~ 07-1022.00 II
Location ID: SU08-08
Total Depth: 15'
Page: 1 of 1

Date/Time: 6/15/07
Instr. Model / SN: 2221 w/44-10, SN# 163685
Cal Due: 10/27/07
Ambient Bkg: 1328 cpm
Technician Init: DA/GMT

Sleeve	Depth Range	Core Scan Info	Top				Bottom
1	~~0' - 4'~~ 0-5	Core Scan Results (cpm):	~~1250~~ VOID	1250	1300	1350	1200	1250
2	~~4' - 8'~~ 5-10	Core Scan Results (cpm):					NA
3	~~8 - 12'~~ 10-15	Core Scan Results (cpm):		1350	1400	1300	1275	1300
4	12' - 16'	Core Scan Results (cpm):					A
5	16' - 20'	Core Scan Results (cpm):			N		

Comments: Recollect sample. No sample collected from 5-10'.

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/15/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10, SN#163685
Location ID: SBR1-SU08-12
Cal Due: 10/27/07
Total Depth: 15'
Ambient Bkg: 1328 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info					
		Top				Bottom	
1	0-5 ~~0'-4'~~	1350	1300	1600 ~~1250~~	1250 ~~1600~~		1200
Core Scan Results (cpm):							
2	5-10 ~~4'-8'~~						
Core Scan Results (cpm):							
3	10-15 ~~8-12'~~		1250	1200	1125		1175
Core Scan Results (cpm):		VOID					
4	12' - 16'						
Core Scan Results (cpm):							
5	16' - 20'						
Core Scan Results (cpm):							

Comments: [illegible]

No sample collected 5-10 ft.
Re-collect previous sample

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/15/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10; SN #163685
Location ID: SU 08-10
Cal Due: 10/27/07
Total Depth: 4'
Ambient Bkg: 1328 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top / Bottom)				
1	0' - 4'			1300	1275	1400
Core Scan Results (cpm):						
2	4' - 8'					
Core Scan Results (cpm):						
3	8 - 12'					
Core Scan Results (cpm):		2				
4	12' - 16'		A			
Core Scan Results (cpm):						
5	16' - 20'					
Core Scan Results (cpm):						

Comments: (record any unique sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

Re Collect samples

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RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 6/15/07
Project #: ~~07-1005.00~~ 07-1022.00 II
Instr. Model / SN: 2221 w/ 44-10, SN #163655
Location ID: 100-10
Cal Due: 10/27/07
Total Depth: 15'
Ambient Bkg: 1199 cpm
Page: 1 of 1
Technician Init: DA/GMT

Sleeve	Depth Range	Core & Scan Info (Top / Bottom)					
1	~~0'-4'~~ 0-5				1200		1275
Core Scan Results (cpm):							
2	~~4'-8'~~ 5-10						
Core Scan Results (cpm):		N/A					
3	8-12' 10-15		1200	1275	1150		1175
Core Scan Results (cpm):							
4	12' - 16'						
Core Scan Results (cpm):							
5	16' - 20'	N					
Core Scan Results (cpm):							

Comments: (recordably [illegible] sampling issues, [illegible] refusal, groundwater, poor recovery, etc. here)

5 μR/hr @ BKGD
No sample collected from 5-10 ft.

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: SU 10-03
Total Depth: 8'
Page: 1 of 1

Date/Time: 06/18/07, 1720
Instr. Model / SN: 222, 44-10,
Cal Due: 10/ /07
Ambient Bkg: 1458 cpm
Technician Init: KMA

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)
1	0' - 4'	X / / / / / / / / / / / / / / / X
	Core Scan Results (cpm):	
2	4' - 8'	X / / / / / / / 1550 1425
	Core Scan Results (cpm):	
3	8 - 12'	N A
	Core Scan Results (cpm):	
4	12' - 16'	N A
	Core Scan Results (cpm):	
5	16' - 20'	N A
	Core Scan Results (cpm):	

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

ONLY COLLECTED 6' TO 8' SECTION FOR VOC'S

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG

Location ID: SU-10-03
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 06/18/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/18/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth: 7'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA	Checked By: [signature]	2221 w/GI 216482	MODEL 19 101662
Date/Time: 06/18/07 1800		CAL DUE 05-04-08	CAL. DUE. 10/07/07
		BKG CPM 1051	BKG 5 ur/hr, CON 5 ur/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1981							
	2		2484							
	3		1750							
	4		1780							
	5		1561							
	6		1519							
	7		1990							
	~~8~~	N/A								

N/A

Notes

KY

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/18/07 0845
Project #: 07-1005.00
Instr. Model / SN: 2221 W/44-10 ~~108862~~
Location ID: 140-01
Cal Due: 04-30-08
Total Depth: 9'
Ambient Bkg: 1832 cpm
Page: 1 of 1
Technician Init: KMA, GT

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0' - 4'	1750	2025	1875	
Core Scan Results (cpm):		VOID			
2	4' - 8'	2000	1900	1875	
Core Scan Results (cpm):		VOID			
3	8 - 12'	2100	1925	1950	
Core Scan Results (cpm):					
4	12' - 16'				
Core Scan Results (cpm):					
5	16' - 20'				
Core Scan Results (cpm):					

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 140-01
Page No.: 1 of 1

Contractor: ZEBRA	Driller: NA	Date Started: 06/18/07	Rock Refusal Depth: NA
Method: DIRECT PUSH	Water Elevation: NA	Date Finished: 06/18/07	Rock Cored (FT): NA
Elevation: NA	Soil Drilled: ~~4'~~ 5'	Total Depth: ~~4'~~ 5'	Casing Size: NA
		METER INFO	Core Size: 1.5" x 3'
Logged By: SMT	Checked By: SMT	2221 w/GI 216482	
Date/Time: 6/18/07		CAL DUE 05-04-08	
		1025 cpm	

Elevation	Depth (feet)	Casing Blows/Foot	~~DHG cpm~~ SMT	Sample No. & Penetration/ Recovery (feet)	DHG ~~Sample Type~~ CPM	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		~~2050~~		2357	5 μR/hr @ 1 meter above hole				
	2		~~1601~~	SMT	2759					
	3		~~1821~~		1601					
	4		~~2050~~		1821					
	5			~~2005~~	2050					

Notes

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RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 140-09
Total Depth: 11'6"
Page: 1 of 1

Date/Time: 06/18/07
Instr. Model / SN: 2221 w/44-10 108862
Cal Due: 04-30-08
Ambient Bkg: 1548 cpm
Technician Init: KMA, GT

Sleeve #	Depth Range	Core & Scan Info
1	~~0-3~~ 0'-4'	Top: 1600 | 1650 | 1550 :Bottom Core Scan Results (cpm): 6" VOID
2	~~3-6~~ 4'-8'	1600 | 2000 | 1750 Core Scan Results (cpm): 6" VOID
3	~~6-9~~ ~~8-12'~~	1650 | 1750 | 1900 Core Scan Results (cpm):
4	~~9'-12'~~ ~~12'-16'~~	1800 | 1700 | 1550 | /// Core Scan Results (cpm):
5	16' - 20'	 Core Scan Results (cpm):

Comments: (record any drilling or sampling issues e.g. wet soil, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 140-09
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABELLARO	Date Started: 06/18/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/18/07	Rock Cored (FT):
Elevation:	Soil Drilled: SAND, SILT	Total Depth: 11'	Casing Size:
		METER INFO	Core Size:
Logged By: KMA, GT	Checked By: [signature]	2221 W/GI 216482	MODEL 19 101662
Date/Time: 06/18/07		CAL DUE 05-04-08	CAL DUE 10-07-07
		BKG CPM 942	BKG 6 MICRO R/HR CON 6 MICRO R/HR

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1895							
	2		2476							
	3		2273							
	4		2878							
	5		2109							
	6		2661							
	7		2871							
	8		3110							
	9		1764							
	10		1371							
	11		1262							

N

A

Notes

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Date/Time: 06/18/07
Project #: 07-1005.00
Instr. Model / SN: 2221 w/44-10 108862
Location ID: 100-02
Cal Due: 04-30-08
Total Depth: 12'
Ambient Bkg: 1325 cpm
Page: 1 of 1
Technician Init: KMA

Sleeve #	Depth Range	Core & Scan Info (Top / Bottom)			
1	0'-3'		1575	1400	
	Core Scan Results (cpm):	1' 6" VOID			
2	3'-6'		1700	1600	
	Core Scan Results (cpm):	1' VOID			
3	6-9'		1450	1400	
	Core Scan Results (cpm):	1' VOID			
4	9'-12' ~~12'-16'~~	1475	1550	1500	
	Core Scan Results (cpm):				
5	16'-20'		N	A	
	Core Scan Results (cpm):				

Comments: (record any drilling or sampling issues, e.g. refusal, groundwater, poor recovery, etc. here)

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 100-02
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABRERA	Date Started: 06/18/07	Rock Refusal Depth:	
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/18/07	Rock Cored (FT):	
Elevation: 0.0	Soil Drilled: SAND, SILT	Total Depth: 11'	Casing Size:	
		MODEL INFO	Core Size:	
Logged By: KMA	Checked By: SMT	2221 W/GI 216482	MODEL 19# 101662	
Date/Time: 06/18/07 1600		CAL DUE 05-04-08	CAL DUE 10/07/07	
		BKG CPM 923	BKG 5 uR/hr, CON: 6 uR/hr	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1228							
	2		2110							
	3		2241							
	4		2096							
	5		2023							
	6		2165							
	7		2067							
	8		1819							
	9		3151							
	10		1999							
	11		1587							

CABRERA SERVICES

RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

SOIL CORE SCAN LOG

Project: Sylvania-Corning FUSRAP Site
Project #: 07-1005.00
Location ID: 100 - 03
Total Depth: 10'
Page: 1 of 1

Date/Time: 06/18/07
Instr. Model / SN: 2221, w/ 44-10, 163685,
Cal Due: 10-27-07
Ambient Bkg: 1325 cpm
Technician Init: KMA, GT

Sleeve #	Depth Range	Core & Scan Info	Top			Bottom
1	0'-3' ~~0-3~~		////	1350	1400	N/A
		Core Scan Results (cpm):	1' Void			
2	3'-6' ~~4-8~~		///	1350	1400	1350 N/A
		Core Scan Results (cpm):				
3	6'-9' ~~8-12~~		1550	1425	1375	N/A
		Core Scan Results (cpm):				
4	12' - 16'		1450	////	N/A	////
		Core Scan Results (cpm):	REFUSAL @ 10'			
5	16' - 20'			N	A	
		Core Scan Results (cpm):				

Comments: *(record any drilling or sampling issues, e.g., refusal, groundwater, poor recovery, etc. here)*

CABRERA SERVICES, INC.

PROJECT NAME: Sylvania-Corning FUSRAP
LOCATION: Hicksville, NY
CLIENT: E & E

BORING LOG
Location ID: 100-03
Page No.: 1 of 1

Contractor: ZEBRA	Driller: L. CABRERA	Date Started: 06/18/07	Rock Refusal Depth:
Method: DIRECT PUSH	Water Elevation: N/A	Date Finished: 06/18/07	Rock Cored (FT):
Elevation: O.G.	Soil Drilled: SAND, SILT	Total Depth:	Casing Size:
		MODEL NO	Core Size:
Logged By: KMA	Checked By: [illegible]	2221 W/GL 216482	MODEL 19 10/662
Date/Time: 06/18/07		CAL DUE 05-04-08	CAL DUE 10/07/07
		BKG CPM	BKG 5 uR/hr, Con 5 uR/hr

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	DHG cpm	Sample No. & Penetration/ Recovery (feet)	Sample Type	Sample Description and Classification	Group Designation	Remarks	Equipment Installed	Lab Tests Performed
	1		1556		SOIL					
	2		2609							
	3		2883							
	4		2707							
	5		2390							
	6		1823							
	7		1475							
	8		2139							
	9		3237							
	10		2120		SOIL					
			N/A							

Notes

CABRERA SMEAR COUNTING WORKSHEET (Rev 6)

α eff	β eff
0.3450	0.1590

Sample Count Time (min)	Daily Background Count Time (min)
2.0	20.0

dpm/100 cm^2	
α Flag	β Flag
100	1000

* Morning Daily Count

seq. #	Sample ID# and Description	Date	Background Total Counts*		Sample Total Counts		Background (cpm)		Sample Counts (cpm)		Sample (dpm/100 cm^2)		> α flag	> β flag	Tech. Initial
			α	β	α	β	α	β	α	β	α	β			
1	Survey001-01	5/15/2007	3	859	0	94	0.2	43.0	0.00	47	-0.4	25			AC
2	Survey001-02	5/15/2007	3	859	0	90	0.2	43.0	0.00	45	-0.4	13			AC
3	Survey002-01	5/16/2007	4	781	0	98	0.2	39.1	0.00	49	-0.6	63			AC
4	Survey002-02	5/16/2007	4	781	0	79	0.2	39.1	0.00	40	-0.6	3			AC
5	Survey002-03	5/16/2007	4	781	0	60	0.2	39.1	0.00	30	-0.6	-57			AC
6	Survey003-01	5/16/2007	4	781	0	83	0.2	39.1	0.00	42	-0.6	15			AC
7	Survey003-02	5/16/2007	4	781	1	70	0.2	39.1	0.50	35	0.9	-25			AC
8	Survey003-03	5/16/2007	4	781	0	81	0.2	39.1	0.00	41	-0.6	9			AC
9	Survey003-04	5/16/2007	4	781	0	68	0.2	39.1	0.00	34	-0.6	-32			AC
10	Survey003-05	5/16/2007	4	781	0	76	0.2	39.1	0.00	38	-0.6	-7			KMA
11	Survey003-06	5/16/2007	4	781	1	72	0.2	39.1	0.50	36	0.9	-19			KMA
12	Survey004-01	5/16/2007	4	781	0	69	0.2	39.1	0.00	35	-0.6	-29			DA
13	Survey004-02	5/16/2007	4	781	1	83	0.2	39.1	0.50	42	0.9	15			DA
14	Survey004-03	5/16/2007	4	781	1	71	0.2	39.1	0.50	36	0.9	-22			DA
15	Survey004-04	5/16/2007	4	781	0	72	0.2	39.1	0.00	36	-0.6	-19			DA
16	Survey004-05	5/16/2007	4	781	2	62	0.2	39.1	1.00	31	2.3	-51			DA
17	Survey004-06	5/16/2007	4	781	0	69	0.2	39.1	0.00	35	-0.6	-29			DA
18	Survey018-01	5/16/2007	4	781	10	80	0.2	39.1	5.00	40	13.9	6			DA
19	Survey018-02	5/16/2007	4	781	0	55	0.2	39.1	0.00	28	-0.6	-73			DA
20	Survey019-01	5/16/2007	4	781	1	75	0.2	39.1	0.50	38	0.9	-10			DA
21	Survey019-02	5/16/2007	4	781	0	74	0.2	39.1	0.00	37	-0.6	-13			DA
22	Survey020-01	5/16/2007	4	781	1	73	0.2	39.1	0.50	37	0.9	-16			DA
23	Survey020-02	5/16/2007	4	781	0	69	0.2	39.1	0.00	35	-0.6	-29			DA
24	Survey021-01	5/17/2007	1	826	0	72	0.1	41.3	0.00	36	-0.1	-33			DA
25	Survey021-02	5/17/2007	1	826	3	94	0.1	41.3	1.50	47	4.2	36			DA
26	Survey022-01	5/17/2007	1	826	2	76	0.1	41.3	1.00	38	2.8	-21			DA
27	Survey022-02	5/17/2007	1	826	0	66	0.1	41.3	0.00	33	-0.1	-52			DA
28	Survey023-01	5/17/2007	1	826	2	89	0.1	41.3	1.00	45	2.8	20			DA
29	Survey023-02	5/17/2007	1	826	1	77	0.1	41.3	0.50	39	1.3	-18			DA
30	Survey024-01	5/17/2007	1	826	0	81	0.1	41.3	0.00	41	-0.1	-5			DA
31	Survey024-02	5/17/2007	1	826	3	95	0.1	41.3	1.50	48	4.2	39			DA
32	Survey007-01	5/18/2007	3	669	0	70	0.2	33.5	0.00	35	-0.4	10			DA
33	Survey007-02	5/18/2007	3	669	0	62	0.2	33.5	0.00	31	-0.4	-15			DA
34	Survey007-03	5/18/2007	3	669	0	76	0.2	33.5	0.00	38	-0.4	29			DA
35	Survey007-04	5/18/2007	3	669	5	86	0.2	33.5	2.50	43	6.8	60			DA
36	Survey007-05	5/18/2007	3	669	1	90	0.2	33.5	0.50	45	1.0	73			DA
37	Survey007-06	5/18/2007	3	669	0	80	0.2	33.5	0.00	40	-0.4	41			DA
38	Survey007-07	5/18/2007	3	669	5	85	0.2	33.5	2.50	43	6.8	57			DA
39	Survey007-08	5/18/2007	3	669	0	69	0.2	33.5	0.00	35	-0.4	7			DA
40	Survey008-01	5/21/2007	4	722	0	81	0.2	36.1	0.00	41	-0.6	28			DA
41	Survey008-02	5/21/2007	4	722	0	0	0.2	36.1	0.00	0	-0.6	-227			DA
42	Survey008-03	5/21/2007	4	722	1	78	0.2	36.1	0.50	39	0.9	18			DA
43	Survey008-04	5/21/2007	4	722	1	76	0.2	36.1	0.50	38	0.9	12			DA
44	Survey008-05	5/21/2007	4	722	0	65	0.2	36.1	0.00	33	-0.6	-23			DA
45	SU14-18	5/21/2007	4	722	0	57	0.2	36.1	0.00	29	-0.6	-48			DA

CABRERA SMEAR COUNTING WORKSHEET (Rev 6)

46	SU14-17	5/21/2007	4	722	0	50	0.2	36.1	0.00	25	-0.6	-70			DA
47	Survey009-01	5/22/2007	3	721	0	58	0.2	36.1	0.00	29	-0.4	-44			DA
48	Survey009-02	5/22/2007	3	721	0	50	0.2	36.1	0.00	25	-0.4	-69			DA
49	Survey009-03	5/22/2007	3	721	0	65	0.2	36.1	0.00	33	-0.4	-22			DA
50	Survey009-04	5/22/2007	3	721	1	66	0.2	36.1	0.50	33	1.0	-19			DA
51	Survey009-05	5/22/2007	3	721	1	47	0.2	36.1	0.50	24	1.0	-79			DA
52	Survey009-06	5/22/2007	3	721	0	68	0.2	36.1	0.00	34	-0.4	-13			DA
53	SU09-01	5/23/2007	0	646	1	77	0.0	32.3	0.50	39	1.4	39			DA
54	SU14-01	5/23/2007	0	646	0	84	0.0	32.3	0.00	42	0.0	61			DA
55	SU14-02	5/23/2007	0	646	0	74	0.0	32.3	0.00	37	0.0	30			DA
56	DRYH-C-Z1	5/23/2007	0	646	0	68	0.0	32.3	0.00	34	0.0	11			DA
57	Survey011-01	6/7/2007	1	942	1	80	0.1	47.1	0.50	40	1.3	-45			DA
58	Survey011-02	6/7/2007	1	942	0	71	0.1	47.1	0.00	36	-0.1	-73			DA
59	Survey011-03	6/7/2007	1	942	0	79	0.1	47.1	0.00	40	-0.1	-48			DA
60	Survey011-04	6/7/2007	1	942	0	76	0.1	47.1	0.00	38	-0.1	-57			DA
61	Survey011-05	6/7/2007	1	942	1	83	0.1	47.1	0.50	42	1.3	-35			DA
62	Survey012-01	6/11/2007	3	817	4	87	0.2	40.9	2.00	44	5.4	17			DA
63	Survey012-02	39244	3	817	6	84	0.2	40.9	3.00	42	8.3	7			KA
64	Survey012-03	39244	3	817	1	70	0.2	40.9	0.50	35	1.0	-37			KA
65	Survey012-04	39244	3	817	2	67	0.2	40.9	1.00	34	2.5	-46			KA
66	Survey012-05	39244	3	817	3	73	0.2	40.9	1.50	37	3.9	-27			KA
67	Survey012-06	39244	3	817	3	90	0.2	40.9	1.50	45	3.9	26			KA
68	Survey012-07	39244	3	817	1	82	0.2	40.9	0.50	41	1.0	1			KA
69	Survey012-08	39244	3	817	0	78	0.2	40.9	0.00	39	-0.4	-12			KA
70	Survey012-09	39244	3	817	0	66	0.2	40.9	0.00	33	-0.4	-49			KA
71	dr-u	39244	3	817	0	87	0.2	40.9	0.00	44	-0.4	17			KA
72	su 12-21	39244	3	817	0	56	0.2	40.9	0.00	28	-0.4	-81			KA
73	su 11-01	39244	3	817	0	86	0.2	40.9	0.00	43	-0.4	14			KA
74	su 11-06	39244	3	817	1	72	0.2	40.9	0.50	36	1.0	-31			KA
75	dr -h	39244	3	817	0	65	0.2	40.9	0.00	33	-0.4	-53			KA
76	dr-m	39244	3	817	0	93	0.2	40.9	0.00	47	-0.4	36			KA
77	su 10-17	39244	3	817	0	89	0.2	40.9	0.00	45	-0.4	23			KA
78	su 10-16	39244	3	817	4	81	0.2	40.9	2.00	41	5.4	-2			KA
79	dr-i	39244	3	817	0	83	0.2	40.9	0.00	42	-0.4	4			KA
80	su12-12	39244	3	817	1	84	0.2	40.9	0.50	42	1.0	7			KA
81	su12-20	39244	3	817	0	72	0.2	40.9	0.00	36	-0.4	-31			KA
82	su12-05	39244	3	817	1	84	0.2	40.9	0.50	42	1.0	7			KA
83	su12-06	39244	3	817	1	72	0.2	40.9	0.50	36	1.0	-31			KA
84	su12-10	39244	3	817	1	70	0.2	40.9	0.50	35	1.0	-37			KA
85	su12-15	39244	3	817	1	78	0.2	40.9	0.50	39	1.0	-12			KA
86	su12-16	39244	3	817	0	77	0.2	40.9	0.00	39	-0.4	-15			KA
87	su12-18	39244	3	817	1	62	0.2	40.9	0.50	31	1.0	-62			KA
88	Truck Release Probe	39244	3	817	0	59	0.2	40.9	0.00	30	-0.4	-71			KA
89	Truck Release	39244	3	817	0	75	0.2	40.9	0.00	38	-0.4	-21			KA
90	Truck Release	39244	3	817	2	63	0.2	40.9	1.00	32	2.5	-59			KA
91	Truck Release	39244	3	817	0	101	0.2	40.9	0.00	51	-0.4	61			KA
92	Truck Release	39244	3	817	0	84	0.2	40.9	0.00	42	-0.4	7			KA
93	Truck Release	39244	3	817	1	79	0.2	40.9	0.50	40	1.0	-8			KA
94	Truck Release	39244	3	817	1	65	0.2	40.9	0.50	33	1.0	-53			KA
95	GPR-F Nugget	39245	1	787	29	193	0.1	39.4	14.50	97	41.9	359			KA
96	su10-11	39245	1	787	6	60	0.1	39.4	3.00	30	8.6	-59			KA
97	su10-15	39245	1	787	0	61	0.1	39.4	0.00	31	-0.1	-56			KA
98	su10-19	39245	1	787	4	64	0.1	39.4	2.00	32	5.7	-46			KA
99	su10-03	39245	1	787	1	78	0.1	39.4	0.50	39	1.3	-2			KA

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100	su08-06	39245	1	787	0	70	0.1	39.4	0.00	35	-0.1	-27			KA
101	su08-05	39245	1	787	0	67	0.1	39.4	0.00	34	-0.1	-37			KA
102	su08-04	39245	1	787	0	92	0.1	39.4	0.00	46	-0.1	42			KA
103	su08-03	39245	1	787	0	63	0.1	39.4	0.00	32	-0.1	-49			KA
104	su08-01	39245	1	787	1	73	0.1	39.4	0.50	37	1.3	-18			KA
105	140-06	39245	1	787	1	61	0.1	39.4	0.50	31	1.3	-56			KA
106	140-08	39245	1	787	1	68	0.1	39.4	0.50	34	1.3	-34			KA
107	em15 Cab	39246	2	826	1	80	0.1	41.3	0.50	40	1.2	-8			KA
108	em15 l tires	39246	2	826	0	61	0.1	41.3	0.00	31	-0.3	-68			KA
109	em15 r tires	39246	2	826	0	65	0.1	41.3	0.00	33	-0.3	-55			KA
110	em15 hoe	39246	2	826	0	66	0.1	41.3	0.00	33	-0.3	-52			KA
111	em 15 bucket	39246	2	826	0	76	0.1	41.3	0.00	38	-0.3	-21			KA
112	em 15 gen area	39246	2	826	1	78	0.1	41.3	0.50	39	1.2	-14			KA
113	100-01	39246	2	826	0	76	0.1	41.3	0.00	38	-0.3	-21			KA
114	100-04	39246	2	826	0	73	0.1	41.3	0.00	37	-0.3	-30			KA
115	100-05	39246	2	826	0	63	0.1	41.3	0.00	32	-0.3	-62			KA
116	140-03	39246	2	826	0	71	0.1	41.3	0.00	36	-0.3	-36			KA
117	140-05	39246	2	826	0	70	0.1	41.3	0.00	35	-0.3	-40			KA

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α eff	β eff
0.3480	0.1820

Sample Count Time (min)	Daily Background Count Time (min)
2.0	20.0

dpm/100 cm^2	
α Flag	β Flag
20	1000

* Morning Daily Count

seq. #	Sample ID# and Description	Date	Background Total Counts*		Sample Total Counts		Background (cpm)		Sample Counts (cpm)		Sample (dpm/100 cm^2)		> α flag	> β flag	Tech. Initial
			α	β	α	β	α	β	α	β	α	β			
1	Survey005-01	5/16/2007	2	681	0	69	0.1	34.1	0.00	35	-0.3	2			AJC
2	Survey005-02	5/16/2007	2	681	1	83	0.1	34.1	0.50	42	1.1	41			AJC
3	Survey006-01	5/17/2007	5	679	0	64	0.3	34.0	0.00	32	-0.7	-11			AJC
4	Survey006-02	5/17/2007	5	679	1	68	0.3	34.0	0.50	34	0.7	0			AJC
5	SU09-06	5/21/2007	4	685	2	57	0.2	34.3	1.00	29	2.3	-32			AJC
6	SU09-12	5/21/2007	4	685	1	79	0.2	34.3	0.50	40	0.9	29			AJC
7	SU13-01	5/21/2007	4	685	1	64	0.2	34.3	0.50	32	0.9	-12			AJC
8	SU13-02	5/21/2007	4	685	1	79	0.2	34.3	0.50	40	0.9	29			AJC
9	SU13-03	5/21/2007	4	685	1	73	0.2	34.3	0.50	37	0.9	12			AJC
10	SU13-04	5/22/2007	5	687	2	64	0.3	34.4	1.00	32	2.2	-13			AJC
11	SU13-05	5/22/2007	5	687	1	72	0.3	34.4	0.50	36	0.7	9			AJC
12	SU13-06	5/22/2007	5	687	2	56	0.3	34.4	1.00	28	2.2	-35			AJC
13	SU13-07	5/22/2007	5	687	3	95	0.3	34.4	1.50	48	3.6	72			AJC
14	SU13-08	5/22/2007	5	687	2	50	0.3	34.4	1.00	25	2.2	-51			AJC
15	SU13-09	5/22/2007	5	687	3	95	0.3	34.4	1.50	48	3.6	72			DA
16	SU13-10	5/22/2007	5	687	4	72	0.3	34.4	2.00	36	5.0	9			DA
17	SU14-16	5/22/2007	5	687	0	63	0.3	34.4	0.00	32	-0.7	-16			DA
18	SU14-15	5/22/2007	5	687	0	72	0.3	34.4	0.00	36	-0.7	9			DA
19	SU14-14	5/22/2007	5	687	2	63	0.3	34.4	1.00	32	2.2	-16			DA
20	SU14-13	5/22/2007	5	687	2	57	0.3	34.4	1.00	29	2.2	-32			DA
21	SU14-07	5/24/2007	4	680	0	95	0.2	34.0	0.00	48	-0.6	74			DA
22	SU14-20	5/24/2007	4	680	1	101	0.2	34.0	0.50	51	0.9	91			DA
23	SU14-12	5/24/2007	4	680	0	82	0.2	34.0	0.00	41	-0.6	38			DA
24	SU14-11	5/24/2007	4	680	1	95	0.2	34.0	0.50	48	0.9	74			DA
25	Truck Release Probe	5/24/2007	4	680	1	77	0.2	34.0	0.50	39	0.9	25			DA
26	Truck Release Bed	5/24/2007	4	680	1	56	0.2	34.0	0.50	28	0.9	-33			DA
27	Truck Release LF Tire	5/24/2007	4	680	1	78	0.2	34.0	0.50	39	0.9	27			AC
28	Truck Release RFTire	5/24/2007	4	680	2	60	0.2	34.0	1.00	30	2.3	-22			AC
29	Truck Release RR Tire	5/24/2007	4	680	0	52	0.2	34.0	0.00	26	-0.6	-44			AC
30	Truck Release LF Tire	5/24/2007	4	680	0	69	0.2	34.0	0.00	35	-0.6	3			AC
31	Truck Release Tool Box LT	5/24/2007	4	680	0	65	0.2	34.0	0.00	33	-0.6	-8			AC
32	Truck Release Tool Box RT	5/24/2007	4	680	2	67	0.2	34.0	1.00	34	2.3	-3			AC
33	Truck Release Floor Left	5/24/2007	4	680	0	75	0.2	34.0	0.00	38	-0.6	19			AC
34	Truck Release Floor Right	5/24/2007	4	680	0	71	0.2	34.0	0.00	36	-0.6	8			AC
35	SU12 -09	5/24/2007	4	680	0	61	0.2	34.0	0.00	31	-0.6	-19			AC
36	SU12 -13	5/24/2007	4	680	0	76	0.2	34.0	0.00	38	-0.6	22			AC
37	SU14-04	5/24/2007	4	680	0	60	0.2	34.0	0.00	30	-0.6	-22			AC
38	SU14-05	5/24/2007	4	680	0	71	0.2	34.0	0.00	36	-0.6	8			AC
39	SU14-06	5/24/2007	4	680	1	68	0.2	34.0	0.50	34	0.9	0			AC
41	SU14-08	5/24/2007	4	680	0	92	0.2	34.0	0.00	46	-0.6	66			AC
42	Survey010-01	5/25/2007	4	663	0	75	0.2	33.2	0.00	38	-0.6	24			AC
43	Survey010-02	5/25/2007	4	663	0	69	0.2	33.2	0.00	35	-0.6	7			AC
44	Survey010-03	5/25/2007	4	663	1	50	0.2	33.2	0.50	25	0.9	-45			AC
45	Survey010-04	5/25/2007	4	663	0	90	0.2	33.2	0.00	45	-0.6	65			AC
46	Survey010-05	5/25/2007	4	663	0	79	0.2	33.2	0.00	40	-0.6	35			AC

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47	Survey010-06	5/25/2007	4	663	0	75	0.2	33.2	0.00	38	-0.6	24			AC
48	Survey010-07	5/25/2007	4	663	1	60	0.2	33.2	0.50	30	0.9	-17			AC
49	Survey010-08	5/25/2007	4	663	0	68	0.2	33.2	0.00	34	-0.6	5			AC
50	Survey010-09	5/25/2007	4	663	0	63	0.2	33.2	0.00	32	-0.6	-9			AC
51	Survey010-10	5/25/2007	4	663	0	73	0.2	33.2	0.00	37	-0.6	18			AC
52	SU10-04	5/25/2007	4	663	1	78	0.2	33.2	0.50	39	0.9	32			AC
53	SU10-05	5/25/2007	4	663	0	58	0.2	33.2	0.00	29	-0.6	-23			AC
54	SU10-06	5/29/2007	5	657	0	66	0.3	32.9	0.00	33	-0.7	1			AC
55	SU10-01	5/29/2007	5	657	1	49	0.3	32.9	0.50	25	0.7	-46			AC
56	SU10-07	5/29/2007	5	657	1	70	0.3	32.9	0.50	35	0.7	12			AC
57	SU10-08	5/29/2007	5	657	1	56	0.3	32.9	0.50	28	0.7	-27			AC
58	SU12-18	5/29/2007	5	657	2	61	0.3	32.9	1.00	31	2.2	-13			AC
59	SU12-16	5/29/2007	5	657	1	54	0.3	32.9	0.50	27	0.7	-32			AC
60	SU10-12	5/31/2007	0	772	0	72	0.0	38.6	0.00	36	0.0	-14			AC
61	SU10-13	5/31/2007	0	772	1	77	0.0	38.6	0.50	39	1.4	-1			AC
62	SU10-06	5/31/2007	0	772	0	80	0.0	38.6	0.00	40	0.0	8			AC
63	SU10-09	5/31/2007	0	772	1	69	0.0	38.6	0.50	35	1.4	-23			AC
64	SU11-07	5/31/2007	0	772	0	71	0.0	38.6	0.00	36	0.0	-17			AC
65	SU11-08	5/31/2007	0	772	1	86	0.0	38.6	0.50	43	1.4	24			AC
66	SU10-10	5/31/2007	0	772	1	54	0.0	38.6	0.50	27	1.4	-64			AC
67	SU10-18	5/31/2007	0	772	0	69	0.0	38.6	0.00	35	0.0	-23			AC
68	SU11-19	5/31/2007	0	772	0	57	0.0	38.6	0.00	29	0.0	-55			AC
69	SU11-20	5/31/2007	0	772	0	69	0.0	38.6	0.00	35	0.0	-23			AC
70	SU11-16	5/31/2007	0	772	0	75	0.0	38.6	0.00	38	0.0	-6			AC
71	DR-C	6/4/2007	1	695	0	64	0.1	34.8	0.00	32	-0.1	-15			AC
72	DR-D	6/4/2007	1	695	0	61	0.1	34.8	0.00	31	-0.1	-23			AC
73	DR-E	6/4/2007	1	695	0	80	0.1	34.8	0.00	40	-0.1	29			AC
74	SU11-15	6/4/2007	1	695	1	70	0.1	34.8	0.50	35	1.3	1			AC
75	SU11-14	6/4/2007	1	695	0	83	0.1	34.8	0.00	42	-0.1	37			AC
76	SU11-13	6/4/2007	1	695	1	64	0.1	34.8	0.50	32	1.3	-15			AC
77	DR-O	6/4/2007	1	695	0	74	0.1	34.8	0.00	37	-0.1	12			AC
78	DR-N	6/4/2007	1	695	0	86	0.1	34.8	0.00	43	-0.1	45			AC
79	SU11-17	6/5/2007	2	704	1	78	0.1	35.2	0.50	39	1.1	21			AC
80	SU11-21	6/5/2007	2	704	2	77	0.1	35.2	1.00	39	2.6	18			AC
81	SU11-18	6/5/2007	2	704	0	66	0.1	35.2	0.00	33	-0.3	-12			DA
82	SU11-12	6/5/2007	2	704	0	75	0.1	35.2	0.00	38	-0.3	13			DA
83	DR-F	6/5/2007	2	704	2	62	0.1	35.2	1.00	31	2.6	-23			DA
84	SU11-10	6/5/2007	2	704	0	72	0.1	35.2	0.00	36	-0.3	4			DA
85	DR-F	6/6/2007	4	723	0	78	0.2	36.2	0.00	39	-0.6	16			DA
86	SU11-11	6/6/2007	4	723	1	65	0.2	36.2	0.50	33	0.9	-20			DA
87	DRYH-F	6/6/2007	4	723	0	78	0.2	36.2	0.00	39	-0.6	16			DA
88	DR-P	6/6/2007	4	723	0	67	0.2	36.2	0.00	34	-0.6	-15			DA
89	SU11-05	6/6/2007	4	723	1	73	0.2	36.2	0.50	37	0.9	2			DA
90	SU11-09	6/6/2007	4	723	1	79	0.2	36.2	0.50	40	0.9	18			DA
91	SU11-04	6/6/2007	4	723	0	79	0.2	36.2	0.00	40	-0.6	18			DA
92	SMP-1	6/7/2007	3	702	1	52	0.2	35.1	0.50	26	1.0	-50			DA
93	SU11-03	6/7/2007	3	702	0	69	0.2	35.1	0.00	35	-0.4	-3			DA
94	SU11-22	6/7/2007	3	702	1	63	0.2	35.1	0.50	32	1.0	-20			DA
95	DR-R1/R2	6/7/2007	3	702	0	70	0.2	35.1	0.00	35	-0.4	-1			DA
96	SU10-02	6/7/2007	3	702	0	61	0.2	35.1	0.00	31	-0.4	-25			DA
97	Survey013-01	6/15/2007	2	689	1	77	0.1	34.5	0.50	39	1.1	22			DA
98	Survey013-02	6/15/2007	2	689	0	63	0.1	34.5	0.00	32	-0.3	-16			DA
99	Survey013-03	6/15/2007	2	689	0	68	0.1	34.5	0.00	34	-0.3	-2			DA
100	Survey013-04	6/15/2007	2	689	0	80	0.1	34.5	0.00	40	-0.3	30			DA

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101	Survey013-05	6/15/2007	2	689	1	63	0.1	34.5	0.50	32	1.1	-16			DA
102	Survey013-06	6/15/2007	2	689	0	66	0.1	34.5	0.00	33	-0.3	-8			DA
103	Survey013-07	6/15/2007	2	689	0	69	0.1	34.5	0.00	35	-0.3	0			DA
104	Survey015-01	6/15/2007	2	689	1	67	0.1	34.5	0.50	34	1.1	-5			DA
105	Survey015-02	6/15/2007	2	689	1	68	0.1	34.5	0.50	34	1.1	-2			DA
106	Survey015-03	6/15/2007	2	689	1	70	0.1	34.5	0.50	35	1.1	3			DA
107	Survey015-04	6/15/2007	2	689	0	70	0.1	34.5	0.00	35	-0.3	3			DA
108	Survey015-05	6/15/2007	2	689	0	64	0.1	34.5	0.00	32	-0.3	-13			DA
109	Survey015-06	6/15/2007	2	689	0	80	0.1	34.5	0.00	40	-0.3	30			DA
110	Survey015-07	6/15/2007	2	689	1	71	0.1	34.5	0.50	36	1.1	6			DA
111	Survey015-08	6/15/2007	2	689	1	76	0.1	34.5	0.50	38	1.1	20			DA
112	Survey015-09	6/15/2007	2	689	1	64	0.1	34.5	0.50	32	1.1	-13			DA
113	Survey014-01	6/15/2007	2	689	0	74	0.1	34.5	0.00	37	-0.3	14			DA
114	Survey014-02	6/15/2007	2	689	2	72	0.1	34.5	1.00	36	2.6	9			DA
115	Survey014-03	6/15/2007	2	689	0	62	0.1	34.5	0.00	31	-0.3	-19			DA
116	Survey014-04	6/15/2007	2	689	2	68	0.1	34.5	1.00	34	2.6	-2			DA
117	Survey014-05	6/15/2007	2	689	0	80	0.1	34.5	0.00	40	-0.3	30			DA
118	Survey014-06	6/15/2007	2	689	0	55	0.1	34.5	0.00	28	-0.3	-38			DA
119	Survey014-07	6/15/2007	2	689	0	68	0.1	34.5	0.00	34	-0.3	-2			DA
120	Survey014-08	6/15/2007	2	689	1	83	0.1	34.5	0.50	42	1.1	39			DA
121	Survey014-09	6/15/2007	2	689	0	75	0.1	34.5	0.00	38	-0.3	17			DA
122	Survey014-10	6/15/2007	2	689	1	64	0.1	34.5	0.50	32	1.1	-13			DA
123	Survey014-11	6/15/2007	2	689	0	69	0.1	34.5	0.00	35	-0.3	0			DA
124	Geoprobe-01	6/15/2007	2	689	0	77	0.1	34.5	0.00	39	-0.3	22			DA
125	Geoprobe-02	6/15/2007	2	689	1	77	0.1	34.5	0.50	39	1.1	22			DA
126	Geoprobe-03	6/15/2007	2	689	0	68	0.1	34.5	0.00	34	-0.3	-2			DA
127	Geoprobe-04	6/15/2007	2	689	0	85	0.1	34.5	0.00	43	-0.3	44			DA
128	Geoprobe-05	6/15/2007	2	689	0	82	0.1	34.5	0.00	41	-0.3	36			DA
129	Geoprobe-06	6/15/2007	2	689	1	65	0.1	34.5	0.50	33	1.1	-11			DA
130	Geoprobe-07	6/15/2007	2	689	0	76	0.1	34.5	0.00	38	-0.3	20			DA
131	Geoprobe-08	6/15/2007	2	689	0	71	0.1	34.5	0.00	36	-0.3	6			DA
132	Survey016-01	6/19/2007	5	702	0	52	0.3	35.1	0.00	26	-0.7	-50			DA
133	Survey016-02	6/19/2007	5	702	1	50	0.3	35.1	0.50	25	0.7	-55			DA
134	Survey016-03	6/19/2007	5	702	0	65	0.3	35.1	0.00	33	-0.7	-14			DA
135	Survey016-04	6/19/2007	5	702	0	78	0.3	35.1	0.00	39	-0.7	21			DA
136	Survey017-01	6/19/2007	5	702	1	80	0.3	35.1	0.50	40	0.7	27			DA
137	Survey017-02	6/19/2007	5	702	1	68	0.3	35.1	0.50	34	0.7	-6			DA
138	Survey017-03	6/19/2007	5	702	0	73	0.3	35.1	0.00	37	-0.7	8			DA
139	Survey017-04	6/19/2007	5	702	0	79	0.3	35.1	0.00	40	-0.7	24			DA
140	Survey017-05	6/19/2007	5	702	0	64	0.3	35.1	0.00	32	-0.7	-17			DA
141	Survey017-06	6/19/2007	5	702	1	62	0.3	35.1	0.50	31	0.7	-23			DA
142	Survey025-01	6/19/2007	5	702	0	76	0.3	35.1	0.00	38	-0.7	16			DA
143	Survey025-02	6/19/2007	5	702	0	61	0.3	35.1	0.00	31	-0.7	-25			DA
144	Survey025-03	6/19/2007	5	702	1	59	0.3	35.1	0.50	30	0.7	-31			DA
145	Survey025-04	6/19/2007	5	702	0	66	0.3	35.1	0.00	33	-0.7	-12			DA
146	Survey025-05	6/19/2007	5	702	0	64	0.3	35.1	0.00	32	-0.7	-17			DA
147	Survey025-06	6/19/2007	5	702	0	74	0.3	35.1	0.00	37	-0.7	10			KA
148	Survey025-07	6/19/2007	5	702	0	60	0.3	35.1	0.00	30	-0.7	-28			KA
149	Survey025-08	6/19/2007	5	702	1	82	0.3	35.1	0.50	41	0.7	32			KA
150	Survey026-01	6/19/2007	5	702	1	65	0.3	35.1	0.50	33	0.7	-14			KA
151	Survey026-02	6/19/2007	5	702	1	68	0.3	35.1	0.50	34	0.7	-6			KA
152	Survey026-03	6/19/2007	5	702	1	64	0.3	35.1	0.50	32	0.7	-17			KA
153	Survey026-04	6/19/2007	5	702	1	61	0.3	35.1	0.50	31	0.7	-25			KA
154	Survey026-05	6/19/2007	5	702	0	78	0.3	35.1	0.00	39	-0.7	21			KA

CABRERA SMEAR COUNTING WORKSHEET (Rev 6)

155	Survey026-06	6/19/2007	5	702	0	80	0.3	35.1	0.00	40	-0.7	27			KA
156	Survey026-07	6/19/2007	5	702	0	70	0.3	35.1	0.00	35	-0.7	-1			KA
157	Survey026-08	6/19/2007	5	702	1	72	0.3	35.1	0.50	36	0.7	5			KA
158	Survey026-09	6/19/2007	5	702	0	74	0.3	35.1	0.00	37	-0.7	10			KA
159	Survey026-10	6/19/2007	5	702	1	55	0.3	35.1	0.50	28	0.7	-42			KA
160	Survey026-11	6/19/2007	5	702	0	59	0.3	35.1	0.00	30	-0.7	-31			KA
161	Survey026-12	6/19/2007	5	702	0	69	0.3	35.1	0.00	35	-0.7	-3			KA
162	Survey026-13	6/19/2007	5	702	2	74	0.3	35.1	1.00	37	2.2	10			KA
163	Survey027-01	6/19/2007	5	702	1	66	0.3	35.1	0.50	33	0.7	-12			KA
164	Survey027-02	6/19/2007	5	702	0	63	0.3	35.1	0.00	32	-0.7	-20			KA
165	Survey027-03	6/19/2007	5	702	1	67	0.3	35.1	0.50	34	0.7	-9			KA
166	Survey027-04	6/19/2007	5	702	0	69	0.3	35.1	0.00	35	-0.7	-3			KA
167	Survey027-05	6/19/2007	5	702	0	73	0.3	35.1	0.00	37	-0.7	8			KA
168	Survey027-06	6/19/2007	5	702	1	62	0.3	35.1	0.50	31	0.7	-23			KA
169	Survey027-07	6/19/2007	5	702	1	75	0.3	35.1	0.50	38	0.7	13			KA
170	Survey027-08	6/19/2007	5	702	0	59	0.3	35.1	0.00	30	-0.7	-31			KA

CABRERA SMEAR COUNTING WORKSHEET (Rev 6)

α eff	β eff
0.3400	0.2010

Sample Count Time (min)	Daily Background Count Time (min)
2.0	10.0

dpm/100 cm^2	
α Flag	β Flag
20	100

* Morning Daily Count

seq. #	Sample ID# and Description	Date	Background Total Counts*		Sample Total Counts		Background (cpm)		Sample Counts (cpm)		Sample (dpm/100 cm^2)		> α flag	> β flag	Tech. Initial
			α	β	α	β	α	β	α	β	α	β			
1	Survey028-01	7/11/2007	2	416	0	80	0.2	41.6	0.00	40	-0.6	-8			gmt
2	Survey028-02	7/11/2007	2	416	0	87	0.2	41.6	0.00	44	-0.6	9			gmt
3	Survey028-03	7/11/2007	2	416	2	90	0.2	41.6	1.00	45	2.4	17			gmt
4	Survey028-04	7/11/2007	2	416	1	83	0.2	41.6	0.50	42	0.9	0			gmt
5	Survey028-05	7/11/2007	2	416	0	105	0.2	41.6	0.00	53	-0.6	54			gmt
6	Survey028-06	7/11/2007	2	416	1	83	0.2	41.6	0.50	42	0.9	0			gmt
7	Survey028-07	7/11/2007	2	416	0	83	0.2	41.6	0.00	42	-0.6	0			gmt
8	Survey028-08	7/11/2007	2	416	1	91	0.2	41.6	0.50	46	0.9	19			gmt
9	Survey028-09	7/11/2007	2	416	1	88	0.2	41.6	0.50	44	0.9	12			gmt
10	Survey028-10	7/11/2007	2	416	1	83	0.2	41.6	0.50	42	0.9	0			gmt
11	Survey029-01	7/12/2007	3	508	0	76	0.3	50.8	0.00	38	-0.9	-64			gmt
12	Survey029-02	7/12/2007	3	508	2	93	0.3	50.8	1.00	47	2.1	-21			gmt
13	Survey029-03	7/12/2007	3	508	0	81	0.3	50.8	0.00	41	-0.9	-51			gmt
14	Survey029-04	7/12/2007	3	508	1	93	0.3	50.8	0.50	47	0.6	-21			gmt
15	Survey029-05	7/12/2007	3	508	0	101	0.3	50.8	0.00	51	-0.9	-1			gmt
16	Survey029-06	7/12/2007	3	508	1	105	0.3	50.8	0.50	53	0.6	8			gmt
17	Survey029-07	7/12/2007	3	508	2	101	0.3	50.8	1.00	51	2.1	-1			gmt
18	Survey029-08	7/12/2007	3	508	0	109	0.3	50.8	0.00	55	-0.9	18			gmt
19	Survey029-09	7/12/2007	3	508	0	104	0.3	50.8	0.00	52	-0.9	6			gmt
20	Survey029-10	7/12/2007	3	508	1	93	0.3	50.8	0.50	47	0.6	-21			gmt
21	Survey029-11	7/12/2007	3	508	1	99	0.3	50.8	0.50	50	0.6	-6			gmt
22	Survey029-12	7/12/2007	3	508	0	106	0.3	50.8	0.00	53	-0.9	11			gmt
23	Survey029-13	7/12/2007	3	508	0	88	0.3	50.8	0.00	44	-0.9	-34			gmt
24	Survey029-14	7/12/2007	3	508	2	111	0.3	50.8	1.00	56	2.1	23			gmt
25	Survey029-15	7/12/2007	3	508	0	104	0.3	50.8	0.00	52	-0.9	6			gmt
26	Survey029-16	7/12/2007	3	508	1	97	0.3	50.8	0.50	49	0.6	-11			gmt
27	Survey029-17	7/12/2007	3	508	0	83	0.3	50.8	0.00	42	-0.9	-46			gmt
28	Survey029-18	7/12/2007	3	508	1	100	0.3	50.8	0.50	50	0.6	-4			gmt
29	Survey029-19	7/12/2007	3	508	1	109	0.3	50.8	0.50	55	0.6	18			gmt
30	Survey029-20	7/12/2007	3	508	2	99	0.3	50.8	1.00	50	2.1	-6			gmt

Location: Site: EM-2	RWP# 07-1022.00-001	Survey # NA	Survey Type: TEST PIT	pg. 1 of 1

~~Smear (CPM/100 cm²)~~
Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	Ø	35.5	26		
2			27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one SHIELDED unshielded µR

	SHIELDED	unshielded
1 ft	1800 2580	5500 6400
2 ft	1600 2490	5000 6800
3 ft	1600 2500	5900 6900
4 ft	2500 3000	6000 8600
5 ft		
6 ft		
7 ft		
8 ft		
9 ft		
10 ft		

6

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	KA AC	6/19/07	2221-S	108862					1820	4/30/08
			2221-NS	149952					6000	4/30/08
			MOD 19	221521					6	10/15/07
			2929	147736	34.5	15.9				4/30/08
	Reviewed By:	Date:								
	gmt	6/14/07								

Key
- ■ A/S Location
- ·-· Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: EM-3	RWP# 07-1022.00-001	Survey # NA	Survey Type: TEST PIT	pg. 1 of 1

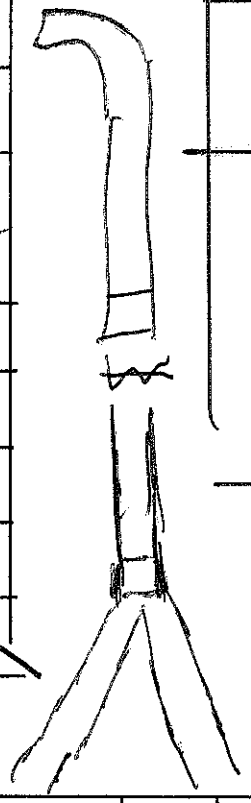
Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)

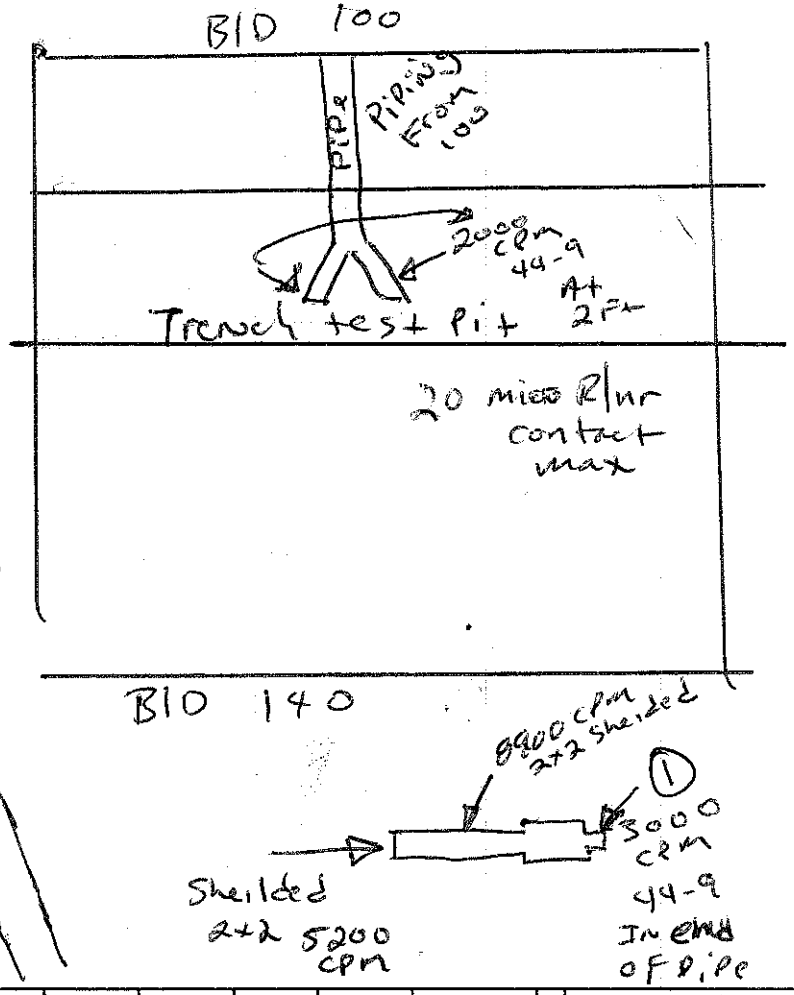
No.	α	β	No.	α	β
1	1	40	26		
2	3.5	44.5	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one: SHIELDED / unshielded μR

	SHIELDED	unshielded
1 ft	1900 2350	6000 6700
2 ft	1900 2400	5100 6700
3 ft	1900 3000	6000 8500
4 ft		
5 ft		
6 ft		
7 ft		
8 ft		
9 ft		
10 ft		

(2) general area as left.





Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due	Key
	KA MC	6/14/07	2221-S	109862				1819		4/30/08	
			2221-NS	149952				5985		4/30/08	■ A/S Location
			MOD 19	221521				6		10/1/07	⋯ Boundary
			2929	147736	34.5	15.9				4/30/08	○ Smear
											□ Dose Rate ____/hr
	Reviewed By:	Date:									⋆ Direct Reading CPM/direct frisk
	SMA	6/14/07									△ Grab Samp

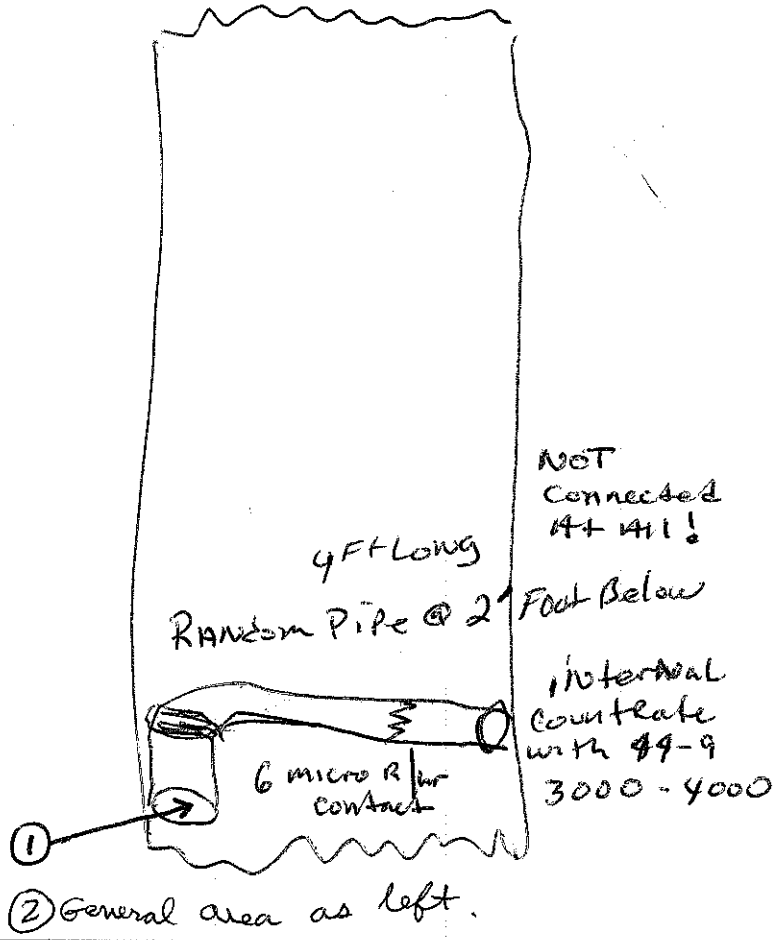
Location: Site: ~~EM-5~~ EM-5	RWP# 07-1022.00-001	Survey # NA	Survey Type: TEST PIT	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	10.5	60	26		
2	4	45	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one — SHIELDED / unshielded

	SHIELDED	unshielded	mR
1 ft	1900 2300	5200 6500	6
2 ft	1900 2400	5800 6300	6
3 ft	1800 2300	5500 6500	6
4 ft	1900 2400	5300 7300	6
5 ft			
6 ft			
7 ft			
8 ft			
9 ft			
10 ft			



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	KA AL	6/14/07	2221-S	108862					1896	4/30/08
			2221-NS	149952					5290	4/30/08
			MOD 19	22152					5	10/15/07
			2929	147736	34.5	15.9				4/30/08
	Reviewed By:	Date:								
	AMA	6/14/07								

Key: ■ A/S Location; ⋯ Boundary; ○ Smear; □ Dose Rate ____/hr; * Direct Reading CPM/direct frisk; △ Grab Sampl

OP-001-02 Radiological Survey Sheet

Revision 2

Survey # NA

Survey Type: TEST PIT

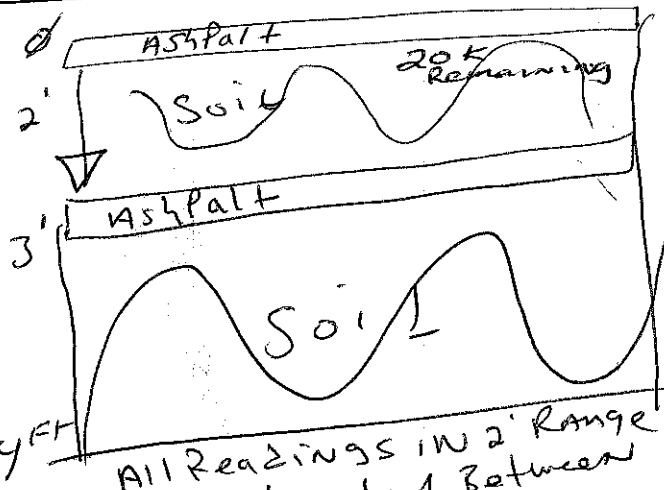
Location: EM-15-1B

RWP# 07-1022.00-001

Site:

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)					
No.	α	β	No.	α	β
1	.05	35	26		
2	0	30.5	27		
3	0	32.5	28		
4	0	33	29		
5	0	36	30		
6	0	40	31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one	SHIELDED	unshielded	µR
1ft	2000 3000	5500 11500	40
2ft	3600 6800	6000 18000	70
	1200	2000	10-15
3ft	1800	3500	
	1000	2000	10-15
4ft	1800	3500	
5ft			
6ft			
7ft			
8ft			
9ft			
10ft			



All Readings in 2' Range were elevated Between AshPalt Layers

Unshielded 20 K still left in west wall of Test Pit

Micro R/hr @ 1 meter 6

Comments

Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
KA AC	6/13/07	2221-S	108862					1650	4/20/08
		2221-NS	149992					4960	4/30/08
		Mod 19	221521					5	10/05/07

Reviewed By: Date:

Key

- A/S Location
- Boundary
- Smear
- Dose Rate _____ /hr
- Direct Reading CPM/direct frisk
- Grab Samp

Location: / Site:	RWP#	Survey #	Survey Type:	
EM-15-1A	07-1022.00-001	N/A	TEST PIT	pg. 2 of 2

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1			26		
2			27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15		A	40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one: SHIELDED / unshielded — μR

	SHIELDED	unshielded	μR
1 ft	1700 2600	5000 7400	6-7
2 ft	1600 2200	5000 7200	6-7
3 ft	1650 3000	5000 8100	9-10
4 ft			
5 ft			
6 ft			
7 ft			
8 ft			
9 ft			
10 ft			

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	KA AE	6/1/07	See page 1							
	Reviewed By:	Date:								
	BMT	6/13/07								

Key	
■	A/S Location
-	Boundary
○	Smear
□	Dose Rate _____ /hr
*	Direct Reading CPM/direct frisk
△	Grab Samp

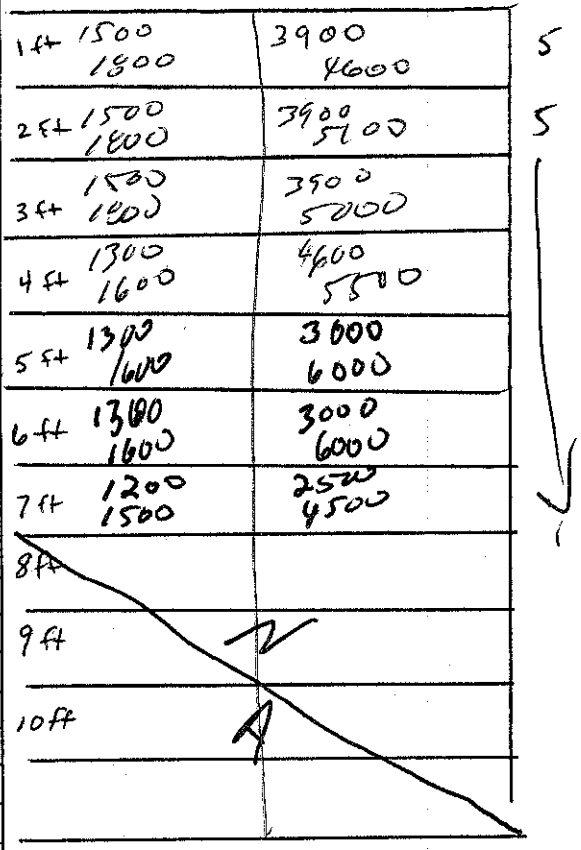
Location: EM-21	RWP# 07-1022.00-001	Survey # TEST PIT →	Survey Type:	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1			26		
2			27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		V
11			36		
12			37		
13			38	A	
14		V	39		
15			40		
16			41		
17	A		42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one — SHIELDED / unshielded — mR

	SHIELDED	unshielded	mR
1 ft	1500 1800	3900 4600	5
2 ft	1500 1800	3900 5100	5
3 ft	1500 1800	3900 5000	
4 ft	1300 1600	4600 5500	
5 ft	1300 1600	3000 6000	
6 ft	1300 1600	3000 6000	
7 ft	1200 1500	2500 4500	
8 ft			
9 ft			
10 ft			



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	KA AC	6/12/07	2221-5	108862		A			1466	4/28/08
			2221-NS	149992					2683	4/14/08
			mod 19	221521			A		5	10/05/07
						V				
	Reviewed By:	Date:				A				
	SMT	6/12/07								

Key: ■ A/S Location; "-" Boundary; ○ Smear; □ Dose Rate _____/hr; * Direct Reading CPM/direct frisk; △ Grab Sample

Location: / Site:	RWP#	Survey #	Survey Type:	pg. 1 of 1
EM 26	1022.00-001 07-100	NA	TEST PIT	

→ Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1			26		
2			27		
3			28		
4			29		
5			30		
6			31		
7		N	32		
8			33		
9			34		
10			35		
11			36		
12		A	37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one: SHIELDED unshielded μR

1 ft	1800-2300	4800-5600	6
2 ft	1800 2300	4700-5500	6
3 ft	2100-2600	4600-5500	6
4 ft	2200-2450	4600-5200	6
5 ft			
6 ft		A	
7 ft			
8 ft	N		
9 ft			
10 ft			

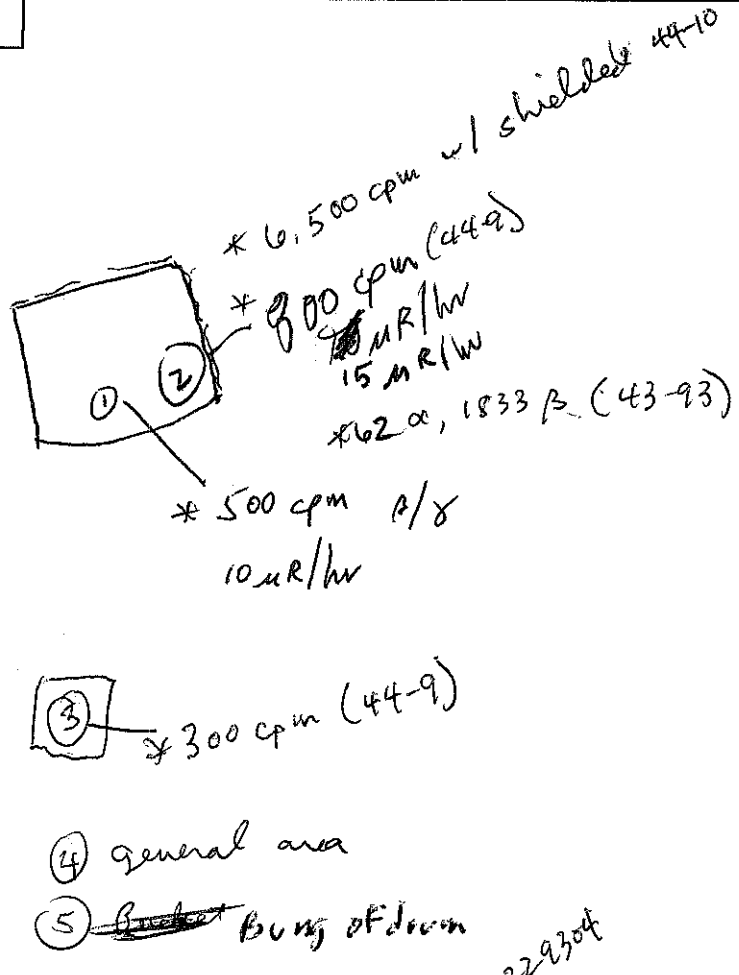
Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	KA/AC	6/11/07	2221-S	108462	N/A	N/A	N/A	N/A	4543	4/30/08
		6/11/07	2221-NS	149942	N/A	N/A	N/A	N/A	1878	4/30/08
		6/11/07	MODEL	221521	N/A	N/A	N/A	N/A	5	10/15/07
						N				
	Reviewed By:	Date:				A				

Key: ■ A/S Location; ·-· Boundary; ○ Smear; □ Dose Rate _____/hr; * Direct Reading CPM/direct frisk; △ Grab Samp

Location: Site: EM 29	RWP# 07-1022.00-001	Survey # 012	Survey Type: Contamination	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	4	87	26		
2	6	84	27		
3	1	70	28		
4	2	67	29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Drum carcass found @ 3' bgs @ Em-29. Drum had elevated activity in scans & bolts (bung). Drum appears to have lead.

(2) Bucket of backhoe
(4) general area
(8)
(9)

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due	Key
	Al Craig	6/6/07	44-9	~~229804~~ 229304	NA	10%	NA	40	NA		
			Mod 19	221521	NA	NA	NA	NA	5		A/S Location
			44-10 shld	108862	NA	NA	NA	NA	~~1850~~ 250		Boundary
			43-93	168040	15%	10%	2	86	NA		Smear
			2929	147736	34.5	15.9					Dose Rate ____/hr
	Reviewed By:	Date:									Direct Reading CPM/direct frisk
	Gwt	6/6/07									Grab Sample

Location: Site: EM-29A	RWP# 07-1022.00-001	Survey # NA	Survey Type: TEST PIT	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1			26		
2			27		
3			28		
4			29		
5			30		
6			31		
7		Z	32		
8			33		
9		A	34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one	SHIELDED	unshielded	μR
1 ft	2,600 - 3600	N/A	7
2 ft	2,200 - 2,800	N/A	7
3 ft	2,200 → 6,500	N/A	7
4 ft	2100 → 2300	N/A	6
5 ft	2100 → 2300	N/A	7
6 ft	2300 - 2600	N/A	7
7 ft	2300 - 2600	N/A	7
8 ft		N/A	
9 ft		N/A	
10 ft		N/A	

Top 3' soil has misc. debris throughout (wire, plastic, tile, glass, etc.). Soil is black and appears to be residue from a burn. Top 3' soil is approximately x2 background.

Drum carcass found at a depth of 3' bgs.

Survey a drum performed that notes the extent of elevated activity.

Drum up to 15 μR/hr on contact

See SURVEY #012

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
10' long trench, depth 7'	AC & KA	6/11/07	~~44-10~~							
lifts @ 1' layed out on			2221-S	108862	NA	NA	NA	NA	2464	4/30/08
plastic & scanned w/			2221-NS	149992	NA	NA	NA	NA	6090	4/30/08
shielded 2"x2". Bkg 1990			Mod 19	221521	NA	NA	NA	NA	5	10/15/07
	Reviewed By:	Date:					A			
	G. M Tarr	6/11/07								

Key

■	A/S Location
-·-	Boundary
○	Smear
□	Dose Rate ____/hr
*	Direct Reading CPM/direct frisk
△	Grab Sampl

Location: Site: EM 29B	RWP# 07-1022.00-001	Survey # EM 29B	Survey Type: TEST PIT	pg. 1 of 1

→ Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1			26		
2			27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			~~37~~		
13			~~38~~		
14			39		
15		A	40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one: SHIELDED / unshielded — μR

	SHIELDED	unshielded
1 ft	2,100 - 2400	5,100 - 6000
2 ft	2,100 - 2300	5,100 - 6000
3 ft	2000 - 2400	5300 - 6200
4 ft	2000 - 2900	5300 - 6000
5 ft	~~2100 - 2300~~	~~6000 - 6100~~
6 ft	~~2100 - 2300~~	~~6000 - 6100~~
7 ft		
8 ft		
9 ft		
10 ft		

5

Comments

Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
KA / AC	6/1/07	2221NS	199992	N/A	N/A	N/A	N/A	6090	4/30/08
	6/1/07	2221-S	108862	N/A	N/A	N/A	N/A	2164	4/30/08
	6/1/07	MODIG	221521	N/A	N/A	N/A	N/A	5	10/25/07
Reviewed By:	Date:				A				

Key
- ■ A/S Location
- ·-· Boundary
- ○ Smear
- □ Dose Rate _____/hr
- • Direct Reading CPM/direct frisk
- △ Grab Samp

Location: GPR-F
Site:

RWP# 07-1022.00-001

Survey # TEST PIT → Survey Type: ~~SCAN~~

pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1			26		
2			27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

circle one SHIELDED unshielded μR

1ft	2000 2400	5200 6500
2ft	1900 2300	5100 7300
3ft	2000 2500	5300 6800
4ft	1800 2300	4900 5900
5ft		
6ft		
7ft		
8ft		
9ft		
10ft		

Left side wall

Found Rocklike Piece & Soil's
Unshielded 82 K on contact
Shielded - 60 K
70 micro R/hr



nugget 42 α dpm
350 β dpm w/ 4293

80,000 ~~cpm~~ dpm β
w/ 44-9.

Rt side wall

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
	KA AC	6/12/07	2221-5	108862			N		1476	4/30/08
			2221-NS	149992					4520	4/30/08
			MOD 19	221521	A				5	10/4/07
						N				
	Reviewed By:	Date:				A				
	Smot	6/12/07								

Key
- ■ A/S Location
- ·-· Boundary
- ○ Smear
- □ Dose Rate ____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

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TECHNICAL MEMORANDUM

Results of Phase IIB Radiological Surveys and Support
Sylvania Corning FUSRAP Site
Hicksville, New York

Prepared for:

Ecology and Environment, Inc.
368 Pleasant View Drive
Lancaster, NY 14086

Prepared by:



CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

103 East Mount Royal Ave, Suite 2B
Baltimore, MD 21202

February 2008

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1.0 INTRODUCTION

The Sylvania Corning site (hereafter referred to as the 'Site') occupies 10.5 acres divided into three contiguous properties located at 70, 100, and 140 Cantiague Rock Road, in the westernmost portion of Hicksville, Long Island, approximately 30 miles east of lower Manhattan. Industrial and commercial properties adjoin the Site to the north (the Nassau County Department of Public Works), to the south (General Instruments' inactive waste disposal site, currently unoccupied), to the west by Cantiague Rock Road, and to the east by the golf driving range of Cantiague Park.

The Site was added to the Formerly Used Sites Remedial Action Program (FUSRAP) in 2006 to evaluate radioactive contamination resulting from former operations conducted under contract to the federal government. The US Army Corps of Engineers (USACE), Kansas City District has responsibility for the FUSRAP investigation of the Site. Ecology and Environment, Inc. (E & E) has been contracted by USACE to conduct a remedial investigation of uranium and thorium contamination at the Site.

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2.0 SCOPE OF WORK

Cabrera Services, Inc. (CABRERA) was contracted by E & E to perform health physics (HP) support services for Phase IIB of the FUSRAP remedial investigation at the Site. These services included the performance of soil core scanning surveys, down-hole gamma logging (DHG) surveys, and providing radiological support for the following activities:

- Geoprobe drilling using a Geoprobe model 54LT at eight previously probed locations to obtain deeper soil samples (i.e., 16-ft to 24-ft);
- Auger drilling at 13 previously probed Phase IIA locations to obtain deeper soil samples (i.e., 16-ft to 72-ft);
- Auger drilling and combination Geoprobe/auger drilling at 44 new locations (20-ft to 72-ft).
- Test pit excavations at 11 new locations to investigate geophysical anomalies identified during Phase IIA.

CABRERA personnel were on-site to support this scope of work beginning October 15 and continuing through November 21, 2007.

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3.0 SURVEY METHODOLOGY

CABRERA provided two teams to accomplish the previously defined scope of work. Each team consisted of two personnel; a team leader and a technician. All work was performed in accordance with *Final Remedial Investigation Work Plan (Phase I & Phase II) for the Sylvania Corning FUSRAP Site, 2007* (WP) and applicable CABRERA procedures (incorporated in the E & E work plan).

3.1 Soil Core Scanning Surveys

Sample core scan results were used to aid in the selection of biased samples. Soil sample cores were scanned for gross gamma radiation using a lead shielded Ludlum Model 44-10 2-inch by 2-inch (2x2) sodium-iodide (NaI) probe connected to a Ludlum Model 2221 ratemeter/scaler. Soil cores were placed in a counting jig and scanned at a rate of one to two inches per second. Scanning results were recorded on data sheets in increments of one foot with the highest measured increment noted. Ambient background measurements at each survey area were also recorded for the 44-10 detector to ensure accuracy of the locally recorded data. All soil core scanning surveys were performed in accordance with CABRERA'S soil core scan field procedure.

3.2 Downhole Gamma Logging

Boreholes were surveyed for gross gamma radiation using a Bicron Model G1 1x1 NaI probe connected to a Ludlum Model 2221 ratemeter/scaler. Once the target depth was reached by the drilling contractor, each open borehole was sleeved with 1.5-in outside diameter (OD) poly-vinyl chloride (PVC) pipe. The pipe was used to maintain the integrity of the borehole (i.e., prevent collapse) once the auger or rods were removed. One-minute integrated measurements were collected in one foot increments within the borehole, starting at the bottom, and recorded on a DHG data sheet. All DHG surveys were performed in accordance with CABRERA'S downhole gamma logging field procedure.

3.3 Radiological Monitoring

Radiological controls were maintained and contamination monitoring was performed by team members during all sampling and subsurface activities. All contamination monitoring was performed in accordance with CABRERA procedures and the approved WP (E & E, 2007). Radiological controls included the implementation of exclusion zones surrounding active work areas, treating all equipment in work areas as if contaminated, and performing clearance, i.e.,

free-release, surveys for all equipment and personnel exiting either exclusion zones or the site completely. Radiological monitoring included the following:

- Ambient Gamma Monitoring (Bicron micro-Rem dose rate meter)
- Masselin Cloth (Ludlum Model 2221 ratemeter/scaler with 43-93 alpha-beta scintillation probe)
- Surface scans (Ludlum Model 12C with 44-9 pancake Geiger-Mueller (GM) probe and Ludlum Model 2221 with 43-93 probe)
- Frisking of Personnel and Equipment (Ludlum Model 12C with 44-9 GM probe and Ludlum Model 2221 with 43-93 probe)
- Swipe Samples (Cloth swipes counted on a Ludlum Model 2929 smear counter)

All contamination monitoring results were compared to the acceptable levels of surface contamination provided in Section 3.5.

3.4 Monitoring During Test Pit Excavation

Exclusion zones were set up around the test pits prior to excavation. Pre-excavation surveys of the work areas were performed using an unshielded 44-10 NaI probe, a Ludlum 44-9 GM pancake probe, and Bicron micro-Rem dose rate meter. Plastic sheeting was then laid over an asphalt or gravel area adjacent to the pit location where excavated spoils were to be placed. The plastic sheeting served as an impermeable barrier between the spoils pile and the ground for contamination control purposes. Using the three detectors listed above, excavated soil was scanned in the bucket of the backhoe before being placed on the spoils pile/plastic sheeting. Once a uniform depth of soil had been removed from the test pit, the spoils pile was then spread out to a relatively uniform thickness, visually examined, and scanned again using the suite of detectors.

3.5 Acceptable Levels of Surface Contamination

Table 1 provides acceptable surface contamination limits for various radionuclides as applied to surface contamination measurements. The lowest values (transuranics) in the table were used as a conservative measure despite the fact that the predominant radionuclide of potential concern at this site is uranium. The alpha removable contamination limit used throughout was 20 disintegrations per minute per 100 square centimeters (dpm/100cm^2), while the maximum and average contamination limits are 300 and 100 dpm/100cm^2, respectively. The beta-gamma removable contamination limit is 1000 dpm/100cm^2.

TABLE 1: ACCEPTABLE LEVELS OF SURFACE CONTAMINATION

Radionuclide[a]	Acceptable Surface Contamination Levels (DPM/100 cm^2)		
	Removable[b, e]	Average[b, c]	Maximum[b, d]
Transuranics, ^{226}Ra, ^{227}Ra, ^{230}Th, ^{228}Th, ^{231}Pa, ^{221}Ac, ^{125}I, ^{129}I,	20	100	300
Th-Natural, ^{232}Th, ^{90}Sr, ^{223}Ra, ^{224}Ra, ^{232}U, ^{126}I, ^{131}I, ^{133}I	200	1,000	3,000
U-Natural, ^{235}U, ^{238}U, and associated decay products	1,000 α	5,000 α	15,000 α
Beta-Gamma emitters (radionuclides with decay modes other than alpha emission or spontaneous fission) except ^{90}Sr and others noted above.	1,000 β γ	5,000 β γ	15,000 β γ

Reference: Table 6-4 of USACE Radiation Protection Manual EM-385-1-80.

a Where surface contamination by both alpha- and beta-gamma emitting nuclides exists, the limits established for alpha- and beta-gamma emitting nuclides should apply independently.

b As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

c Measurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each object.

d The maximum contamination level applies to an area not more than 100 cm^2.

e The amount of removable radioactive material per 100 cm^2 of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionately and the entire surface should be wiped.

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4.0 RESULTS

4.1 Soil Core Scanning Surveys

A total of 66 core scan surveys were performed during the Phase IIB investigation. Core scan results ranged from a minimum of 1,000 cpm to a maximum of 4,350 cpm using a shielded 44-10 NaI detector. The median range of results within a typical borehole was 265 cpm. However, results from Borehole C09-03/D had a range of 2,700 cpm with a maximum value of 4,350 cpm (between 45-ft and 46-ft depth). A visual inspection of this core identified a green salt-like material that appeared to be consistent with contamination found during Phase IIA of the project. The activity of the green salts registered up to 3,000 cpm using a Ludlum 44-9 GM pancake probe. Swipe samples performed on the core sample and the work area did not identify any removable activity in excess of the values listed in Table 1. Spoils from this hole were drummed with labels reading 'pending laboratory analysis,' and stored in the temporary radioactive materials storage area.

A summary of soil core scan results by borehole is presented in Attachment 1. Electronic copies of all completed soil core scanning survey data sheets are included in Attachment 2, a compact disk (CD).

4.2 Downhole Gamma Logging Surveys

A total of 69 DHG surveys were performed during this phase of the project. DHG results ranged from a minimum of 366 cpm to a maximum of 28,391 cpm. The highest DHG result was in borehole C09-03/D at a depth of 47-ft, which corroborated the soil core scanning results from that depth. The median range of results within the boreholes was 1,463 cpm. A summary of DHG results by borehole is presented in Attachment 1. Electronic copies of all DHG data sheets are included on Attachment 2, the electronic Data CD.

4.3 Test Pits

A total of twelve test pits were excavated during Phase IIB. Soil scanning results ranged from a low of 4,300 cpm to a high of 13,700 cpm with an unshielded Ludlum 44-10 NaI probe and from 30 cpm to 1,200 cpm with a Ludlum 44-9 GM pancake probe. Table 2 summarizes the survey results for each test pit. Electronic copies of all test pit survey forms are located on the enclosed data CD. Locations EM-8 and EM-9 were close in proximity and therefore reported on one data sheet (i.e., EM-8/9).

Test Pit EM-28 exhibited the highest activity of all the test pits. EM-28 consisted of a circular concrete dry well that was 7-ft in diameter and 12-ft deep with a concrete bottom. The top of the capped well was detected approximately 3 ft below ground surface. The well was filled to capacity with soil, sand, and building debris. Small particles of elevated activity were identified throughout the well and appeared to be associated with the presence of black soil-like material although not all of the black soil present contained elevated activity. No other features of the elevated activity were visually discernable. No entry or exit pipes or drains were identified within the well.

Scan results on the excavated soils from the well ranged from 30 to 1,200 net cpm on a Ludlum 44-9 GM probe and from 6,000 to 13,700 net cpm with an unshielded Ludlum 44-10. Dose rates on soil ranged from 4 to 8 microRem/hr on contact and at 1-meter, above the spoils. No removable activity in excess of the release criteria was identified in the work area (e.g., backhoe bucket, shovels, sampling equipment, etc.). Soils excavated from the test pit/drywell were returned to the pit with the exception of a volume equivalent to two 55-gallon drums which were segregated and stored in the radioactive materials storage area pending laboratory analysis.

Soil scan results in the remaining test pits ranged from background levels to marginally elevated, as summarized in Table 2.

TABLE 2. TEST PIT SURVEY RESULTS

Location ID	Total Depth (ft)	Ludlum 44-10 Scan Result (cpm)		Ludlum 44-9 Scan Results (cpm)		Dose Rate Range (µrem/hr)
		Min	Max	Min	Max	
EM-35	8	4,500	6,300	30	70	5-7
EM-28	12	6,300	12,000	30	1,200	4-9
EM-11	9	5,600	10,000	30	90	5-8
GPR-C	6	4,300	6,800	40	200	4-5
EM-16	4	5,200	7,000	40	150	4-8
EM-13	4	5,800	10,800	40	80	4-8
EM-7	4	4,500	8,130	30	60	3-5
EM-31	5	5,500	6,910	30	80	3-5
EM-8/9	5	4,500	10,500	40	150	3-5
EM-30	4	5,800	7,500	30	60	2-4
EM-34	5	4,500	7,100	40	60	3-4

4.4 Contamination Monitoring

All sampling and subsurface activities were monitored for the presence of elevated radiological activity. Results of routine contamination monitoring were recorded in site log books. All of the routine contamination monitoring results were below the applicable limits listed in Table 1. Electronic copies of the site logbooks with routine contamination monitoring results are included in Attachment 2 on the data CD.

At the request of E & E, two lead-lined drains in Building 70 (DR-BB-1 and DR-BB-2) were surveyed for radiological activity. Both floor drains are approximately 3-inches in diameter and extend approximately 1.5-ft vertically below floor grade, where they connect to a single pipe, extending westward. Elevated activity was identified within both drains. Drain DR-BB-1 measured 600 net cpm using a Ludlum 44-9 GM and had removable activity of 104 alpha and 623 beta dpm/100cm^2 present within the drain. Drain DR-BB-2 measured 400 net cpm using a Ludlum 44-9 and had removable activity of 228 alpha and 802 beta dpm/100cm^2 present within the drain.

A contamination survey (i.e., Radiological Survey #15) was performed in the room containing the drains. This survey confirmed the elevated activity present inside the drains (i.e., survey smears #10 & #11, respectively) but found no removable activity in excess of the values listed in Table 1 in the areas surrounding the drains. Following the survey, yellow and magenta tape was place over the drain covers to indicate the hazard. Electronic copies of Radiological Survey #15 and Cabrera's Smear Counting Worksheet results are presented on the attached Data CD. The data flags present on the Cabrera Smear Counting Worksheet indicate smear results in excess of the values listed in Table 1.

In addition to monitoring sampling and subsurface activities, all equipment leaving the site was surveyed for free release. Equipment that was surveyed for free release included drilling rigs, backhoes, and all associated support equipment. Survey results for all release surveys were below the applicable removable release criteria (i.e., Table 1). Electronic copies of all radiological surveys are located in Attachment 2 on the attached Data CD.

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5.0 QUALITY CONTROL

5.1 Quality Control Measures

Quality control (QC) measurements for field instrumentation included initial response to a radioactive source and daily operability checks. All instruments were calibrated within the last twelve months by the instrument vendor, a certified calibration laboratory, using sources traceable to the National Institute of Standards and Technology (NIST). Calibration certificates for each instrument are provided in Attachment 2 on the attached Data CD.

Prior to commencing any surveys, ten (10) initial readings were collected on each detector using Technicium-99 (^{99}Tc) and Thorium-230 (^{230}Th) sources to establish a control chart for each unit to determine daily operability. The bases for the daily operability of these instruments were ± 20% of the average for the initial ten measurements for the Ludlum Model 44-9 probe, Ludlum Model 44-10 probe, Bicron G1 probe, and Bicron MicroRem, and ±3-standard deviations from the average for the initial ten measurements for the Ludlum Model 43-93 and Ludlum 2929 detectors.

A review of the alpha/beta counting instrument QC sheets identified instances where instrument response was outside the two sigma value of the initial 10 measurements resulting in a "Question" Flag and one instance on 10/19/08 where the instrument response for detector #196226 exceeded the three sigma value resulting in a "Failure" flag. The QC data was reviewed in the field per Cabrera's *OP-058 Health Physics General Instrument Quality Control Procedure*. The instrument response on 10/19/08 was immediately repeated per procedure and fell within the acceptance criteria. The review of the initial data set on which the control chart was based found the statistical groupings of the initial 10 measurements to be relatively narrow. This narrow grouping resulted in relatively narrow acceptance criteria of two and three sigma. None of the project data was impacted by this occurrence. All quality control data are included electronically on the attached Data CD.

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6.0 REFERENCES

(E & E, 2007) *Final Remedial Investigation Work Plan (Phase I & Phase II) for the Sylvania Corning FUSRAP Site, Environment and Ecology, Inc. March 2007*

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ATTACHMENT 1

SUMMARY OF SOIL CORE SCANNING SURVEY AND DOWNHOLE GAMMA LOGGING SURVEY RESULTS

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Date	Location ID	Soil Core Scanning Survey Results (Shielded 44-10 NaI)			DHG Survey Results (1x1 NaI)			Ambient Exposure Rate Result (µR/hr)
		Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	
10/16/2007	C13-01	16	1,460	1,600	16	790	1,935	6
10/16/2007	C13-02	16	1,640	1,740	16	997	1,881	5
10/16/2007	C08-01	30	1,400	1,630	30	963	1,874	10
10/16/2007	C08-02	30	1,370	1,420	30	945	1,373	10
10/16/2007	SU09-10	72	1,300	1,550	64	866	1,120	5
10/17/2007	SU13-07/D	66	1,600	1,920	66	717	2,571	6
10/17/2007	DR-7	n/a	n/a	n/a	2	1,321	1,601	5
10/17/2007	DR-Y	n/a	n/a	n/a	1	1,282	1,282	5
10/17/2007	C07-01	40	1,250	1,480	40	1,039	1,673	4
10/17/2007	C07-02	32	1,380	1,540	32	839	1,321	5
10/17/2007	C13-03	24	1,300	1,560	24	935	2,398	5
10/18/2007	SU14-10/D	66	1,400	1,950	64	733	3,166	5
10/18/2007	C04-03	32	1,190	1,320	31	891	1,125	4
10/18/2007	C11-02	56	1,150	1,670	56	949	3,692	8
10/19/2007	C11-01	56	1,220	1,500	56	921	4,166	4
10/19/2007	LPH-C/D	68	1,150	1,500	66	678	3,866	4
10/22/2007	C10-01	30	1,300	1,350	30	959	1,602	5
10/22/2007	C10-02	30	1,450	1,500	30	734	899	5
10/22/2007	C12-02	32	1,570	1,570	32	835	1,503	5
10/22/2007	C12-01	34	1,500	1,580	34	767	961	5
10/22/2007	C04-02	32	1,450	1,450	32	859	2,002	5
10/22/2007	C09-01	50	1,550	1,750	50	887	2,714	5
10/23/2007	C09-02/D	69	1,600	1,850	64	366	6,059	4
10/23/2007	C09-04/D	64	1,600	1,950	63	757	6,592	4
10/23/2007	SU08-2/D	61	1,250	1,670	61	786	2,263	5

Date	Location ID	Soil Core Scanning Survey Results (Shielded 44-10 NaI)			DHG Survey Results (1x1 NaI)			Ambient Exposure Rate Result (µR/hr)
		Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	
10/24/2007	SU08-11/D	64	1,480	2,140	64	730	3,160	5
10/24/2007	C09-03/D	68	1,650	4,350	65	869	28,391	6
10/25/2007	C04-01/D	59	1,500	1,800	45	964	1,497	4
10/25/2007	C06-02/D	54	1,660	1,950	55	413	3,334	5
10/25/2007	C06-03	22	1,320	1,650	22	814	1,608	5
10/25/2007	SU14-03/D	65	2,030	2,500	65	805	3,651	5
10/26/2007	C03-01	30	1,350	1,500	30	753	1,429	5
10/26/2007	C02-02	36	1,350	1,450	35	837	3,014	5
10/29/2007	LPH-A/D	50	1,550	2,000	49	695	2,554	7
10/30/2007	100-11	26	1,450	1,650	24	970	6,277	4
10/30/2007	C03-02	32	1,200	1,600	32	779	1,591	5
10/30/2007	C02-01	34	1,400	1,500	34	746	3,078	4
10/30/2007	SU11-05/D	66	1,020	1,290	66	524	2,991	5
10/31/2007	SU11-16/D	66	1,010	1,330	65	583	1,819	4
10/31/2007	DR-D	16	1,030	1,110	15	957	1,720	4
10/31/2007	C06-01	56	1,350	1,600	57	981	1,941	4
10/31/2007	C05-02	32	1,300	1,600	33	698	1,669	4
11/1/2007	C01-01	32	1,220	1,350	33	746	1,734	4
11/1/2007	C01-02	23	1,350	1,650	23	1,105	1,562	4
11/1/2007	C01-03	25	1,200	1,600	25	912	2,398	5
11/1/2007	C05-01	30	1,300	1,400	30	735	1,827	4
11/2/2007	SU12-07/D	66	1,120	1,470	66	677	3,709	4
11/2/2007	SU12-08/I	32	1,230	1,630	31	809	2,919	4
11/2/2007	DRH-A1	32	1,000	1,400	32	758	3,700	4
11/5/2007	SU12-03	32	1,800	2,250	32	1,003	3,358	4

Date	Location ID	Soil Core Scanning Survey Results (Shielded 44-10 NaI)			DHG Survey Results (1x1 NaI)			Ambient Exposure Rate Result (µR/hr)
		Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	Total Depth (ft)	Minimum Result (cpm)	Maximum Result (cpm)	
11/5/2007	DR-K	32	1,700	2,000	32	1,082	5,321	6
11/6/2007	SU12-04	32	1,500	2,300	31	779	3,174	5
11/6/2007	DR-J	24	1,400	1,550	24	1,084	3,307	6
11/6/2007	140-07/D	66	1,580	2,050	65	468	2,992	4
11/6/2007	DRH-A2	24	1,070	1,220	24	905	1,168	5
11/7/2007	SU12-12/I	32	1,000	1,550	30	663	1,596	4
11/7/2007	SU12-11/I	32	1,150	1,500	27	721	3,756	5
11/7/2007	DRM	n/a	n/a	n/a	7	1,376	2,713	5
11/7/2007	11-06/D	58	1200	1580	58	875	2877	5
11/8/2007	DR-CC	16	1,200	1,500	10	1,377	3,377	4
11/8/2007	DR-Y	12	1,400	1,650	5	1,740	2,259	4
11/8/2007	DR-BB	11	2,100	2,300	9	1,283	2,113	3
11/9/2007	DR-AA	14	1,600	1,800	13	1,241	3,843	4
11/9/2007	DR-X	10	1,500	1,750	8	1,616	3,303	4
11/9/2007	DR-W	7	1,450	1,650	5	1,424	2,877	4
11/9/2007	DR-Z	2	1,700	1,750	2	2,679	3,232	4
11/12/2007	SU12-01/D	66	1,300	1,610	66	716	3,662	5
11/13/2007	SU12-17/I	32	1,200	1,440	32	723	3,069	5
11/14/2007	SU12-22/D	66	1,370	1,700	65	531	3,214	4
11/15/2007	DR-Z #2	8	1,750	2,150	8	1,769	3,020	4

N/A- No core scan survey performed per the direction of E & E.

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ATTACHMENT 2

Instrument QC Checks and Swipe Results

(included on compact disc)

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Inst.#149400 (2241)		
QC Daily Source		
Date	Result (cpm)	P/F
10/15/2007	234417	Pass
10/16/2007	226579	Pass
10/17/2007	222945	Pass
10/18/2007	222563	Pass
10/19/2007	224812	Pass
10/22/2007	219387	Pass
10/23/2007	229797	Pass
10/24/2007	244964	Pass
10/25/2007	245649	Pass
10/26/2007	244551	Pass
10/29/2007	228209	Pass
10/30/2007	242521	Pass
10/31/2007	239996	Pass
11/1/2007	249700	Pass
11/2/2007	247435	Pass
11/5/2007	238691	Pass
11/6/2007	246402	Pass
11/7/2007	239218	Pass
11/8/2007	243155	Pass
11/9/2007	238893	Pass
11/12/2007	241922	Pass
11/13/2007	239807	Pass
11/14/2007	237893	Pass
11/15/2007	235899	Pass

Inst.#149400 (2241)		Source Ser. #	1228
Initial Source Readings		Nuclide	Cs-137
Date	Result (cpm)		
10/15/2007	230379		
10/15/2007	229649		
10/15/2007	229719		
10/15/2007	235262		
10/15/2007	235405		
10/15/2007	234631		
10/15/2007	235608		
10/15/2007	235460		
10/15/2007	235747		
10/15/2007	234417		
	Average		
	233628		

Inst.#149408 (2241)		
QC Daily Source		
Date	Result (cpm)	P/F
10/15/2007	208536	Pass
10/16/2007	195164	Pass
10/17/2007	208170	Pass
10/18/2007	208321	Pass
10/19/2007	212289	Pass
10/22/2007	207958	Pass
10/23/2007	209526	Pass
10/24/2007	208287	Pass
10/25/2007	211119	Pass
10/26/2007	213698	Pass
10/29/2007	211527	Pass
10/30/2007	207211	Pass
10/31/2007	203951	Pass
11/1/2007	210592	Pass
11/2/2007	213245	Pass
11/5/2007	210933	Pass
11/6/2007	206816	Pass
11/7/2007	217714	Pass
11/8/2007	211442	Pass
11/9/2007	207420	Pass
11/12/2007	205213	Pass
11/13/2007	203814	Pass
11/14/2007	209165	Pass
11/15/2007	210144	Pass

Inst.#149408 (2241)		Source Ser. #	1228
Initial Source Readings		Nuclide	Cs-137
Date	Result (cpm)		
10/15/2007	208960		
10/15/2007	208910		
10/15/2007	209151		
10/15/2007	208658		
10/15/2007	208136		
10/15/2007	208265		
10/15/2007	208189		
10/15/2007	207932		
10/15/2007	208817		
10/15/2007	208536		
	Average		
	208555		

Inst.#148089		
QC Daily Source		
Date	Result (cpm)	P/F
11/12/2007	240924	Pass
11/13/2007	249707	Pass
11/14/2007	237854	Pass
11/15/2007	235732	Pass

Inst.#148089		Source Ser. #	1228
Initial Source Readings		Nuclide	Cs-137
Date	Result (cpm)		
11/12/2007	241142		
11/12/2007	241770		
11/12/2007	241238		
11/12/2007	240972		
11/12/2007	241128		
11/12/2007	241128		
11/12/2007	241968		
11/12/2007	240258		
11/12/2007	240578		
11/12/2007	240600		
	Average		
	241078		

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MJW Technical Services
243 Root St.
Suite 100
Olean, New York 14760
Voice: (716) 372-5300
Fax: (716) 372-5307

Certificate Of Calibration

This Certificate will be accompanied by Calibration Charts or Readings where Applicable

Customer

Customer Name: Cabrera Services Inc

Address: 473 Silver Lane
East Hartford, CT 06118

Contact Name: Chuck Mikaitis

Customer PO/
CC. Number: 08-1090

Work Order
Number: 2007-347

Instrument

Manufacturer: Ludlum Measurements, Inc.

Model: 3 Serial Number: 166511

Detector Manufacturer: Ludlum Measurements, Inc.

Det. Model: 44-9 Serial Number: PR073107

Meterface: 202-002 Calibration Method: Electronic

Instrument Received: ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other (See Comments)

☑ Geotropism ☑ Meter Zero ☑ Mech. Ck. ☐ HV Readout ☑ Battery Check ☑ Reset

☑ Audio ☐ Window Status ☑ FS Response ☐ Linearity ☐ Background Subtract ☐ Alarm Set

Temperature: 71.2 F Humidity: 61 % Pressure: 726.4 mm Hg Altitude: 1455 ft

Instrument Calibration

Multiplier\Range	Calibration Point	Instrument Response	
		Before Calibration	After Calibration
X 0.1	100 cpm	95 cpm	100 cpm
X 0.1	400 cpm	395 cpm	400 cpm
X 1	1 Kcpm	1 Kcpm	1 Kcpm
X 1	4 Kcpm	4 Kcpm	4 Kcpm
X 10	10 Kcpm	10 Kcpm	10 Kcpm
X 10	40 Kcpm	40 Kcpm	40 Kcpm
X 100	100 Kcpm	100 Kcpm	100 Kcpm
X 100	400 Kcpm	400 Kcpm	400 Kcpm

Reference instruments and / or Sources

Pulser: LUD500-2	220099		
Th-230	C7-643	C-14	C7-804
SrY-90	C7-661	Tc-99	C7-641

Comments

Inst. Voltage: 900 V Input Sensitivity: 36 mV

4 Pi Efficiency @ 1/4 inch

Th-230 4.0%

C-14 2.4%

Tc-99 11.0%

SrY-90 27.3%

Statement of Certification

MJW Technical Sevices, Inc certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANS/NCSL Z540-1-1994 and ANSI N323. The instrument listed above was inspected prior to shipment and it met all the manufacturer's published operating specifications. (MJW technical Services is not responsible for damage incurred during shipment or use of this instrument).

Instrument Calibrated By: [signature]

Reviewed By: Linda M. Lund Date 10/3/07

Calibration Date: 10/02/2007

Calibration Due: 10/02/2008

Certificate of Calibration

2 Channel Scaler Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2929 Serial No.: 196226

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: 97743 ☐ 201932 ☑

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☐ Meter Zeroed ☐ Geotropism ck. ☐ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☐ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 175 mV Beta Threshold.: 4 mV Beta Window.: 50 mV

Voltage setting: 550 volts = 2.26 on HV Dial (Pot.)

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Alpha Channel Digital Readout		Beta Channel Digital Readout	
	Instrument "As Found Reading"	Integrated Counts (1-minute count)	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398888	+/- 10%	398894
40 Kcpm	+/- 10%	39891	+/- 10%	39890
4 Kcpm	+/- 10%	3989	+/- 10%	3989
400 cpm	+/- 10%	399	+/- 10%	399

Calibrated By: _____ Calibration Date: 9-26-07

Calibration Due: 9-26-08

Reviewed By: _____ Date: 9/27/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-10-1 Serial No.: PR215943

Counter Mfg.: Ludlum Model: 2929 Serial No.: 196226

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 175 mV Beta Threshold: 4 mV Beta Window: 50 mV

Geometry / Distance to source: In planchett Cable Length: ☑ 39 inch ☐ Other:

Alpha Source: ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts		Pot. Setting
	Alpha	Beta	Alpha	Beta	Alpha	Beta	
500	4383	263	7	2535	4	42	2.06
550	4752	414	3	3735	3	59	2.26
600	4822	765	4	4768	2	83	2.46
650	4849	1489	4	4853	2	67	2.66

Comments: Recommended Operating High Voltage: 550 volts

Calibrated By: [signature] Calibration Date: 9-26-07

Calibration Due: 9-26-08

Reviewed By: [signature] Date: 9/27/07

Certificate of Calibration

2 Channel Scaler Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2929 Serial No.: 137607

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: 97743 ☐ 201932 ☑

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☐ Meter Zeroed ☐ Geotropism ck. ☐ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☐ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 170 mV Beta Threshold.: 4 mV Beta Window.: 50 mV

Voltage setting: 700 volts = 2.92 on HV Dial (Pot.)

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Alpha Channel Digital Readout		Beta Channel Digital Readout	
	Instrument "As Found Reading"	Integrated Counts (1-minute count)	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398865	+/- 10%	398813
40 Kcpm	+/- 10%	39889	+/- 10%	39880
4 Kcpm	+/- 10%	3988	+/- 10%	3989
400 cpm	+/- 10%	398	+/- 10%	399

Calibrated By: _____ Calibration Date: 9-26-07

Calibration Due: 9-26-08

Reviewed By: _____ Date: 9/26/07

Certificate of Calibration

Voltage Plateau Form

Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-10-1 Serial No.: PR142936

Counter Mfg.: Ludlum Model: 2929 Serial No.: 137607

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 170 mV Beta Threshold: 4 mV Beta Window: 50 mV

Geometry / Distance to source: In planchett Cable Length: ☑ 39 inch ☐ Other:

Alpha Source: ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 minute(s)

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts		Pot. Setting
	Alpha	Beta	Alpha	Beta	Alpha	Beta	
600	4520	264	3	2732	0	64	2.52
650	4782	309	6	3546	0	68	2.74
700	4816	502	3	4222	1	71	2.92
750	4815	816	10	4142	3	89	3.14

Comments: Recommended Operating High Voltage: 700 volts

Calibrated By: [signature] Calibration Date: 9-26-07

Calibration Due: 9-26-07

Reviewed By: [signature] Date: 9/26/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2241 Serial No.: 148089

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☐ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck.: ☐ 500v ☐ 1000v ☐ 1500v ☐ Battery ck. (min 4.4 vdc)

Threshold Setting: 10 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	399 kC/m
100 Kcpm	+/- 10%	99.0 kC/m
40 Kcpm	+/- 10%	39.8 kC/m
10 Kcpm	+/- 10%	9.95 kC/m
4 Kcpm	+/- 10%	3.98 kC/m
1 Kcpm	+/- 10%	0.99 kC/m
400 cpm	+/- 10%	395 C/m
100 cpm	+/- 10%	103 C/m

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398803
40 Kcpm	+/- 10%	39881
4 Kcpm	+/- 10%	3988
400 cpm	+/- 10%	399

Calibrated By:  Calibration Date: 9-25-07

Calibration Due: 9-25-08

Reviewed By: Cloud Date: 9/25/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-10 Serial No.: PR154617

Counter Mfg.: Ludlum Model: 2241 Serial No.: 148089

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Counter Threshold Setting: 10 mV Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other: ~~Curly~~

Detector geometry to source: ☐ Face, ☑ Side, ☐ Below, ☐ Other:

Distance to source: ☐ Contact, ☑ 6-Inches, ☐ Other:

Gamma Source : ☑ Cs-137 @ 5.81µCi (3/07/07) sn: 4097-03 ☐ Other:

Count Time: 1 Minute

High Voltage	Gross Source Counts	Background Counts
600	20863	
700	47046	
800	72973	
900	82776	
→ 1000	83467	9491
1100	83593	
1200	84000	

Comments: Recommended Operating High Voltage: 1000 volts

Calibrated By: [signature] Calibration Date: 9-25-07

Calibration Due: 9-25-08

Reviewed By: [signature] Date: 9/25/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2241 Serial No.: 150711

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☐ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck.: ☐ 500v ☐ 1000v ☐ 1500v ☐ Battery ck. (min 4.4 vdc)

Threshold Setting: 10 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	398 kC/m
100 Kcpm	+/- 10%	100 kC/m
40 Kcpm	+/- 10%	39.8 kC/m
10 Kcpm	+/- 10%	10.0 kC/m
4 Kcpm	+/- 10%	3.99 kC/m
1 Kcpm	+/- 10%	1.00 kC/m
400 cpm	+/- 10%	398 C/m
100 cpm	+/- 10%	99 C/m

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398957
40 Kcpm	+/- 10%	39896
4 Kcpm	+/- 10%	3990
400 cpm	+/- 10%	399

Calibrated By: [signature] Calibration Date: 9-25-07

Calibration Due: 9-25-08

Reviewed By: [signature] Date: 9/25/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-10 Serial No.: PR150852

Counter Mfg.: Ludlum Model: 2241 Serial No.: 150711

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Counter Threshold Setting: 10 mV Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other: ~~Curly~~

Detector geometry to source: ☐ Face, ☑ Side, ☐ Below, ☐ Other:

Distance to source: ☐ Contact, ☑ 6-Inches, ☐ Other:

Gamma Source :☑Cs-137 @ 5.81μCi (3/07/07) sn: 4097-03 ☐ Other:

Count Time: 1 Minute

High Voltage	Gross Source Counts	Background Counts
600	173	
700	2142	
800	40493	
900	63943	
1000	76205	
→ 1100	80777	9358
1200	84428	

Comments: Recommended Operating High Voltage: 1100 volts

Calibrated By: [signature] Calibration Date: 9-25-07

Calibration Due: 9-25-08

Reviewed By: [signature] Date: 9/25/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2241 Serial No.: 149408

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☐ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck.: ☐ 500v ☐ 1000v ☐ 1500v ☐ Battery ck. (min 4.4 vdc)

Threshold Setting: 10 mV

Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	398 kC/m
100 Kcpm	+/- 10%	99.8 kC/m
40 Kcpm	+/- 10%	39.8 kC/m
10 Kcpm	+/- 10%	9.97 kC/m
4 Kcpm	+/- 10%	3.98 kC/m
1 Kcpm	+/- 10%	0.99 kC/m
400 cpm	+/- 10%	392 C/m
100 cpm	+/- 10%	94 C/m

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398960
40 Kcpm	+/- 10%	39897
4 Kcpm	+/- 10%	3989
400 cpm	+/- 10%	399

Calibrated By: [signature] Calibration Date: 9-25-07

Calibration Due: 9-25-08

Reviewed By: [signature] Date: 9/25/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-10 Serial No.: PR150507

Counter Mfg.: Ludlum Model: 2241 Serial No.: 149408

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Counter Threshold Setting: 10 mV Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other: ~~Curly~~

Detector geometry to source: ☐ Face, ☑ Side, ☐ Below, ☐ Other:

Distance to source: ☐ Contact, ☑ 6-Inches, ☐ Other:

Gamma Source: ☑ Cs-137 @ 5.81µCi (3/07/07) sn: 4097-03 ☐ Other:

Count Time: 1 Minute

High Voltage	Gross Source Counts	Background Counts
600	49369	
700	71261	
800	78028	
900	81625	
1000	82381	9870
1100	82408	
1200	90919	

Comments: Recommended Operating High Voltage: 1000 volts

Calibrated By: [signature] Calibration Date: 9-25-07

Calibration Due: 9-25-08

Reviewed By: [signature] Date: 9/25/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2241 Serial No.: 149400

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☐ Geotropism ck. ☑ F/S Response ck. ☑ Audio ck.

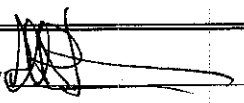
☐ THR/WIN ck. High Voltage ck.: ☐ 500v ☐ 1000v ☐ 1500v ☐ Battery ck. (min 4.4 vdc)

Threshold Setting: 10 mV

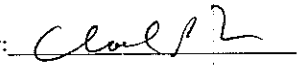
Instrument found within tolerance (+/- 10%) ☑ Yes ☐ No

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	399 kC/m
100 Kcpm	+/- 10%	99.5 kC/m
40 Kcpm	+/- 10%	39.8 kC/m
10 Kcpm	+/- 10%	9.99 kC/m
4 Kcpm	+/- 10%	3.97 kC/m
1 Kcpm	+/- 10%	0.99 kC/m
400 cpm	+/- 10%	399 C/m
100 cpm	+/- 10%	99 C/m

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	399320
40 Kcpm	+/- 10%	39933
4 Kcpm	+/- 10%	3993
400 cpm	+/- 10%	399

Calibrated By:  Calibration Date: 9-25-07

Calibration Due: 9-25-08

Reviewed By:  Date: 9/25/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 44-10 Serial No.: PR112840

Counter Mfg.: Ludlum Model: 2241 Serial No.: 149400

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Counter Threshold Setting: 10 mV Cable Length: ☑ 39 inch, ☐ 5 foot, ☐ Other: ~~Curly~~

Detector geometry to source: ☐ Face, ☑ Side, ☐ Below, ☐ Other:

Distance to source: ☐ Contact, ☑ 6-Inches, ☐ Other:

Gamma Source :☑Cs-137 @ 5.81µCi (3/07/07) sn: 4097-03 ☐ Other:

Count Time: 1 Minute

High Voltage	Gross Source Counts	Background Counts
600	709	
700	30860	
800	55762	
900	69892	
1000	76075	
1100	80584	9714
1200	81475	

Comments: Recommended Operating High Voltage: 1100 volts

Calibrated By: Calibration Date: 9-25-07

Calibration Due: 9-25-08

Reviewed By: Date: 9/25/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2360 Serial No.: 193652

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☐ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 120 mV Beta Threshold.: 4 mV Beta Window.: 30 mV

Internal Calibration Date Reset ☑ Instrument found within tolerance (+/- 10%) Yes ☑ No ☐

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm	+/- 10%	100 Kcpm
40 Kcpm	+/- 10%	40 Kcpm
10 Kcpm	+/- 10%	10 Kcpm
4 Kcpm	+/- 10%	4 Kcpm
1 Kcpm	+/- 10%	1 Kcpm
400 cpm	+/- 10%	400 cpm
100 cpm	+/- 10%	100 cpm

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398719
40 Kcpm	+/- 10%	39874
4 Kcpm	+/- 10%	3987
400 cpm	+/- 10%	399

Calibrated By: [signature] Calibration Date: 10-5-07

Calibration Due: 10-5-08

Reviewed By: [signature] Date: 10/5/07

ERG Form 1.02C

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-93 Serial No.: PR 199836

Counter Mfg.: Ludlum Model: 2360 Serial No.: 193652

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 120 mV Beta Threshold: 4 mV Beta Window: 30 mV

Detector geometry to source: ☑ Face, ☐ Side, ☐ Below, ☐ Other:

Distance to source: ☑ Contact, ☐ 6-Inches, ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 Minute

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
650	1827	286	19	282	1	55
700	2678	358	19	1555	0	141
→ 750	2884	639	24	2891	2	254
775	2889	920	20	3437	2	319
800	2971	1182	19	3950	4	351

Comments: Recommended Operating High Voltage: 750 volts

Calibrated By: Calibration Date: 10-5-07

Calibration Due: 10-5-08

Reviewed By: Date: 10/5/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2360 Serial No.: 168043

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☐ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 120 mV Beta Threshold.: 4 mV Beta Window.: 30 mV

Internal Calibration Date Reset ☑ Instrument found within tolerance (+/- 10%) Yes ☑ No ☐

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm	+/- 10%	100 Kcpm
40 Kcpm	+/- 10%	40 Kcpm
10 Kcpm	+/- 10%	10 Kcpm
4 Kcpm	+/- 10%	4 Kcpm
1 Kcpm	+/- 10%	1 Kcpm
400 cpm	+/- 10%	400 cpm
100 cpm	+/- 10%	100 cpm

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398655
40 Kcpm	+/- 10%	39868
4 Kcpm	+/- 10%	3987
400 cpm	+/- 10%	399

Calibrated By: [signature] Calibration Date: 10-5-07

Calibration Due: 10-5-08

Reviewed By: [signature] Date: 10/5/07

ERG Form 1.02C

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-93 Serial No.: PR 179861

Counter Mfg.: Ludlum Model: 2360 Serial No.: 168043

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 120 mV Beta Threshold: 4 mV Beta Window: 30 mV

Detector geometry to source: ☑ Face, ☐ Side, ☐ Below, ☐ Other:

Distance to source: ☑ Contact, ☐ 6-Inches, ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 Minute

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
750	2027	274	6	124	4	45
800	2599	293	5	865	1	125
850	2817	613	9	1833	2	196
875	2762	875	20	2494	2	311
900	2761	1338	11	3090	4	366

Comments: Recommended Operating High Voltage: 850 volts

Calibrated By: [signature] Calibration Date: 10-5-07

Calibration Due: 10-5-08

Reviewed By: [signature] Date: 10/5/07

Certificate of Calibration

Ratemeter Certificate of Calibration

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2360 Serial No.: 184952

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☐ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 120 mV Beta Threshold.: 4 mV Beta Window.: 30 mV

Internal Calibration Date Reset ☑ Instrument found within tolerance (+/- 10%) Yes ☑ No ☐

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm	+/- 10%	100 Kcpm
40 Kcpm	+/- 10%	40 Kcpm
10 Kcpm	+/- 10%	10 Kcpm
4 Kcpm	+/- 10%	4 Kcpm
1 Kcpm	+/- 10%	1 Kcpm
400 cpm	+/- 10%	400 cpm
100 cpm	+/- 10%	100 cpm

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398746
40 Kcpm	+/- 10%	39875
4 Kcpm	+/- 10%	3988
400 cpm	+/- 10%	399

Calibrated By: [signature] Calibration Date: 10-5-07

Calibration Due: 10-5-08

Reviewed By: [signature] Date: 10/5/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-93 Serial No.: PR 199827

Counter Mfg.: Ludlum Model: 2360 Serial No.: 184952

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 120 mV Beta Threshold: 4 mV Beta Window: 30 mV

Detector geometry to source: ☑ Face, ☐ Side, ☐ Below, ☐ Other:

Distance to source: ☑ Contact, ☐ 6-Inches, ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 Minute

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
800	2113	185	14	229	1	41
850	2522	266	9	1029	2	96
900	2746	433	16	2016	2	162
925	2707	481	17	2494	3	227
950	2835	679	22	2875	3	295

Comments: Recommended Operating High Voltage: 925 volts

Calibrated By: Calibration Date: 10-5-07

Calibration Due: 10-5-08

Reviewed By: Date: 10/5/07

Certificate of Calibration

Ratemeter Certificate of Calibration

Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Manufacturer: Ludlum Model: 2360 Serial No.: 220246

All Ranges Calibrated Electronically; Ludlum Pulser Generator Serial No.: ☐ 97743 ☑ 201932

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

☑ Mechanical ck. ☑ Meter Zeroed ☑ Geotropism ck. ☐ F/S Response ck. ☑ Audio ck.

☐ THR/WIN ck. High Voltage ck. ☑ 500v ☑ 1000v ☑ 1500v ☑ Battery ck. (min 4.4 vdc)

Alpha Threshold.: 120 mV Beta Threshold.: 4 mV Beta Window.: 30 mV

Internal Calibration Date Reset ☑ Instrument found within tolerance (+/- 10%) Yes ☑ No ☐

Reference Setting	Instrument "As Found Reading"	Instrument Meter Reading
400 Kcpm	+/- 10%	400 Kcpm
100 Kcpm	+/- 10%	100 Kcpm
40 Kcpm	+/- 10%	40 Kcpm
10 Kcpm	+/- 10%	10 Kcpm
4 Kcpm	+/- 10%	4 Kcpm
1 Kcpm	+/- 10%	1 Kcpm
400 cpm	+/- 10%	400 cpm
100 cpm	+/- 10%	100 cpm

Reference Setting	Instrument "As Found Reading"	Integrated Counts (1-minute count)
400 Kcpm	+/- 10%	398492
40 Kcpm	+/- 10%	39878
4 Kcpm	+/- 10%	3988
400 cpm	+/- 10%	399

Calibrated By: _____ Calibration Date: 10-5-07

Calibration Due: 10-5-08

Reviewed By: _____ Date: 10/5/07

Certificate of Calibration

Voltage Plateau Form

ERG
Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224

Detector Mfg.: Ludlum Model: 43-93 Serial No.: PR 199826

Counter Mfg.: Ludlum Model: 2360 Serial No.: 220246

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 481-3 • Calibration of Radiation Detection Instruments & Devices

Alpha Threshold: 120 mV Beta Threshold: 4 mV Beta Window: 30 mV

Detector geometry to source: ☑ Face, ☐ Side, ☐ Below, ☐ Other:

Distance to source: ☑ Contact, ☐ 6-Inches, ☐ Other:

Alpha Source : ☑ Th230 @ 13,300 dpm (1/19/07) sn: 4098-03 ☐ Other:

Beta Source: ☑ Tc99 @ 17,800 dpm (1/15/07) sn: 4099-03 ☐ Other:

Count Time: 1 Minute

High Voltage	Alpha Source Counts		Beta Source Counts		Background Counts	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
700	2053	281	7	448	0	80
750	2537	376	5	1718	0	134
775	2688	481	5	2248	1	235
800	2739	618	6	2657	0	397

Comments: Recommended Operating High Voltage: 775 volts

Calibrated By: [signature] Calibration Date: 10-5-07

Calibration Due: 10-5-08

Reviewed By: [signature] Date: 10/5/07

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER ERG ORDER NO. 279730/315084

Mfg. Thermo Model MICRO REM Serial No. 1716

Mfg. _____ Model _____ Serial No. _____

Cal. Date 9-Jul-07 Cal Due Date 9-Jul-08 Cal. Interval 1 Year Meterface 0-200µrem

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 58 % Alt 698.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☐ Geotropism
☐ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) _____ VDC

☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set _____ V Input Sens. _____ mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☐ HV Readout (2 points) Ref./Inst. _____ / _____ V Ref./Inst. _____ / _____ V

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
x1000	150 mR/hr	150	150
x1000	50 mR/hr	50	50
x100	15 mR/hr	152	150
x100	5 mR/hr	50	50
x10	1500 µR/hr	150	150
x10	500 µR/hr	45	45
x1	150 µR/hr	150	150
x1	100 µR/hr	100	100
x0.1	15 µR/hr	150	150
x0.1			

*Uncertainty within ± 10% C.F. within ± 20%

Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout				Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques.
The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ S-394/1122 ☐ 1131 ☐ 781

Cs-137 Gamma S/N ☐ 1162 ☑ G112 ☑ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☑ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☑ Other Cs-137 20µci

☐ m 500 S/N _____ ☐ Oscilloscope S/N _____ ☐ Multimeter S/N _____

Calibrated By: Dwaine Jackson Date 9-Jul-07

Reviewed By: Rhonda Harris Date 10 Jul 07

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.
FORM C22A 01/24/2007

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed: _____

Calibration Certificate
ID Number: 19020511653-0

CTI Calibration Technology
A Division of RSCS, Inc.

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument	Serial Number
Ludlum Model 2221	190205

Probe Model	Serial Number
Bicron G-1	C436E

Precision Check

Test 1	Test 2	Test 3	Mean	Results
4.00 Kcpm	**4.00 Kcpm**	**4.00 Kcpm**	**4.00 Kcpm**	**Satisfactory**

Accuracy Check

Range	Target Value	As Found	As Left
X1000	400 Kcpm	399.133 Kcpm #	399.133 Kcpm #
X1000	100 Kcpm	98.969 Kcpm #	98.969 Kcpm #
X100	40 Kcpm	39.932 Kcpm #	39.932 Kcpm #
X100	10 Kcpm	9.912 Kcpm #	9.912 Kcpm #
X10	4 Kcpm	3.997 Kcpm #	3.997 Kcpm #
X10	1 Kcpm	0.992 Kcpm #	0.992 Kcpm #
X1	400 cpm	399 cpm #	399 cpm #
X1	100 cpm	100 cpm #	100 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
G-1 C436E	Ba-133	0.1685 C/D	Ba-133 (SN: 380-39-1)	@1cm
G-1 C436E	Co-57	0.1439 C/D	Co-57 (SN: 14288)	@1cm
G-1 C436E	Cs-137	0.0425 C/D	Cs-137 (SN: 14290)	@1cm
G-1 C436E	I-129	0.0616 C/D	I-129 (SN: NES-186S)	@1cm

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/15/2008

Outer Physical Check: *Pass* Mechanical Zero: *Pass*
Internal Check: *Pass* Tap Test: *Pass*
Geotropism Check: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**850 Volts**	**850 Volts**
Low Level Discriminator #1	**10 mV**	**10 mV**
Window	**Out**	**Out**

Comments: Analog and digital displays reflect appropriate congruence.

Calibrated by: J. Gilbo QA Review: M Faith

Date: 05/04/2007
Expires: 05/04/2008

Atmospheric Conditions - Temperature: 74° F Humidity: 21 % Barometric Pressure: 29.99 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

CTI
Calibration Technology
A Division of RSCS, Inc.

Calibration Certificate
ID Number: 21651211656-0

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument	Serial Number
Ludlum Model 2221	216512

Probe Model	Serial Number
Bicron G-1	C442E

Precision Check

Test 1	Test 2	Test 3	Mean	Results
4.00 Kcpm	**4.00 Kcpm**	**4.00 Kcpm**	**4.00 Kcpm**	**Satisfactory**

Accuracy Check

Range	Target Value	As Found	As Left
X1000	400 Kcpm	399.781 Kcpm #	399.781 Kcpm #
X1000	100 Kcpm	99.797 Kcpm #	99.797 Kcpm #
X100	40 Kcpm	39.978 Kcpm #	39.978 Kcpm #
X100	10 Kcpm	9.997 Kcpm #	9.997 Kcpm #
X10	4 Kcpm	3.998 Kcpm #	3.998 Kcpm #
X10	1 Kcpm	0.999 Kcpm #	0.999 Kcpm #
X1	400 cpm	400 cpm #	400 cpm #
X1	100 cpm	100 cpm #	100 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
G-1 C442E	Ba-133	0.1694 C/D	Ba-133 (SN: 380-39-1)	@1cm
G-1 C442E	Co-57	0.1493 C/D	Co-57 (SN: 14288)	@1cm
G-1 C442E	Cs-137	0.0435 C/D	Cs-137 (SN: 14290)	@1cm
G-1 C442E	I-129	0.0632 C/D	I-129 (SN: NES-186S)	@1cm

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/15/2008

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**895 Volts**	**895 Volts**
Low Level Discriminator #1	**10 mV**	**10 mV**
Window	**Out**	**Out**

Comments: Analog and digital displays reflect appropriate congruence.

Calibrated by: J. [signature]

QA Review: [signature]

Date: 05/04/2007
Expires: 05/04/2008

Atmospheric Conditions - Temperature: 74° F Humidity: 21 % Barometric Pressure: 29.99 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Calibration Certificate
ID Number: 19606211654-0

Calibration Technology
A Division of RSCS, Inc.

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument
Ludlum Model 2221

Serial Number
196062 ✓

Probe Model
Bicron G-1

Serial Number
C443E ✓

Precision Check				
Test 1	Test 2	Test 3	Mean	Results
9.99 Kcpm	**9.99 Kcpm**	**9.99 Kcpm**	**9.99 Kcpm**	**Satisfactory**

Accuracy Check			
Range	Target Value	As Found	As Left
X1000	400 Kcpm	399.622 Kcpm #	399.622 Kcpm #
X1000	100 Kcpm	100.139 Kcpm #	100.139 Kcpm #
X100	40 Kcpm	39.987 Kcpm #	39.987 Kcpm #
X100	10 Kcpm	9.993 Kcpm #	9.993 Kcpm #
X10	4 Kcpm	4.007 Kcpm #	4.007 Kcpm #
X10	1 Kcpm	0.999 Kcpm #	0.999 Kcpm #
X1	400 cpm	401 cpm #	401 cpm #
X1	100 cpm	100 cpm #	100 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
G-1 C443E	Ba-133	0.1736 C/D	Ba-133 (SN: 380-39-1)	@1cm
G-1 C443E	Co-57	0.1515 C/D	Co-57 (SN: 14288)	@1cm
G-1 C443E	Cs-137	0.0450 C/D	Cs-137 (SN: 14290)	@1cm
G-1 C443E	I-129	0.0684 C/D	I-129 (SN: NES-186S)	@1cm

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/15/2008

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**880 Volts**	**880 Volts**
Low Level Discriminator #1	**3.4 mV**	**10 mV**
Window	**In**	**Out**

Comments: Analog and digital displays reflect appropriate congruence.

Calibrated by: [signature]

QA Review: [signature]

Date: 05/04/2007
Expires: 05/04/2008

Atmospheric Conditions - Temperature: 74° F Humidity: 21 % Barometric Pressure: 29.99 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
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Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

Calibration Certificate
ID Number: 21648211655-0

Calibration Technology
A Division of RSCS, Inc.

Customer: Chuck Mikaitis
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument
Ludlum Model 2221

Serial Number
216482 ✓

Probe Model
Bicron G-1

Serial Number
C358C ✓

Precision Check				
Test 1	Test 2	Test 3	Mean	Results
9.95 Kcpm	**9.96 Kcpm**	**9.96 Kcpm**	**9.95 Kcpm**	**Satisfactory**

Accuracy Check			
Range	Target Value	As Found	As Left
X1000	400 Kcpm	400.549 Kcpm #	400.549 Kcpm #
X1000	100 Kcpm	99.530 Kcpm #	99.530 Kcpm #
X100	40 Kcpm	40.016 Kcpm #	40.016 Kcpm #
X100	10 Kcpm	9.953 Kcpm #	9.953 Kcpm #
X10	4 Kcpm	4.010 Kcpm #	4.010 Kcpm #
X10	1 Kcpm	0.995 Kcpm #	0.995 Kcpm #
X1	400 cpm	400 cpm #	400 cpm #
X1	100 cpm	99 cpm #	99 cpm #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges were calibrated using a pulser

Probe Model & SN	Isotope	Efficiency	NIST Source ID	Geometry
G-1 C358C	Ba-133	0.1638 C/D	Ba-133 (SN: 380-39-1)	@1cm
G-1 C358C	Co-57	0.1404 C/D	Co-57 (SN: 14288)	@1cm
G-1 C358C	Cs-137	0.0427 C/D	Cs-137 (SN: 14290)	@1cm
G-1 C358C	I-129	0.0598 C/D	I-129 (SN: NES-186S)	@1cm

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4SN: 66151	01/15/2008

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Electronics Checks	As Found	As Left
High Voltage	**945 Volts**	**945 Volts**
Low Level Discriminator #1	**10 mV**	**10 mV**
Window	**Out**	**Out**

Comments: Analog and digital displays reflect appropriate congruence.

Calibrated by: [signature]

QA Review: [signature]

Date: 05/04/2007
Expires: 05/04/2008

Atmospheric Conditions - Temperature: 74° F Humidity: 21 % Barometric Pressure: 29.99 in/hg
This calibration was performed by RSCS using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4.
This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

Radiation Safety and Control Services, Inc.
91 Portsmouth Ave. Stratham, NH 03885
1-800-525-8339 (603) 778-2871 Fax (603) 778-6879 www.radsafety.com

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER CABRERA SERVICES ORDER NO. 269547/309433

Mfg. Ludlum Measurements, Inc. Model 3 Serial No. 79511 ✓

Mfg. Ludlum Measurements, Inc. Model 44-9 Serial No. PR137499 ✓

Cal. Date 17-Jan-07 Cal Due Date 17-Jan-08 Cal. Interval 1 Year Meterface 202-002

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 20 % Alt 708.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 900 V Input Sens. 27 mV Det. Oper. 900 V at 27 mV Threshold Dial Ratio ____ = ____ mV

☐ HV Readout (2 points) Ref./Inst. ____ / ____ V Ref./Inst. ____ / ____ V

COMMENTS:

TH-230 #121495 act.19,800dpm ct.2800cpm -Bg40 ct.2760cpm 14% 4Pi
TC-99 #5279 act.28,800dpm ct.6500cpm -Bg40 ct.6460cpm 22% 4Pi
Ni-63 #4017 act.289,562dpm ct.1100cpm -Bg40 ct.1060cpm 0.4% 4Pi
Sr90y90 #4016 act.58,269dpm ct.19000cpm -Bg40 ct.18960cpm 33% 4Pi

Cal with a 4Ft. cable.

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X 100	400kcpm	4K	4K
X 100	100kcpm	1K	1K
X 10	40kcpm	4K	4K
X 10	10kcpm	1K	1K
X 1	4kcpm	4K	4K
X 1	1kcpm	1K	1K
X 0.1	400cpm	4K	4K
X 0.1	100cpm	1K	1K

*Uncertainty within ± 10% C.F. within ± 20% ALL Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout				Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ S-394 ☐ 1122 ☐ 781

Cs-137 Gamma S/N ☐ 1162 ☑ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☑ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N ____ ☐ Beta S/N ____ ☐ Other ____

☑ m 500 S/N 54683 ☐ Oscilloscope S/N ____ ☑ Multimeter S/N 70602489

Calibrated By: Dwain Jackson Date 17JAN07

Reviewed By: Rhonda Hamm Date 18Jan07

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed: ____

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CONVERSION CHART

Customer CABRERA SERVICES Date 17-Jan-07 Order #. 269547/309433

Model 3 Serial No. 7951 Detector Model 44-9 Serial No. PR137499

Source Cs-137 194.6 mCi Cs-137 20 mCi High Voltage 900 V

Input Sensitivity 27 mV

Reference Point	"As Found" Readings (CPM): Meter Reading	Range/Scale	After Adjustment Readings (CPM): Meter Reading	Range/Scale
150 mR/hr	2K	x100	2K	x100
50 mR/hr	1.1K	x100	1.1K	x100
15 mR/hr	0.41K	x100	0.4K	x100
5 mR/hr	1.5K	x10	1.5K	x10
1.5 mR/hr	0.45K	x10	0.45K	x10
1.0 mR/hr	3.2K	x1	3.2K	x1

Signature: Dwaine Jackson Date 17-JAN07

MJW Technical Services
243 Root St.
Suite 100
Olean, New York 14760
Voice: (716) 372-5300
Fax: (716) 372-5307

Certificate Of Calibration

This Certificate will be accompanied by Calibration Charts or Readings where Applicable

Customer

Customer Name: Cabrera Services Inc

Address: 473 Silver Lane
East Hartford, CT 06118

Contact Name: Chuck M

Customer PO/
CC. Number:

Work Order
Number: 2007-189

Instrument

Manufacturer: Ludlum Measurements, Inc.

Model: 3 Serial Number: 79552 ✓

Detector Manufacturer: Ludlum Measurements, Inc.

Det. Model: 44-9 Serial Number: PR085991 ✓

Meterface: 202-002 Calibration Method: Electronic

Instrument Received: ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other (See Comments)

☑ Geotropism ☑ Meter Zero ☑ Mech. Ck. ☐ HV Readout ☑ Battery Check ☑ Reset

☑ Audio ☐ Window Status ☑ FS Response ☐ Linearity ☐ Background Subtract ☐ Alarm Set

Temperature: 71.3 F Humidity: 22 % Pressure: 726.4 mm Hg Altitude: 1451 ft

Instrument Calibration

Multiplier\Range	Calibration Point	Instrument Response	
		Before Calibration	After Calibration
X 0.1	100 cpm	100 cpm	100 cpm
X 0.1	400 cpm	400 cpm	400 cpm
X 1	1 Kcpm	0.9 Kcpm	1 Kcpm
X 1	4 Kcpm	3.8 Kcpm	4.1 Kcpm
X 10	10 Kcpm	9.5 Kcpm	10 Kcpm
X 10	40 Kcpm	39.5 Kcpm	41 Kcpm
X 100	100 Kcpm	100 Kcpm	100 Kcpm
X 100	400 Kcpm	405 Kcpm	405 Kcpm

Reference instruments and / or Sources

Pulser: LUD500-2	220099		
Th-230	C7644	C-14	C7804
Sr-90	C7661	Tc-99	C7641

Comments

Inst. Voltage: 900 V Input Sensitivity: 27 mV

Efficiencies:

4 PI at 0.25 "

Th230 6.3%

Tc99 11.1%

SrY90 21.1%

C14 2.7%

Statement of Certification

MJW Technical Sevices, Inc certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANS/NCSL Z540-1-1994 and ANSI N323. The instrument listed above was inspected prior to shipment and it met all the manufacturer's published operating specifications. (MJW technical Services is not responsible for damage incurred during shipment or use of this instrument).

Instrument Calibrated By: [signature]

Reviewed By: Linda M. Lund Date 2/12/07.

Calibration Date: 02/12/2007

Calibration Due: 02/12/2008

MJW Technical Services
243 Root St.
Suite 100
Olean, New York 14760
Voice: (716) 372-5300
Fax: (716) 372-5307

Certificate Of Calibration

This Certificate will be accompanied by Calibration Charts or Readings where Applicable

Customer	Instrument
Customer Name: Cabrera Services Inc	Manufacturer: Ludlum Measurements, Inc.
Address: 473 Silver Lane East Hartford, CT 06118	Model: 3 Serial Number: 79498 ✓
	Detector Manufacturer: Ludlum Measurements, Inc.
Contact Name: Chuck Mikaitis	Det. Model: 44-9 Serial Number: PR073106 ✓
Customer PO/ CC. Number: 07-444 / Work Order Number: 2007-229	Meterface: 202-002 Calibration Method: Electronic

Instrument Received: ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other (See Comments)

☑ Geotropism ☑ Meter Zero ☑ Mech. Ck. ☐ HV Readout ☑ Battery Check ☑ Reset

☑ Audio ☐ Window Status ☑ FS Response ☐ Linearity ☐ Background Subtract ☐ Alarm Set

Temperature: 71.1 F Humidity: 28 % Pressure: 723.9 mm Hg Altitude: 1451 ft

Instrument Calibration

Multiplier\Range	Calibration Point	Instrument Response	
		Before Calibration	After Calibration
X 0.1	100 cpm	100 cpm	100 cpm
X 0.1	400 cpm	400 cpm	400 cpm
X 1	1 Kcpm	1 Kcpm	1 Kcpm
X 1	4 Kcpm	4 Kcpm	4 Kcpm
X 10	10 Kcpm	10 Kcpm	10 Kcpm
X 10	40 Kcpm	40 Kcpm	40 Kcpm
X 100	100 Kcpm	100 Kcpm	100 Kcpm
X 100	400 Kcpm	400 Kcpm	400 Kcpm

Reference instruments and / or Sources

Pulser: LUD500-2	220099		
C-14	C7804	SrY-90	C7-661
Th-230	C7-644	Tc-99	C7-641

Comments

Inst. Voltage: 900 V Input Sensitivity: 25 mV

4 Pi Efficiency @ 1/4 inch

Th-230 9.6%

C-14 3.2%

Tc-99 10.5%

SrY-90 21.6%

Statement of Certification

MJW Technical Sevices, Inc certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANS/NCSL Z540-1-1994 and ANSI N323. The instrument listed above was inspected prior to shipment and it met all the manufacturer's published operating specifications. (MJW technical Services is not responsible for damage incurred during shipment or use of this instrument).

Instrument Calibrated By: [signature]

Reviewed By: Linda M. Zeno Date 4/12/07

Calibration Date: 04/11/2007

Calibration Due: 04/11/2008

CTI
Calibration Technology
A Division of RSCS, Inc.

Calibration Certificate
ID Number: B985Y13328-0

Customer: Hank Siegrist
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118-

Instrument
Bicron Model MicroRem

Serial Number
B985Y

Precision Check				
Test 1	Test 2	Test 3	Mean	Results
4.00 mrem/hr	4.00 mrem/hr	4.00 mrem/hr	4.00 mrem/hr	Satisfactory

Accuracy Check			
Range	Target Value	As Found	As Left
X1000	160 mrem/hr	160 mrem/hr	175 mrem/hr
X1000	40 mrem/hr	35 mrem/hr	40 mrem/hr
X100	16 mrem/hr	15.5 mrem/hr	17.5 mrem/hr
X100	4 mrem/hr	3.5 mrem/hr	4.0 mrem/hr
X10	1.6 mrem/hr	1.45 mrem/hr	1.65 mrem/hr
X10	0.4 mrem/hr	0.35 mrem/hr	0.4 mrem/hr
X1	160 µrem/hr	160 µrem/hr	160 µrem/hr
X1	40 µrem/hr	40 µrem/hr #	40 µrem/hr #
X0.1	16 µrem/hr	16 µrem/hr #	16 µrem/hr #
X0.1	4 µrem/hr	4 µrem/hr #	4 µrem/hr #

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10% of Target value
Readings with # indicate ranges where pulser was used.

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4 SN: 66151	01/15/2008

Outer Physical Check: *Pass*
Internal Check: *Pass*
Geotropism Check: *Pass*
Mechanical Zero: *Pass*
Tap Test: *Pass*

Calibrated by: QA Review:

Calibration Date: 07/24/2007
Expires: 07/24/2008

Atmospheric Conditions - Temperature: 79°F Humidity: 42% Barometric Pressure: 29.81"hg
This calibration was performed by RSCS Inc. 91 Portsmouth ave, Stratham NH 03885 using a NIST Traceable radiation source, in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure 2.4. This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc

EBERLINE SERVICES

CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# 6481
P.O.# 06-735

Description of Standard:

Model No. DNS-11 Serial No. 2888-01 ✓ Isotope Th-230

Electroplated on polished SS disc, 0.79 mm thick.

Total diameter of 4.77 cm and an active diameter of 4.45 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below, and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 4001-02.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was:

9,720 ± 388

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was:

19,200 ± 766 (0.00863 μCi)

The uncertainty of the measurement is 4 %, which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: ART REUST Reviewed by: Anthony W. Toth

Calibration Technician: Art Reust Q.A. Representative: Anthony W. Toth

Calibration Date: 6-14-2006 Reviewed Date: 6-15-06

7021 Pan American Freeway NE
Albuquerque, New Mexico 87109-4238
(505) 262-2694 Fax (505) 262-2698
www.eberlineservices.com

EBERLINE SERVICES

CERTIFICATE OF CALIBRATION

Electroplated Beta Standard

S.O.# 3759
P.O.# 01-325

Description of Standard:

Model No. DNS-12 Serial No. 2898-01 ✓ Isotope Tc-99

Electroplated on polished SS disc, 0.79 mm thick.

Total diameter of 4.77 cm and an active diameter of 4.45 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2pi beta emission rate was measured using an internal gas flow proportional chamber. Absolute counting of beta particles emitted in the hemisphere above the active surface was verified by counting above, below, and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated beta source S/N 2148/90.

Measurement Result:

The observed beta count rate from the surface of the disc per minute (cpm) on the calibration date was:

10,800 ± 432

The total disintegration rate (dpm) assuming 25 % backscatter of beta particles from the surface of the disc, was:

17,300 ± 692 (0.00780 μCi)

The uncertainty of the measurement is 4 %, which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: ART REUST Reviewed by: Barbara M. Faiberg

Calibration Technician: Art Reust Q.A. Representative: Barbara M. Faiberg

Calibration Date: 6-05-2001 Reviewed Date: 6/11/01

Analytical Services
7021 Pan American Freeway NE
Albuquerque, New Mexico 87109-4238
(505) 345-3461 Fax (505) 761-5416
Toll Free (866) RAD-LABS (723-5227)
www.eberlineservices.com

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Inst.#196062 (2221)		
QC Daily Source		
Date	Result (cpm)	P/F
10/15/2007	215250	Pass
10/16/2007	225560	Pass
10/17/2007	223425	Pass
10/18/2007	221304	Pass
10/19/2007	220706	Pass
10/22/2007	208867	Pass
10/23/2007	209238	Pass
10/24/2007	213847	Pass
10/25/2007	227106	Pass
10/26/2007	227868	Pass
10/29/2007	227445	Pass
10/30/2007	215451	Pass
10/31/2007	228172	Pass
11/1/2007	223911	Pass
11/2/2007	222219	Pass
11/5/2007	224847	Pass
11/6/2007	228360	Pass
11/7/2007	221124	Pass
11/8/2007	216396	Pass
11/9/2007	218821	Pass
11/12/2007	217613	Pass
11/13/2007	225435	Pass
11/14/2007	223795	Pass
11/15/2007	215554	Pass

Inst.#196062 (2221)		Source Ser. #	1228
Initial Source Readings		Nuclide	Cs-137
Date	Result (cpm)		
10/15/2007	210536		
10/15/2007	212316		
10/15/2007	216401		
10/15/2007	216814		
10/15/2007	216600		
10/15/2007	216759		
10/15/2007	216552		
10/15/2007	216904		
10/15/2007	215250		
10/15/2007	225560		
	Average		
	216369		

Inst.#216512 (2221)		
QC Daily Source		
Date	Result (cpm)	P/F
10/15/2007	216421	Pass
10/16/2007	222166	Pass
10/17/2007	223742	Pass
10/18/2007	223777	Pass
10/19/2007	216965	Pass
10/22/2007	222043	Pass
10/23/2007	219601	Pass
10/24/2007	221202	Pass
10/25/2007	220021	Pass
10/26/2007	218636	Pass
10/29/2007	210349	Pass
10/30/2007	223580	Pass
10/31/2007	210900	Pass
11/1/2007	223232	Pass
11/2/2007	222219	Pass
11/5/2007	216866	Pass
11/6/2007	221530	Pass
11/7/2007	213564	Pass
11/8/2007	223687	Pass
11/9/2007	215009	Pass
11/12/2007	206869	Pass
11/13/2007	222274	Pass

Inst.#216512 (2221)		Source Ser. #	1228
Initial Source Readings		Nuclide	Cs-137
Date	Result (cpm)		
10/15/2007	217475		
10/15/2007	217212		
10/15/2007	217100		
10/15/2007	217193		
10/15/2007	216510		
10/15/2007	216262		
10/15/2007	216295		
10/15/2007	216599		
10/15/2007	216923		
10/15/2007	216421		
	Average		
	216799		

Inst.#B985Y (uRem)		
QC Daily Source		
Date	Result (µrem/hr)	P/F
10/15/2007	100	Pass
10/16/2007	110	Pass
10/17/2007	100	Pass
10/18/2007	110	Pass
10/19/2007	100	Pass
10/22/2007	110	Pass
10/23/2007	100	Pass
10/24/2007	100	Pass
10/25/2007	100	Pass
10/26/2007	100	Pass
10/29/2007	100	Pass
10/30/2007	100	Pass
10/31/2007	100	Pass
11/1/2007	100	Pass
11/2/2007	100	Pass
11/5/2007	100	Pass
11/6/2007	110	Pass
11/7/2007	100	Pass
11/8/2007	100	Pass
11/9/2007	100	Pass
11/12/2007	110	Pass
11/13/2007	100	Pass
11/14/2007	110	Pass

Inst.#B985Y (uRem)		Source Ser. #	1228
Initial Source Readings		Nuclide	Cs-137
Date	Result (µrem/hr)		
10/15/2007	100		
10/15/2007	100		
10/15/2007	110		
10/15/2007	100		
10/15/2007	100		
10/15/2007	110		
10/15/2007	100		
10/15/2007	110		
10/15/2007	110		
10/15/2007	100		
	Average		
	104		

Inst.#1716 (uRem)		
QC Daily Source		
Date	Result (µrem/hr)	P/F
10/15/2007	140	Pass
10/16/2007	150	Pass
10/17/2007	140	Pass
10/18/2007	140	Pass
10/19/2007	140	Pass
10/22/2007	150	Pass
10/23/2007	140	Pass
10/24/2007	150	Pass
10/25/2007	150	Pass
10/26/2007	150	Pass
10/29/2007	150	Pass
10/30/2007	140	Pass
10/31/2007	150	Pass
11/1/2007	140	Pass
11/2/2007	140	Pass
11/5/2007	150	Pass
11/6/2007	140	Pass
11/7/2007	150	Pass
11/8/2007	140	Pass
11/9/2007	140	Pass
11/12/2007	140	Pass
11/13/2007	140	Pass
11/14/2007	140	Pass
11/15/2007	140	Pass

Inst.#1716 (uRem)		Source Ser. #	1228
Initial Source Readings		Nuclide	Cs-137
Date	Result (µrem/hr)		
10/15/2007	140		
10/15/2007	150		
10/15/2007	150		
10/15/2007	140		
10/15/2007	140		
10/15/2007	150		
10/15/2007	140		
10/15/2007	150		
10/15/2007	150		
10/15/2007	140		
	Average		
	145		

Equipment Chi-Square Distribution Worksheet

Count No.	X_i	X_m-X_i	$(X_m-X_i)^2$
1	6825	146.6	21491.56
2	6909	62.6	3918.76
3	6999	-27.4	750.76
4	7090	-118.4	14018.56
5	7123	-151.4	22921.96
6	6895	76.6	5867.56
7	6993	-21.4	457.96
8	7080	-108.4	11750.56
9	6905	66.6	4435.56
10	6957	14.6	213.16
11	6765	206.6	42683.56
12	6917	54.6	2981.16
13	7020	-48.4	2342.56
14	7136	-164.4	27027.36
15	6946	25.6	655.36
16	6896	75.6	5715.36
17	6973	-1.4	1.96
18	6950	21.6	466.56
19	7081	-109.4	11968.36
20	6972	-0.4	0.16
Sum total	139432		179668.8
X_m	6971.6		

Instrument/Detector	2929 / 43-10-1
Serial # / Serial#	196226 / PR215943
Date Performed	15-Oct-07
Count time interval (minutes)	1
Source Used	Th-230

X^2 = 25.77

Note: Accept χ^2 if between 8.91 and 32.8

Equipment Chi-Square Distribution Worksheet

Count No.	X_i	X_m-X_i	$(X_m-X_i)^2$
1	7434	-213.45	45560.9
2	7264	-43.45	1887.902
3	7302	-81.45	6634.102
4	7242	-21.45	460.1025
5	7088	132.55	17569.5
6	7331	-110.45	12199.2
7	7057	163.55	26748.6
8	7246	-25.45	647.7025
9	7143	77.55	6014.003
10	7108	112.55	12667.5
11	7274	-53.45	2856.902
12	7240	-19.45	378.3025
13	7339	-118.45	14030.4
14	7284	-63.45	4025.902
15	7144	76.55	5859.903
16	7189	31.55	995.4025
17	7088	132.55	17569.5
18	7246	-25.45	647.7025
19	7157	63.55	4038.603
20	7235	-14.45	208.8025
Sum total	144411		181001
X_m	7220.55		

Instrument/Detector	2929 / 43-10-1
Serial # / Serial#	137607 / PR142936
Date Performed	15-Oct-07
Count time interval (minutes)	1
Source Used	Th-230

X^2 = 25.07

Note: Accept χ^2 if between 8.91 and 32.8

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 6)

Counting Instrument:	2929	Detector:	43-10-1	Calibration Date:	9/28/2008
Serial #:	137607	Serial #:	PR142936	12 month calibration:	OK
Detector Active Area or Area Covered by Smear (cm^2):	100				

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA (DPM/100cm^2)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.3760	Th-230	2888-01	19,200	6/14/2006	7.54E+04	19,200	20	10	1	0.26	0.20	7221.2	120.28
Beta	0.1370	Tc-99	2898-01	17,300	6/5/2001	2.11E+05	17,300	1000	10	1	44.69	2.42	2765.8	43.30

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
10/15/2007	3	435	7274	2837	0.3	43.5	7273.7	2793.5	PASS	PASS	PASS	PASS	13.01	188	Yes	Yes	MMD	MMD
10/16/2007	6	424	7154	2777	0.6	42.4	7153.4	2734.6	PASS	PASS	PASS	PASS	15.09	186	Yes	Yes	MMD	MMD
10/17/2007	1	467	7053	2710	0.1	46.7	7052.9	2663.3	PASS	PASS	PASS	*QUESTION*	10.88	194	Yes	Yes	MMD	MMD
10/18/2007	3	465	7220	2763	0.3	46.5	7219.7	2716.5	PASS	PASS	PASS	PASS	13.01	194	Yes	Yes	MMD	MMD
10/19/2007	0	385	7060	2692	0.0	38.5	7060.0	2653.5	PASS	*QUESTION*	PASS	*QUESTION*	7.98	178	Yes	Yes	MMD	MMD
10/19/2007	4	460	7060	2763	0.4	46.0	7059.6	2717.0	PASS	PASS	PASS	PASS	13.78	193	Yes	Yes	MMD	MMD
10/22/2007	6	437	7258	2817	0.6	43.7	7257.4	2773.3	PASS	PASS	PASS	PASS	15.09	188	Yes	Yes	MMD	MMD
10/23/2007	3	445	7006	2846	0.3	44.5	7005.7	2801.5	PASS	PASS	PASS	PASS	13.01	190	Yes	Yes	MMD	MMD
10/24/2007	4	433	7228	2832	0.4	43.3	7227.6	2788.7	PASS	PASS	PASS	PASS	13.78	188	Yes	Yes	MMD	MMD
10/25/2007	1	454	6999	2841	0.1	45.4	6998.9	2795.6	PASS	PASS	PASS	PASS	10.88	192	Yes	Yes	MMD	MMD
10/26/2007	0	409	7165	2858	0.0	40.9	7165.0	2817.1	PASS	PASS	PASS	PASS	7.98	183	Yes	Yes	MMD	MMD
10/29/2007	0	402	6997	2770	0.0	40.2	6997.0	2729.8	PASS	PASS	PASS	PASS	7.98	182	Yes	Yes	DA	DA
10/30/2007	6	460	7119	2810	0.6	46.0	7118.4	2764.0	PASS	PASS	PASS	PASS	15.09	193	Yes	Yes	DA	DA
10/31/2007	6	433	6984	2695	0.6	43.3	6983.4	2651.7	PASS	PASS	PASS	*QUESTION*	15.09	188	Yes	Yes	DA	DA
11/1/2007	3	508	7154	2796	0.3	50.8	7153.7	2745.2	PASS	*QUESTION*	PASS	PASS	13.01	201	Yes	Yes	DA	DA
11/2/2007	5	465	6993	2806	0.5	46.5	6992.5	2759.5	PASS	PASS	PASS	PASS	14.47	194	Yes	Yes	DA	DA
11/5/2007	1	471	7152	2736	0.1	47.1	7151.9	2688.9	PASS	PASS	PASS	PASS	10.88	195	Yes	Yes	DA	DA
11/6/2007	2	517	7176	2776	0.2	51.7	7175.8	2724.3	PASS	*QUESTION*	PASS	PASS	12.08	203	Yes	Yes	DA	DA
11/7/2007	1	441	7186	2846	0.1	44.1	7185.9	2801.9	PASS	PASS	PASS	PASS	10.88	189	Yes	Yes	DA	DA
11/8/2007	3	438	7132	2753	0.3	43.8	7131.7	2709.2	PASS	PASS	PASS	PASS	13.01	189	Yes	Yes	DA	DA
11/9/2007	6	471	7240	2898	0.6	47.1	7239.4	2850.9	PASS	PASS	PASS	PASS	15.09	195	Yes	Yes	DA	DA
11/12/2007	5	494	6915	2785	0.5	49.4	6914.5	2735.6	PASS	PASS	*QUESTION*	PASS	14.47	199	Yes	Yes	DA	DA
11/13/2007	2	490	7038	2820	0.2	49.0	7037.8	2771.0	PASS	PASS	PASS	PASS	12.08	198	Yes	Yes	DA	DA
11/14/2007	1	469	7039	2825	0.1	46.9	7038.9	2778.1	PASS	PASS	PASS	PASS	10.88	194	Yes	Yes	DA	DA
11/15/2007	4	454	7250	2845	0.4	45.4	7249.6	2799.6	PASS	PASS	PASS	PASS	13.78	192	Yes	Yes	DA	DA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 6)

Counting Instrument:	2929	Detector:	43-10-1	Calibration Date:	9/26/2008
Serial #:	196226	Serial #:	PR215943	12 month calibration:	OK
Detector Active Area or Area Covered by Smear (cm^2):	100				

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA (DPM/100cm^2)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.3630	Th-230	2888-01	19,200	6/14/2006	7.54E+04	19,200	20	10	1	0.12	0.11	6977.5	97.39
Beta	0.1230	Tc-99	2898-01	17,300	6/5/2001	2.11E+05	17,300	1000	10	1	37.09	2.06	2460.0	42.46

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
10/15/2007	1	365	6972	2468	0.1	36.5	6971.9	2431.5	PASS	PASS	PASS	PASS	11.27	194	Yes	Yes	MMD	MMD
10/16/2007	0	390	6969	2504	0.0	39.0	6969.0	2465.0	PASS	PASS	PASS	PASS	8.26	200	Yes	Yes	MMD	MMD
10/17/2007	1	376	7011	2491	0.1	37.6	7010.9	2453.4	PASS	PASS	PASS	PASS	11.27	196	Yes	Yes	MMD	MMD
10/18/2007	0	409	6919	2558	0.0	40.9	6919.0	2517.1	PASS	PASS	PASS	PASS	8.26	204	Yes	Yes	MMD	MMD
10/18/2007	2	398	6919	2558	0.2	39.8	6918.8	2518.2	PASS	PASS	PASS	PASS	12.52	201	Yes	Yes	MMD	MMD
10/19/2007	0	417	6971	2692	0.0	41.7	6971.0	2650.3	PASS	*QUESTION*	PASS	**FAIL**	8.26	206	Yes	Yes	MMD	MMD
10/19/2007	2	357	6971	2526	0.2	35.7	6970.8	2490.3	PASS	PASS	PASS	PASS	12.52	192	Yes	Yes	MMD	MMD
10/22/2007	2	379	6935	2441	0.2	37.9	6934.8	2403.1	PASS	PASS	PASS	PASS	12.52	197	Yes	Yes	MMD	MMD
10/23/2007	0	377	6982	2596	0.0	37.7	6982.0	2558.3	PASS	PASS	PASS	*QUESTION*	8.26	197	Yes	Yes	MMD	MMD
10/24/2007	2	386	6983	2516	0.2	38.6	6982.8	2477.4	PASS	PASS	PASS	PASS	12.52	199	Yes	Yes	MMD	MMD
10/25/2007	1	351	6840	2422	0.1	35.1	6839.9	2386.9	PASS	PASS	PASS	PASS	11.27	191	Yes	Yes	MMD	MMD
10/26/2007	1	395	7000	2597	0.1	39.5	6999.9	2557.5	PASS	PASS	PASS	*QUESTION*	11.27	201	Yes	Yes	MMD	MMD
10/29/2007	1	372	6982	2529	0.1	37.2	6981.9	2491.8	PASS	PASS	PASS	PASS	11.27	195	Yes	Yes	DA	DA
10/30/2007	3	381	7133	2604	0.3	38.1	7132.7	2565.9	PASS	PASS	PASS	*QUESTION*	13.47	198	Yes	Yes	DA	DA
10/31/2007	1	376	6945	2578	0.1	37.6	6944.9	2540.4	PASS	PASS	PASS	PASS	11.27	196	Yes	Yes	DA	DA
11/1/2007	0	365	6833	2486	0.0	36.5	6833.0	2449.5	PASS	PASS	PASS	PASS	8.26	194	Yes	Yes	DA	DA
11/2/2007	3	339	7061	2569	0.3	33.9	7060.7	2535.1	PASS	PASS	PASS	PASS	13.47	188	Yes	Yes	DA	DA
11/5/2007	1	363	7204	2545	0.1	36.3	7203.9	2508.7	PASS	PASS	*QUESTION*	PASS	11.27	193	Yes	Yes	DA	DA
11/6/2007	2	388	7138	2530	0.2	38.8	7137.8	2491.2	PASS	PASS	PASS	PASS	12.52	199	Yes	Yes	DA	DA
11/7/2007	0	362	7078	2558	0.0	36.2	7078.0	2521.8	PASS	PASS	PASS	PASS	8.26	193	Yes	Yes	DA	DA
11/8/2007	3	329	6998	2560	0.3	32.9	6997.7	2527.1	PASS	*QUESTION*	PASS	PASS	13.47	185	Yes	Yes	DA	DA
11/9/2007	2	391	7042	2497	0.2	39.1	7041.8	2457.9	PASS	PASS	PASS	PASS	12.52	200	Yes	Yes	DA	DA
11/12/2007	3	352	6901	2600	0.3	35.2	6900.7	2564.8	PASS	PASS	PASS	*QUESTION*	13.47	191	Yes	Yes	DA	DA
11/13/2007	2	344	7075	2555	0.2	34.4	7074.8	2520.6	PASS	PASS	PASS	PASS	12.52	189	Yes	Yes	DA	DA
11/14/2007	1	366	6945	2586	0.1	36.6	6944.9	2549.4	PASS	PASS	PASS	*QUESTION*	11.27	194	Yes	Yes	DA	DA
11/15/2007	4	393	7107	2525	0.4	39.3	7106.6	2485.7	*QUESTION*	PASS	PASS	PASS	14.28	200	Yes	Yes	DA	DA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 5)

Counting Instrument:	2360	Detector:	43/93	Calibration Date:	10/5/2008
Serial #:	193652	Serial #:	199836	12 month calibration:	OK
Detector Active Area or Area Covered by Smear (cm^2):	100			NRC 6 Mo Cal. Due Date?	OK

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA (DPM/100cm^2)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.1500	Th230	2888-01	19,200	3/30/2004	7.54E+04	19,199	100	1	1	0.70	0.95	4378.5	59.29
Beta	0.1000	Tc99	2898-01	17,300	3/30/2004	2.11E+02	17,100	1000	1	1	183.30	10.60	2437.7	54.18

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
10/15/2007	0	190	4403	2587	0.0	190.0	4403.0	2397.0	PASS	PASS	PASS	PASS	20.00	671	Yes	Yes	GT	DA
10/18/2007	1	200	4477	2600	1.0	200.0	4476.0	2400.0	PASS	PASS	PASS	PASS	51.02	688	Yes	Yes	GT	DA
10/19/2007	0	190	4460	2687	0.0	190.0	4460.0	2497.0	PASS	PASS	PASS	PASS	20.00	671	Yes	Yes	GT	DA
10/22/2007	0	189	4429	2692	0.0	189.0	4429.0	2503.0	PASS	PASS	PASS	PASS	20.00	670	Yes	Yes	GT	DA
10/23/2007	2	196	4430	2609	2.0	196.0	4428.0	2413.0	PASS	PASS	PASS	PASS	63.87	681	Yes	Yes	GT	DA
10/24/2007	1	189	4399	2773	1.0	189.0	4398.0	2584.0	PASS	PASS	PASS	*QUESTION*	51.02	670	Yes	Yes	GT	DA
10/25/2007	0	191	4506	2603	0.0	191.0	4506.0	2412.0	PASS	PASS	*QUESTION*	PASS	20.00	673	Yes	Yes	GT	DA
10/26/2007	1	174	4428	2603	1.0	174.0	4427.0	2429.0	PASS	PASS	PASS	PASS	51.02	644	Yes	Yes	GT	DA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 5)

Counting Instrument:	2360			Detector:	43/93		Calibration Date:	10/5/2008										
Serial #:	220246			Serial #:	199826		12 month calibration:	OK										
Detector Active Area or Area Covered by Smear (cm^2):					100		NRC 6 Mo Cal. Due Date?	OK										

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA ($DPM/100cm^2$)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.1500	Th230	2888-01	19,200	3/30/2004	7.54E+04	19,199	100	1	1	0.70	0.67	4349.2	87.91
Beta	0.1000	Tc99	2898-01	17,300	3/30/2004	2.11E+02	17,099	1000	1	1	171.20	10.52	2052.4	63.68

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
10/22/2007	0	177	4410	2237	0.0	177.0	4410.0	2060.0	PASS	PASS	PASS	PASS	20.00	649	Yes	Yes	GT	DA
10/23/2007	0	187	4311	2242	0.0	187.0	4311.0	2055.0	PASS	PASS	PASS	PASS	20.00	666	Yes	Yes	GT	DA
10/24/2007	1	193	4312	2347	1.0	193.0	4311.0	2154.0	PASS	*QUESTION*	PASS	PASS	51.02	676	Yes	Yes	GT	DA
10/25/2007	0	168	4246	2124	0.0	168.0	4246.0	1956.0	PASS	PASS	PASS	PASS	20.00	633	Yes	Yes	GT	DA
10/26/2007	1	168	4236	2258	1.0	168.0	4235.0	2090.0	PASS	PASS	PASS	PASS	51.02	633	Yes	Yes	GT	DA
10/29/2007	0	164	4299	2219	0.0	164.0	4299.0	2055.0	PASS	PASS	PASS	PASS	20.00	626	Yes	Yes	GT	DA
10/30/2007	0	167	4269	2279	0.0	167.0	4269.0	2112.0	PASS	PASS	PASS	PASS	20.00	631	Yes	Yes	GT	DA
10/31/2007	1	174	4229	2193	1.0	174.0	4228.0	2019.0	PASS	PASS	PASS	PASS	51.02	644	Yes	Yes	GT	DA
11/1/2007	1	160	4263	2334	1.0	160.0	4262.0	2174.0	PASS	PASS	PASS	PASS	51.02	619	Yes	Yes	GT	DA
11/2/2007	0	159	4227	2353	0.0	159.0	4227.0	2194.0	PASS	PASS	PASS	*QUESTION*	20.00	617	Yes	Yes	GT	DA
11/5/2007	2	166	4277	2262	2.0	166.0	4275.0	2096.0	PASS	PASS	PASS	PASS	63.87	629	Yes	Yes	GT	DA
11/6/2007	0	165	4283	2247	0.0	165.0	4283.0	2082.0	PASS	PASS	PASS	PASS	20.00	628	Yes	Yes	GT	DA
11/7/2007	1	173	4364	2271	1.0	173.0	4363.0	2098.0	PASS	PASS	PASS	PASS	51.02	642	Yes	Yes	GT	DA
11/8/2007	1	179	4260	2349	1.0	179.0	4259.0	2170.0	PASS	PASS	PASS	PASS	51.02	652	Yes	Yes	GT	DA
11/9/2007	1	169	4295	2330	1.0	169.0	4294.0	2161.0	PASS	PASS	PASS	PASS	51.02	635	Yes	Yes	GT	DA
11/12/2007	1	173	4303	2306	1.0	173.0	4302.0	2133.0	PASS	PASS	PASS	PASS	51.02	642	Yes	Yes	GT	DA
11/13/2007	1	166	4284	2226	1.0	166.0	4283.0	2060.0	PASS	PASS	PASS	PASS	51.02	629	Yes	Yes	GT	DA
11/14/2007	1	166	4293	2235	1.0	166.0	4292.0	2069.0	PASS	PASS	PASS	PASS	51.02	629	Yes	Yes	GT	DA
11/15/2007	1	156	4198	2287	1.0	156.0	4197.0	2131.0	PASS	PASS	PASS	PASS	51.02	611	Yes	Yes	GT	DA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 5)

Counting Instrument:	2360	Detector:	43/93	Calibration Date:	10/5/2008
Serial #:	184952	Serial #:	199827	12 month calibration:	OK
Detector Active Area or Area Covered by Smear (cm^2):	100			NRC 6 Mo Cal. Due Date?	OK

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA (DPM/100cm^2)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.1500	Th230	2888-01	19,200	3/30/2004	7.54E+04	19,199	100	1	1	0.90	0.88	4453.7	52.82
Beta	0.1000	Tc99	2898-01	17,300	3/30/2004	2.11E+02	17,100	1000	1	1	174.10	13.44	2270.9	66.03

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
10/15/2007	2	170	4448	2467	2.0	170.0	4446.0	2297.0	PASS	PASS	PASS	PASS	63.87	637	Yes	Yes	GT	DA
10/16/2007	0	174	4469	2480	0.0	174.0	4469.0	2306.0	PASS	PASS	PASS	PASS	20.00	644	Yes	Yes	GT	DA
10/17/2007	0	176	4469	2485	0.0	176.0	4469.0	2309.0	PASS	PASS	PASS	PASS	20.00	647	Yes	Yes	GT	DA
10/18/2007	0	173	4406	2438	0.0	173.0	4406.0	2265.0	PASS	PASS	PASS	PASS	20.00	642	Yes	Yes	GT	DA
10/19/2007	1	170	4472	2429	1.0	170.0	4471.0	2259.0	PASS	PASS	PASS	PASS	51.02	637	Yes	Yes	GT	DA
10/29/2007	0	164	4513	2532	0.0	164.0	4513.0	2368.0	PASS	PASS	PASS	PASS	20.00	626	Yes	Yes	GT	DA
11/8/2007	1	169	4422	2540	1.0	169.0	4421.0	2371.0	PASS	PASS	PASS	PASS	51.02	635	Yes	Yes	GT	DA
11/9/2007	1	167	4425	2505	1.0	167.0	4424.0	2338.0	PASS	PASS	PASS	PASS	51.02	631	Yes	Yes	GT	DA
11/12/2007	1	174	4561	2551	1.0	174.0	4560.0	2377.0	PASS	PASS	*QUESTION*	PASS	51.02	644	Yes	Yes	GT	DA
11/13/2007	1	193	4415	2579	1.0	193.0	4414.0	2386.0	PASS	PASS	PASS	PASS	51.02	676	Yes	Yes	GT	DA
11/14/2007	1	180	4333	2446	1.0	180.0	4332.0	2266.0	PASS	PASS	*QUESTION*	PASS	51.02	654	Yes	Yes	GT	DA
11/15/2007	1	192	4488	2537	1.0	192.0	4487.0	2345.0	PASS	PASS	PASS	PASS	51.02	675	Yes	Yes	GT	DA

CABRERA ALPHA-BETA COUNTING INSTRUMENT (Rev 5)

Counting Instrument:	2360			Detector:	43/93		Calibration Date:	10/5/2008										
Serial #:	168043			Serial #:	179861		12 month calibration:	OK										
Detector Active Area or Area Covered by Smear (cm^2):					100		NRC 6 Mo Cal. Due Date?	OK										

	Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	$T_{1/2}$ (yr)	Source Decayed Activity	Required MDA ($DPM/100cm^2$)	Control Chart & Daily Bkg Count Time	Control Chart & Daily Source-Sample Count Time	Control Chart bkg Average α/β cpm	Control Chart bkg 1 sigma, cpm	Control Chart Source-bkg Average α/β cpm	Control Chart source 1 sigma, cpm
Alpha	0.1500	Th230	2888-01	19,200	3/30/2004	7.54E+04	19,199	100	1	1	0.40	0.52	4434.7	188.53
Beta	0.1000	Tc99	2898-01	17,300	3/30/2004	2.11E+02	17,098	1000	1	1	182.70	10.88	2120.7	155.99

Date	Daily Bkg Counts		Daily Check Source Counts		Daily Bkg Rate (cpm)		Net Daily Source Rate (cpm)		Bkg QC Pass/Fail		Source QC Pass/Fail		MDA α (dpm)	MDA β (dpm)	α MDA OK?	β MDA OK?	H.P. Technician	Technician Initials
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta						
10/25/2007	1	177	4477	2316	1.0	177.0	4476.0	2139.0	PASS	PASS	PASS	PASS	51.02	649	Yes	Yes	GT	DA
10/26/2007	0	180	4339	2392	0.0	180.0	4339.0	2212.0	PASS	PASS	PASS	PASS	20.00	654	Yes	Yes	GT	DA
10/29/2007	0	170	4395	2227	0.0	170.0	4395.0	2057.0	PASS	PASS	PASS	PASS	20.00	637	Yes	Yes	GT	DA
10/30/2007	0	180	4389	2325	0.0	180.0	4389.0	2145.0	PASS	PASS	PASS	PASS	20.00	654	Yes	Yes	GT	DA
10/31/2007	0	167	4396	2300	0.0	167.0	4396.0	2133.0	PASS	PASS	PASS	PASS	20.00	631	Yes	Yes	GT	DA
11/1/2007	1	164	4440	2315	1.0	164.0	4439.0	2151.0	PASS	PASS	PASS	PASS	51.02	626	Yes	Yes	GT	DA
11/2/2007	0	184	4598	2287	0.0	184.0	4598.0	2103.0	PASS	PASS	PASS	PASS	20.00	661	Yes	Yes	GT	DA
11/5/2007	1	164	4504	2386	1.0	164.0	4503.0	2222.0	PASS	PASS	PASS	PASS	51.02	626	Yes	Yes	GT	DA
11/6/2007	1	178	4436	2231	1.0	178.0	4435.0	2053.0	PASS	PASS	PASS	PASS	51.02	651	Yes	Yes	GT	DA
11/7/2007	0	176	4461	2320	0.0	176.0	4461.0	2144.0	PASS	PASS	PASS	PASS	20.00	647	Yes	Yes	GT	DA
11/8/2007	1	172	4380	2250	1.0	172.0	4379.0	2078.0	PASS	PASS	PASS	PASS	51.02	640	Yes	Yes	GT	DA

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

Sylvania-Corning, Phase IIB, Hicksville, NY
Instrument Inventory Log

Vendor	Model (Det/Pr)	Inst S/N	Probe S/N	Cal Due	Date Rec'd	Date Ret'd	Comments
Cabrera	2221 / Bicron G1	190205	C436E	05/04/08	10/15/07	11/16/08	
Cabrera	2221 / Bicron G1	216512	C442E	05/04/08	10/15/07	11/16/08	
Cabrera	2221 / Bicron G1	196062	C443E	05/04/08	10/15/07	11/16/08	
Cabrera	2221 / Bicron G1	216482	C358C	05/04/08	10/15/07	11/16/08	
Cabrera	3 / 44-9	79511	PR137499	01/17/08	10/15/07	11/16/08	
Cabrera	3 / 44-9	79552	PR085991	02/12/08	10/15/07	11/16/08	
Cabrera	3 / 44-9	79498	PR073106	04/12/08	10/15/07	11/16/08	
Cabrera	Bicron microRem	B985Y	N/A	07/24/08	10/15/07	11/16/08	
ERG	2929 / 43-10-1	196226	PR215943	09/26/08	10/15/07	11/16/08	
ERG	2929 / 43-10-1	137607	PR142936	09/26/08	10/15/07	11/16/08	
ERG	2241 / 44-10	148089	PR154617	09/15/08	10/15/07	11/16/08	
ERG	2241 / 44-10	150711	PR150852	09/25/08	10/15/07	11/16/08	
ERG	2241 / 44-10	149408	PR150507	09/25/08	10/15/07	11/16/08	
ERG	2241 / 44-10	149400	PR112840	09/25/08	10/15/07	11/16/08	
ERG	2360 / 43-93	193652	PR199836	10/05/08	10/15/07	11/16/08	
ERG	2360 / 43-93	168043	PR179861	10/05/08	10/15/07	11/16/08	
ERG	2360 / 43-93	184952	PR199827	10/05/08	10/15/07	11/16/08	
ERG	2360 / 43-93	220246	PR199826	10/05/08	10/15/07	11/16/08	
ERG	Bicron microRem	1716	N/A	07/09/08	10/15/07	11/16/08	
Cabrera	3 / 44-9	166511	PR073107	10/03/08	10/15/07	11/16/08	

Inst.#79511 (44-9)		
QC Daily Source		
Date	Result (cpm)	P/F
10/15/2007	1200	Pass
10/16/2007	1400	Pass
10/17/2007	1300	Pass
10/18/2007	1300	Pass
10/19/2007	1400	Pass
10/22/2007	1300	Pass
10/23/2007	1400	Pass
10/24/2007	1400	Pass
10/25/2007	1400	Pass
10/26/2007	1400	Pass
10/29/2007	1400	Pass
10/30/2007	1400	Pass
10/31/2007	1300	Pass
11/1/2007	1500	Pass
11/2/2007	1400	Pass
11/5/2007	1300	Pass
11/6/2007	1300	Pass
11/7/2007	1400	Pass
11/8/2007	1400	Pass
11/9/2007	1400	Pass
11/12/2007	1300	Pass
11/13/2007	1300	Pass
11/14/2007	1400	Pass
11/15/2007	1400	Pass

Inst.#79511 (44-9)		Source Ser. #	2898-01
Initial Source Readings		Nuclide	Tc-99
Date	Result (cpm)		
10/15/2007	1200		
10/15/2007	1300		
10/15/2007	1400		
10/15/2007	1200		
10/15/2007	1300		
10/15/2007	1200		
10/15/2007	1400		
10/15/2007	1300		
10/15/2007	1200		
10/15/2007	1200		
	Average		
	1270		

Inst.#79498 (44-9)		
QC Daily Source		
Date	Result (cpm)	P/F
10/15/2007	1400	Pass
10/16/2007	1400	Pass
10/17/2007	1400	Pass
10/18/2007	1400	Pass
10/19/2007	1300	Pass
10/22/2007	1400	Pass
10/23/2007	1400	Pass
10/24/2007	1400	Pass
10/25/2007	1400	Pass
10/26/2007	1400	Pass
10/29/2007	1400	Pass
10/30/2007	1400	Pass
10/31/2007	1400	Pass
11/1/2007	1400	Pass
11/2/2007	1400	Pass
11/5/2007	1300	Pass
11/6/2007	1400	Pass
11/7/2007	1400	Pass
11/8/2007	1400	Pass
11/9/2007	1400	Pass
11/12/2007	1400	Pass
11/13/2007	1300	Pass
11/14/2007	1400	Pass

Inst.#79498 (44-9)		Source Ser. #	2898-01
Initial Source Readings		Nuclide	Tc-99
Date	Result (cpm)		
10/15/2007	1400		
10/15/2007	1400		
10/15/2007	1300		
10/15/2007	1400		
10/15/2007	1500		
10/15/2007	1300		
10/15/2007	1400		
10/15/2007	1300		
10/15/2007	1500		
10/15/2007	1400		
	Average		
	1390		

Inst.#79552 (44-9)		
QC Daily Source		
Date	Result (cpm)	P/F
10/15/2007	1300	Pass
10/24/2007	1300	Pass
10/25/2007	1400	Pass
10/26/2007	1300	Pass
10/29/2007	1300	Pass
10/30/2007	1300	Pass
10/31/2007	1400	Pass
11/1/2007	1300	Pass
11/2/2007	1300	Pass
11/5/2007	1400	Pass
11/6/2007	1400	Pass
11/7/2007	1300	Pass
11/8/2007	1300	Pass
11/9/2007	1300	Pass
11/12/2007	1300	Pass
11/13/2007	1400	Pass
11/14/2007	1400	Pass
11/15/2007	1400	Pass

Inst.#79552 (44-9)	Source Ser. #	2898-01
Initial Source Readings	Nuclide	Tc-99
Date	Result (cpm)	
10/15/2007	1200	
10/15/2007	1300	
10/15/2007	1100	
10/15/2007	1300	
10/15/2007	1200	
10/15/2007	1300	
10/15/2007	1100	
10/15/2007	1300	
10/15/2007	1200	
10/15/2007	1300	
	Average	
	1230	

08-1007.00 HICKSVILLE PHASE IIB

OP-001-01
ROUTINE SURVEY SCHEDULE

Survey Designation	Location of Survey
01	Incoming Drill Rig
02	Incoming Supply TRUCK
03	RELEASE Supply TRUCK
04	Incoming Bobcat Geoprobe
05	Release Geoprobe
06	Release Drill RIG
07	Release Drill RIG
08	Release Geoprobe
09	Incomming Drill Rig
10	Release Supply TRUCK
11	Release Drill Rig
12	Release Drill Rig
13	RELEASE SUPPLY TRUCK
14	Incoming Geoprobe
15	CONTAMINATION SURVEY of DR-BB1 & DR-BB2 AREA
16	Release Geoprobe
17	RELEASE CORE BORING DRILL

Prepared By: [signature] Date: 11/15/07

Reviewed By: [signature] Date: 11/15/07

OP-001-01
ROUTINE SURVEY SCHEDULE

Survey Designation	Location of Survey
18	Incoming HAMMER / SAMPLER
19	Release HAMMER / SAMPLER
20	Incoming BACKHOE
21	Release Geoprobe
22	Release BACKHOE
23	Contamination survey of RAD DRUM Storage.
	A
	N

Prepared By: G. M. TANNAHILL Date: 11/15/07

Reviewed By: [signature] Date: 11/15/07

Location: BLDG 70 PARKING LOT
Site: HICKSVILLE

RWP# OR-1007.00-001

Survey # 01

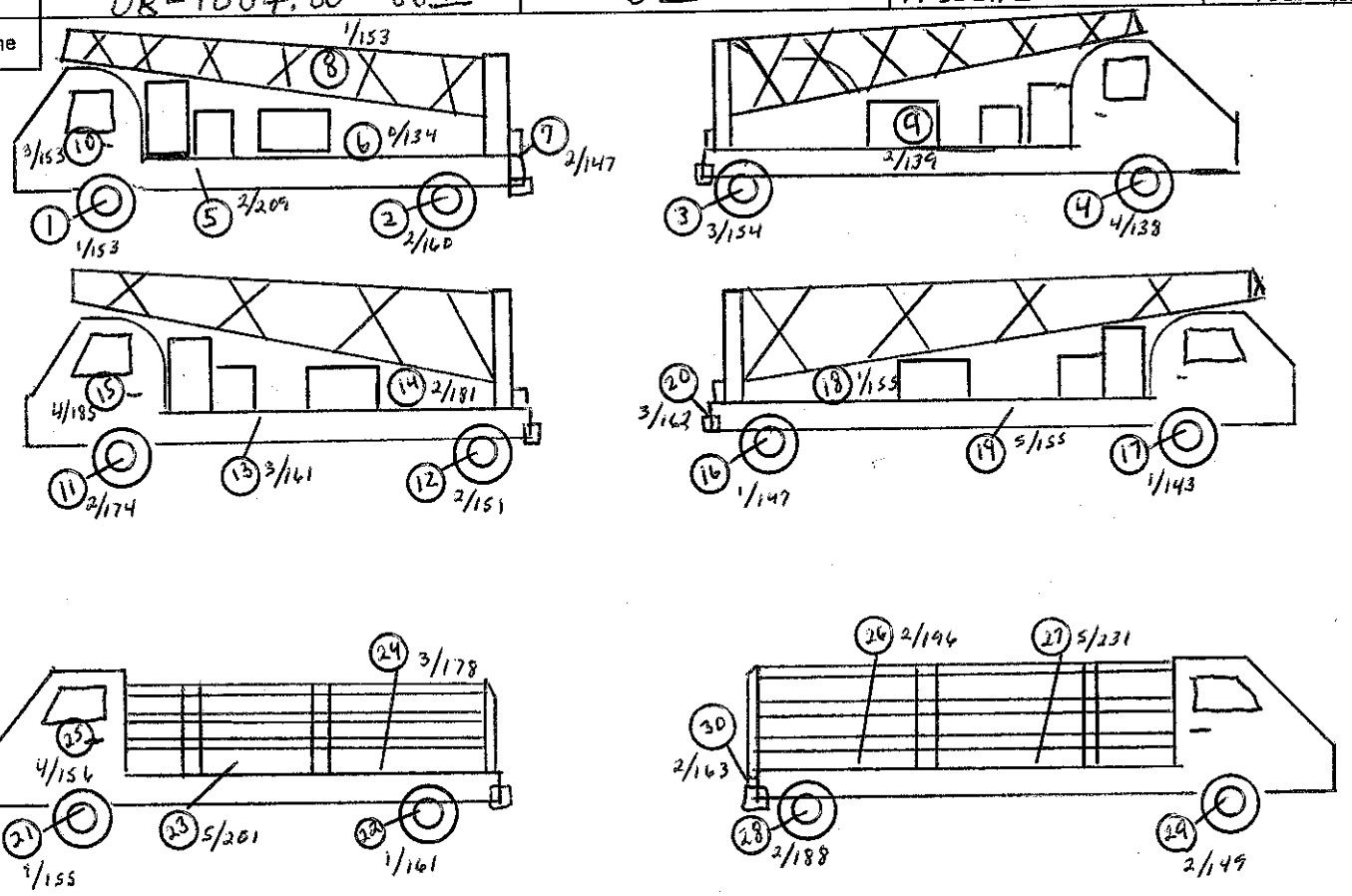
Survey Type: Contamination BASELINE

pg. 1 of 1

Smear (~~CPM/100 cm²~~)
~~Direct Count (CPM/Direct Frisk)~~

circle one

No.	α	β	No.	α	β
1	1	79	26	0	67
2	0	84	27	0	75
3	2	78	28	0	68
4	2	87	29	1	82
5	2	84	30	1	71
6	2	87	31		
7	0	86	32		
8	0	82	33		
9	0	77	34		
10	0	90	35		
11	0	65	36		
12	0	66	37		
13	0	67	38		
14	1	72	39		
15	1	82	40		
16	3	76	41		
17	0	60	42		
18	0	78	43		
19	0	64	44		
20	0	87	45		
21	0	76	46		
22	0	68	47		
23	0	67	48		
24	1	72	49		
25	0	69	50		



α/β cpm

Comments

Scanned 50-75% of all accessible surfaces and equipment. Swipe Results in counts per 2 minute count time.

Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Kyle Gordon	10/15/07	BICRON	B985Y	NA	NA	NA	NA	4 μR/hr	7/08
N		43-93	184952	0.15	0.10	1	159	NA	10/08
A		2929	196226	0.363	0.123	0.1	39.1	NA	9/08
					N				
Reviewed By:	Date:				A				
JW Quilp	10/16/07								

Key

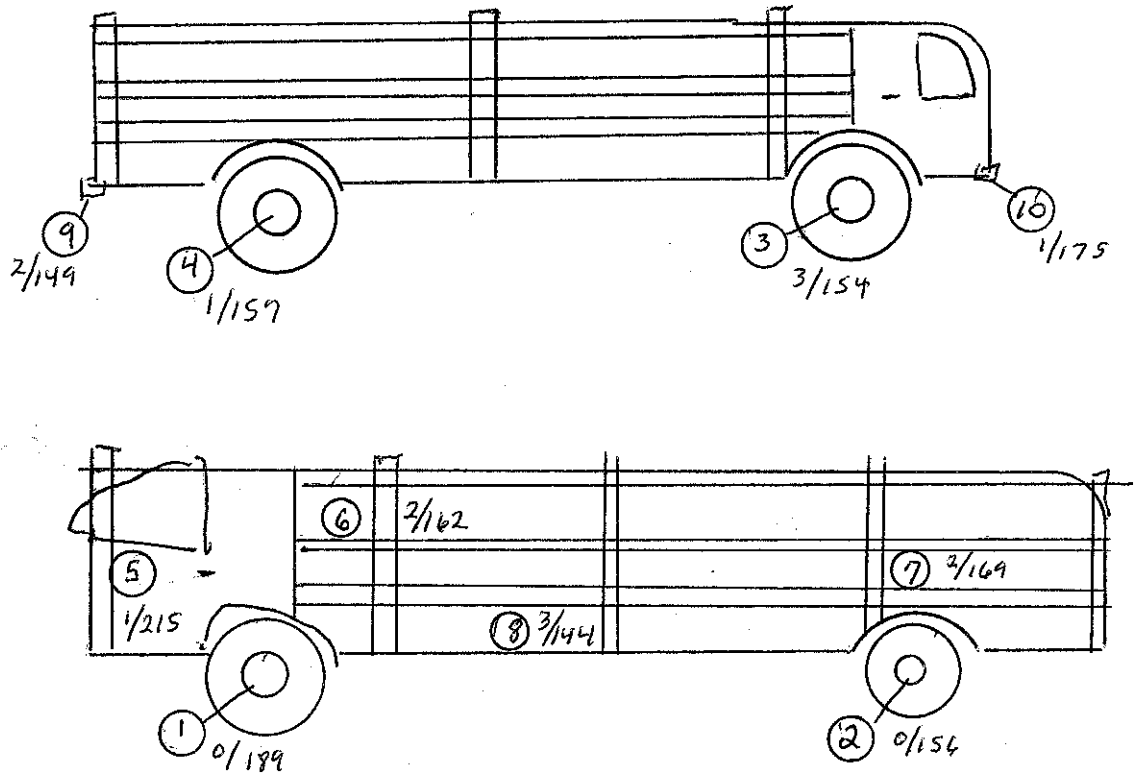
- ■ A/S Location
- "-" Boundary
- ○ Smear
- □ Dose Rate _____/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: BLDG 70 Parking Lot Site: Hicksville	RWP# OR-1007.00-001	Survey # 02	Survey Type: Release	pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)

circle one

No.	α	β	No.	α	β
1	0	73	26		
2	1	73	27		
3	3	77	28		
4	2	81	29	N	
5	0	83	30		
6	0	89	31		
7	2	77	32		A
8	0	64	33		
9	0	66	34		
10	0	87	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16		N	41		
17			42		
18			43		
19			44		
20			45	A	
21			46		
22			47		
23			48		
24			49		
25			50		



α/β - cpm

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Scanned 50-75% of	K. Gordon	10/19/07	2360	193652	15%	10%	1	156	N/A	10-5-08
All Accessible Surfaces			2929	196226	0.363	0.123	.2	357	N/A	9-26-08
And Equipment. Swipe										
Results In Counts Per								A		
2 minute Count Time										
	Reviewed By:	Date:			N					
	[signature]	10/19/07								

Key

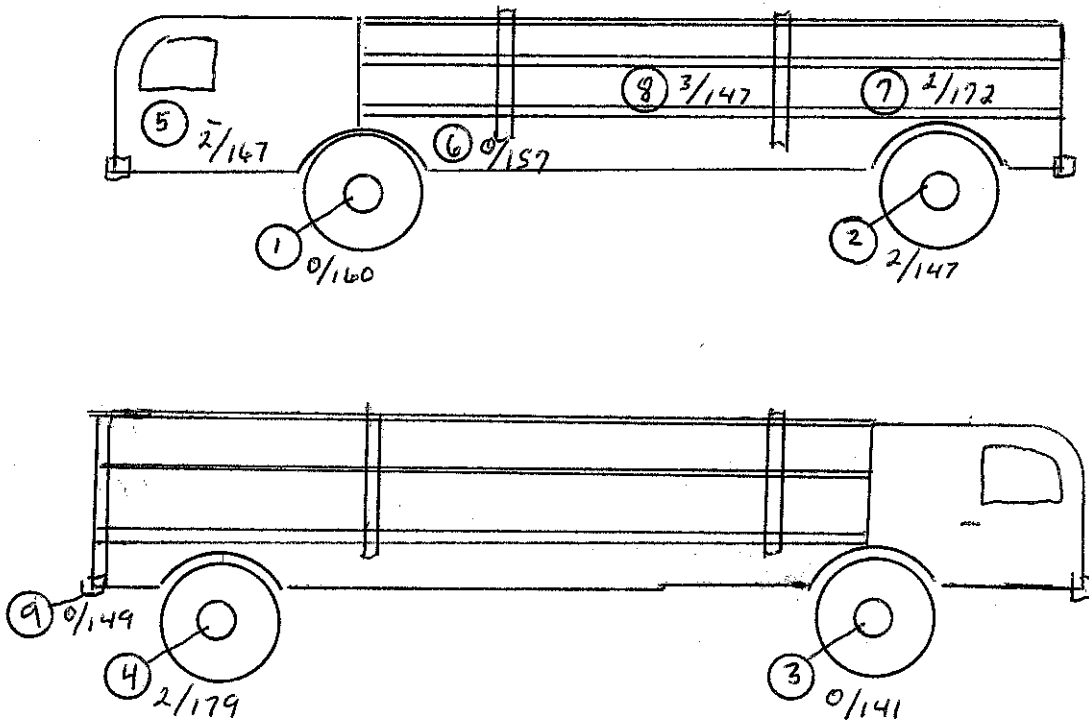
■	A/S Location
-	Boundary
○	Smear
□	Dose Rate _____ /hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: BLDG 140 PARKING LOT	RWP#	Survey #	Survey Type:	
Site: HUNTSVILLE	08-1007.00-001	03	RELEASE	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	98	26		
2	0	80	27		
3	0	79	28		
4	0	78	29		
5	1	64	30	N	
6	1	72	31		
7	1	73	32		A
8	1	82	33		
9	0	93	34		
10	0	84	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16		N	41		
17			42		
18			43		
19			44		
20			45		A
21			46		
22			47		
23			48		
24			49		
25			50		

α/β cpm



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SCANNED 75% OF ACCESSIBLE	K. GORDON	10-22-07	220246	2360	15%	10%	1	149	N	10-5-08
SURFACES AND EQUIPMENT.			196226	2929	.363	.123	.2	37.9	A	9-26-08
SMEAR RESULTS IN COUNTS										
PER 2 MINUTE COUNT TIME.										
				N						
	Reviewed By:	Date:						A		
	JM Del	10/22/07								

Key
- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate _____ /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE	RWP# 08-1007.00-01	Survey # 04	Survey Type: Incoming Contamination	pg. 1 of 1
Site: Building 70 PARKING LOT				

~~Smear (CPM/100 cm²)~~ / Direct Count (CPM/~~Direct Frisk~~) — circle one

No.	α	β	No.	α	β
1	2	75	26		
2	2	66	27		
3	Ø	76	28		
4	1	82	29		
5	~~Ø~~ 1	~~77~~ 53 gone	30		
6	Ø	77	31		
7	Ø	71	32		
8	Ø	82	33		
9	1	68	34		
10	Ø	86	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



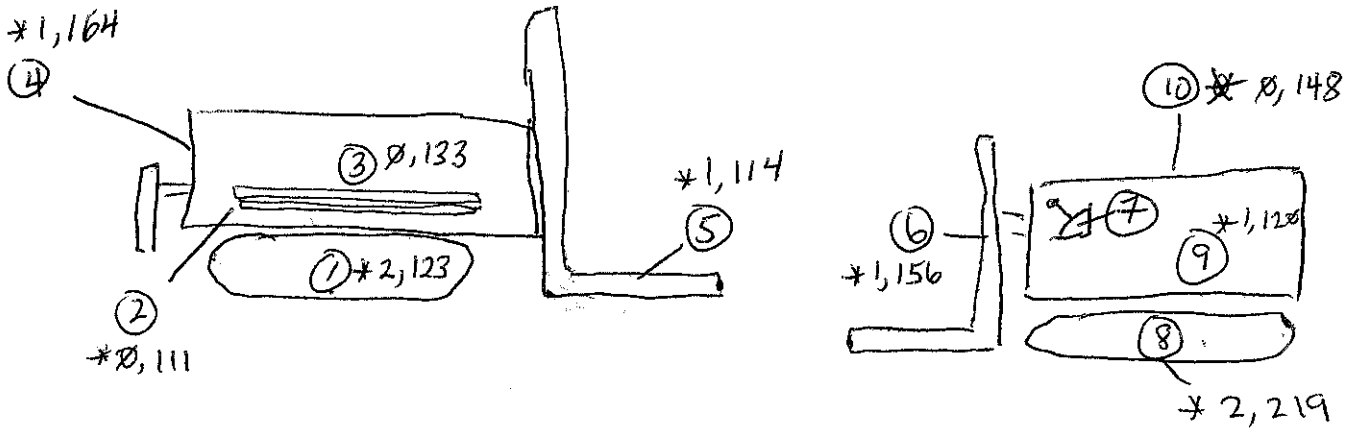
Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
all swipes are counts per 2 minutes. Scanned 100% accessible area w/ 44-9. all readings were 30-40 cpm.	Kyle GORDON	10/23/07	43-93	220246	0.15	0.10	1	131	NA	10/08
			Bicron	B958Y	NA	NA	NA	NA	5	~~9/07~~ 9/08
			2929	196226	0.363	0.123	Ø	37.7	NA	9/08
			44-9	19498	NA	0.10	NA	40cpm	NA	4/08
	Reviewed By:	Date:								
		10/23/07				A				

Key: ■ A/S Location; *-* Boundary; ○ Smear; □ Dose Rate _____/hr; * Direct Reading CPM/direct frisk; △ Grab Sample

Location: Hicksville Site: Building 70 PARKING LOT	RWP# 08-1007.00-01	Survey # 05	Survey Type: Release Survey	pg. 1 of 1

~~Smear (CPM/100 cm²)~~ / ~~Direct Count (CPM/Direct Frisk)~~ — circle one

No.	α	β	No.	α	β
1	Ø	73	26		
2	1	67	27		
3	Ø	76	28		
4	1	81	29		
5	2	72	30		
6	2	66	31		
7	1	65	32		
8	Ø	91	33		
9	1	74	34		
10	1	74	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
all swipes results ARE	G. TANNAHILL	10/25/07	43-93	220246	0.15	0.10	Ø	147	NA	10/08
counts per two minutes.			BICRON	B9587	NA	NA	NA	NA	4	7/08
Scanned 100% of			2929	196226	0.363	0.123	0.18	35.1	NA	9/08
geoprobe and equipment			44-9	79498	NA	0.10	NA	30	NA	4/08
w/ 44-9. Scan results	A									
were 30-40 cpm	Reviewed By:	Date:								
		10/25/07								

Key

- ■ A/S Location
- *_* Boundary
- ○ Smear
- □ Dose Rate _____ /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

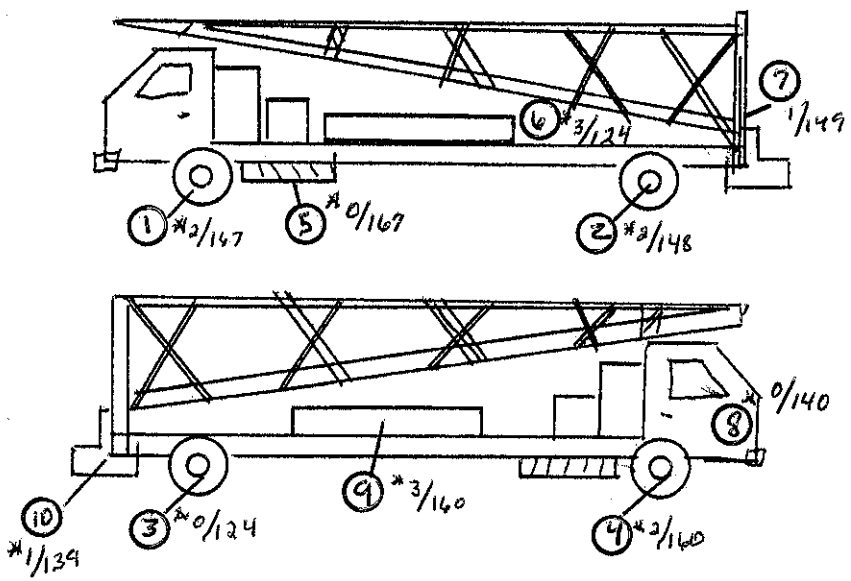
Location: Hickville	RWP# 08-1007.00-01	Survey # 06	Survey Type: Release	pg. 1 of 1
Site: Bldg. 70 Parking Lot				

~~Smear~~ (CPM/100 cm²) circle one

Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	0	68	26		
2	0	76	27		
3	0	59	28		
4	0	83	29	N	
5	0	86	30		
6	1	92	31		
7	0	55	32		
8	0	75	33		A
9	1	55	34		
10	2	77	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16		N	41		
17			42		
18			43		
19			44		
20			45		A
21			46		
22			47		
23			48		
24			49		
25			50		

α/β⁻ cpm



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
All Smear results are	K. Gordon	10/25/07	2929	196226	.363	.123	0.1	35.1	N	9/26/08
counts per 2 minutes			2360	220246	15%	10%	1	109	A	10/5/08
Scanned 100% of	N		Mod. 3	79498	N/A	10%	N/A	30cpm	N/A	4/11/08
Drill Rig and equipment		A	Bicron M Rig	B985Y	N/A	N/A	N/A	N/A	4	7/24/08
w/44.9 Scan Results				N						
were 30 to 50cpm	Reviewed By:	Date:								
	[signature]	10/25/07							A	

Key

■	A/S Location
-	Boundary
○	Smear
□	Dose Rate ____ /hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: HICKSVILLE
Site: BUILDING 70 PARKING LOT

RWP# 08-1007.00-01

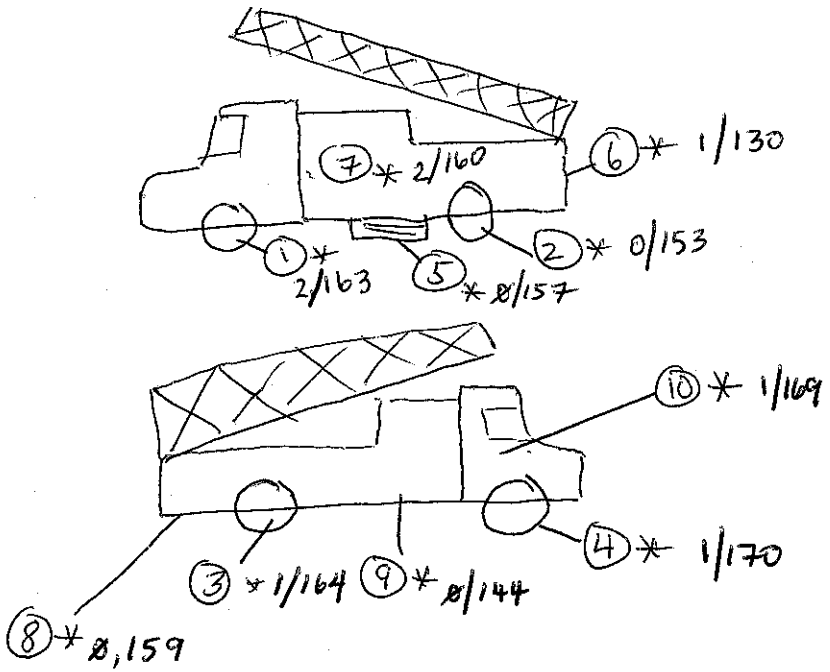
Survey # 07

Survey Type: Release Survey

pg. 1 of 1

~~Smear (CPM/100 cm²)~~
~~Direct Count (CPM/Direct Frisk)~~
circle one

No.	α	β	No.	α	β
1	0	81	26		
2	1	72	27		
3	1	65	28		
4	0	76	29		
5	0	59	30		
6	2	63	31		
7	1	77	32		
8	0	66	33		
9	2	72	34		
10	0	68	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



0/0

Comments	Surveyed By:	Date:	SN# Instrument	Instrument Serial#	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Swipe results in counts	G TANAWAHILL	10/26/07	196226	2929	0.363	0.123	0.1	39.5	N/A	9/08
per 2 minutes. Scanned			220246	43-93	0.15	0.10	1	151	N/A	10/08
100% of accessible			79498	44-9	N/A	0.10	N/A	40	N/A	4/08
rig & equipment w/			B985Y	BICRON	N/A	N/A	N/A	N/A	4	7/08
44-9, Scan results										
ranged from	Reviewed By:	Date:								
	[signature]	10/26/07								

Key

■	A/S Location
-	Boundary
○	Smear
□	Dose Rate _____ /hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

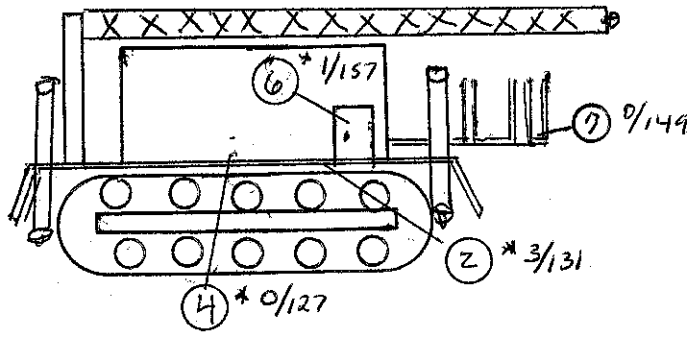
Location: HICKSVILLE	RWP#	Survey #	Survey Type: CONTAMINATED	pg. 1 of 1
Site: BLDG 70 PARKING LOT	08-1007.00-01	08	BASELINE	

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

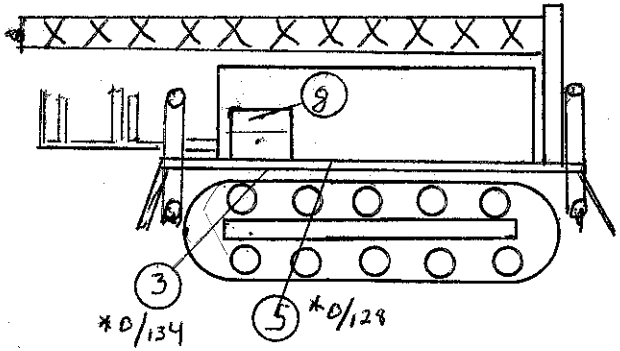
No.	α	β	No.	α	β
1	0	62	26		
2	2	78	27		
3	0	76	28		
4	0	72	29	N	
5	0	67	30		
6	0	61	31		NA
7	0	73	32		
8	1	79	33		
9	0	72	34		
10	2	81	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16	N		41		
17			42		
18			43		
19			44		NA
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

RIG #239

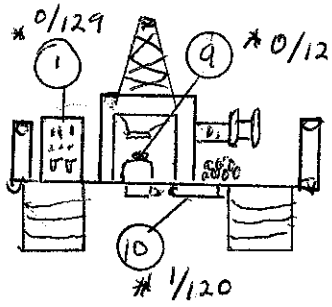
LEFT



RIGHT



REAR



α/β - cpm

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
ALL SMEAR RESULTS	K. GORDON	10/26/07	2929	196226	.363	.123	.1	39.5	N	9/26/08
ARE TO COUNTS PER			2360	220246	15%	10%	1	129		10/15/08
2 MINUTES	N		MODEL 3	79498	N/A	10%	N/A	30	NA	4/11/08
		NA	BICRON	B9859	N/A	N/A	N/A	N/A	5	7/24/08
				N						
	Reviewed By:	Date:								
	[signature]	10/26/07							NA	

Key

- ■ A/S Location
- ·-· Boundary
- ○ Smear
- □ Dose Rate _____ /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE
Site:

RWP# 08-1007.00-01

Survey # 29

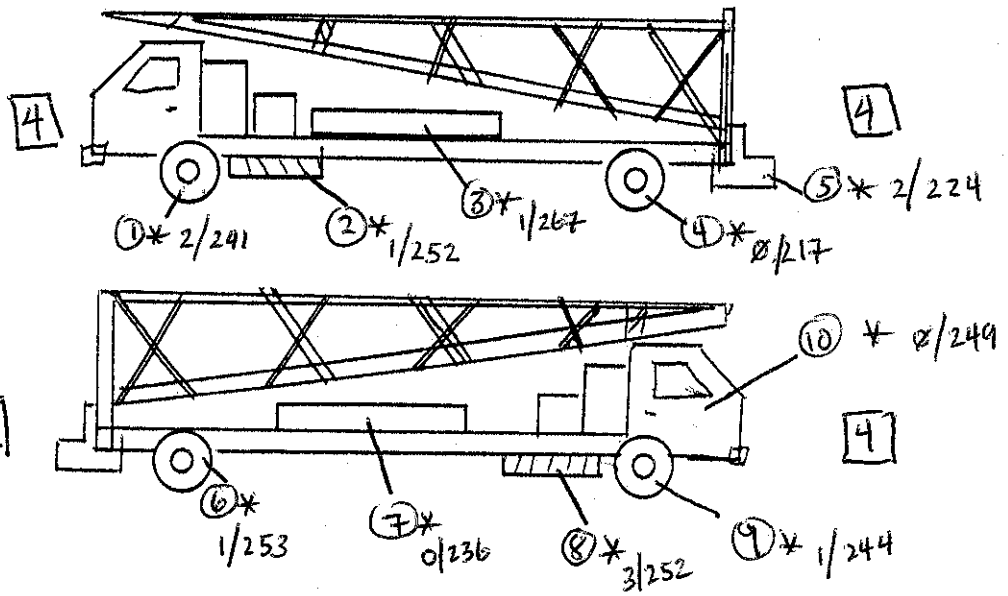
Survey Type: Initial Contamination

Radiological Surveys

pg. 1 of 1

Smear (DPM/100 cm²)
Direct Count (CPM/Direct Frisk)
circle one

No.	α	β	No.	α	β
1	Ø	75	26		
2	Ø	69	27		
3	Ø	63	28		
4	Ø	72	29		
5	1	71	30		
6	2	68	31		
7	1	73	32		
8	1	66	33		
9	1	76	34		
10	Ø	75	35		
11			36		
12			37		
13			38		
14			39		
15			40	A	
16			41		
17			42		
18		✓	43		
19			44		
20			45		
21	A		46		
22			47		
23			48		
24			49		
25			50		



Scan results w/ 44-9 ranged between 30-40 cpm.

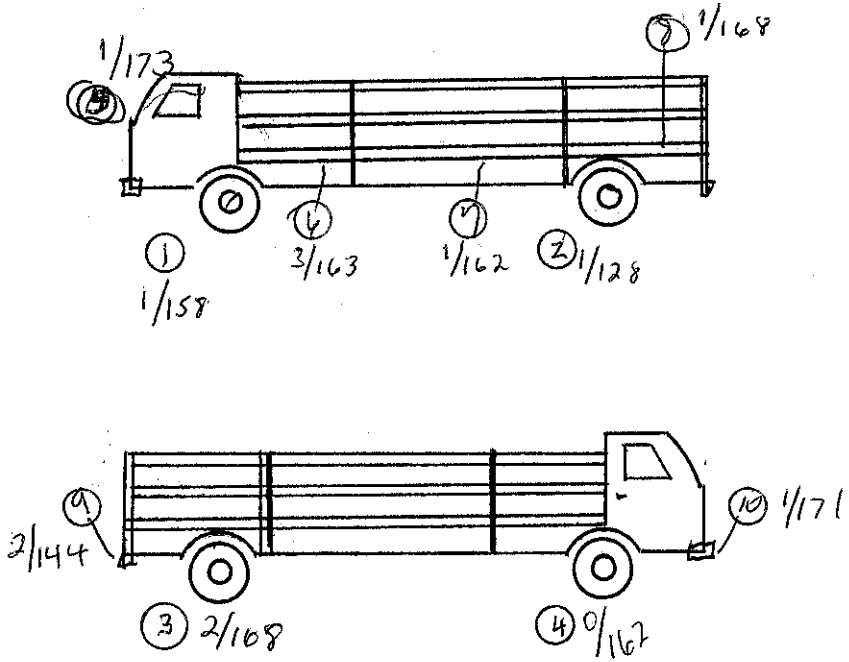
Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Swipe results listed in counts per 2 minutes. Scanned 100% of accessible surfaces of rig and equipment w/ 44-9.	gmt	10/29/07	43-93	168043	0.15	0.18	1	224	N/A	10/08
			BICRON	1716	N/A	N/A	N/A	N/A	4	7/08
	✓		44-9	79511	N/A	0.10	N/A	40	N/A	1/08
	1		2929	196226	0.363	0.123	Ø.1	~~0~~ 39.5 gmt	N/A	9/08
	Reviewed By:	Date:					✓			
	gmt	10/29/07					A			

Key
- ■ A/S Location
- *-* Boundary
- ○ Smear
- ▭ Dose Rate ____ /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE	RWP# 08-1007.00	Survey # 10	Survey Type: RELEASE	pg. 1 of 1
Site: BLOOMD				

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	77	26		
2	0	70	27		
3	2	85	28		
4	0	59	29		
5	0	87	30		
6	0	85	31		
7	1	71	32	N	
8	0	74	33		
9	0	84	34		
10	2	80	35		
11			36		
12			37		
13			38		
14	N		39		
15			40		
16			41		
17			42		
18			43		A
19			44		
20			45		
21			46		
22		A	47		
23			48		
24			49		
25			50		



α/β - cpm

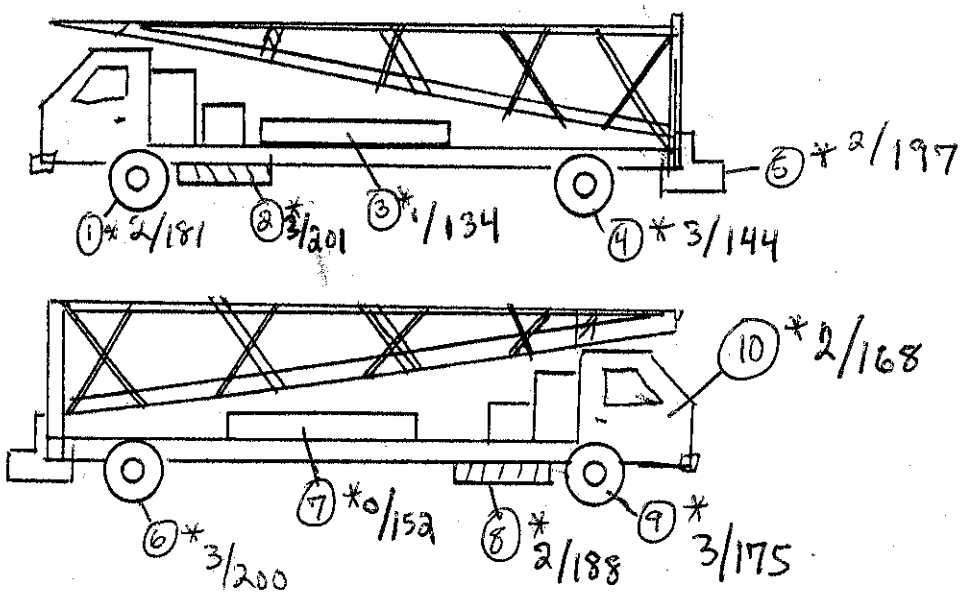
Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due		Key
SMEAR RESULTS ARE	K LONDON	10/30/07	~~2360~~	~~220196~~	~~15%~~	~~10%~~	1	137	N	10/5/08	10-30-07	
IN COUNTS PER 2 MINUTES			2929	196226	.363	123	.3	38.1		9/26/08		■ A/S Location
SCANNED 100% OF			MODEL 3	79498	N/A	10%	N/A	40cpm	N/A	4/11/08		*-* Boundary
ACCESSIBLE AREAS EQUIP			2360	168093	15%	10%	1	137	N/A	10/5/08		○ Smear
WITH 44-9. SEND RESULTS				N								□ Dose Rate _____ /hr
40-60 cpm	Reviewed By:	Date:							N/A			* Direct Reading CPM/direct frisk
	[signature]	10/30/07										△ Grab Sample

Location: Site: HICKSVILLE	RWP# 08-1007.00-01	Survey # ~~110~~ DA #11	Survey Type: OUT	pg. 1 of 1

Smear (CPM/100 cm²) | circle one

Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	0	81	26		
2	0	83	27		
3	1	95	28		
4	1	93	29		
5	1	91	30		
6	2	72	31		
7	0	68	32		
8	0	77	33		
9	1	71	34		
10	1	62	35		
11			36		
12			37		
13			38		
14			39		
15			40	N	A
16			41		
17			42		
18			43		
19	N	A	44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Scan results w/ 44-9 ranged between 30-40 cpm.

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Results listed in counts per two minutes. 100% of accessable equipment surfaces w/ 44-9, includes rig	D. Albert	11/02/07	43-93	168043	0.15	0.10	0	184	N/A	10/08
	N/A		BICRON	1716	N/A	N/A	N/A	N/A	5	7/08
			44-9	79511	N/A	0.10	N/A	40	N/A	1/08
			2929	196226	0.363	0.123	0.3	33.9	N/A	9/08
	Reviewed By:	Date:	N					A		
	[signature]	11/2/07								

Key: α/β; ■ A/S Location; *-* Boundary; ○ Smear; ▭ Dose Rate ____ /hr; * Direct Reading CPM/direct frisk; △ Grab Sample

Location: HICKSVILLE
Site: SYLVANIA

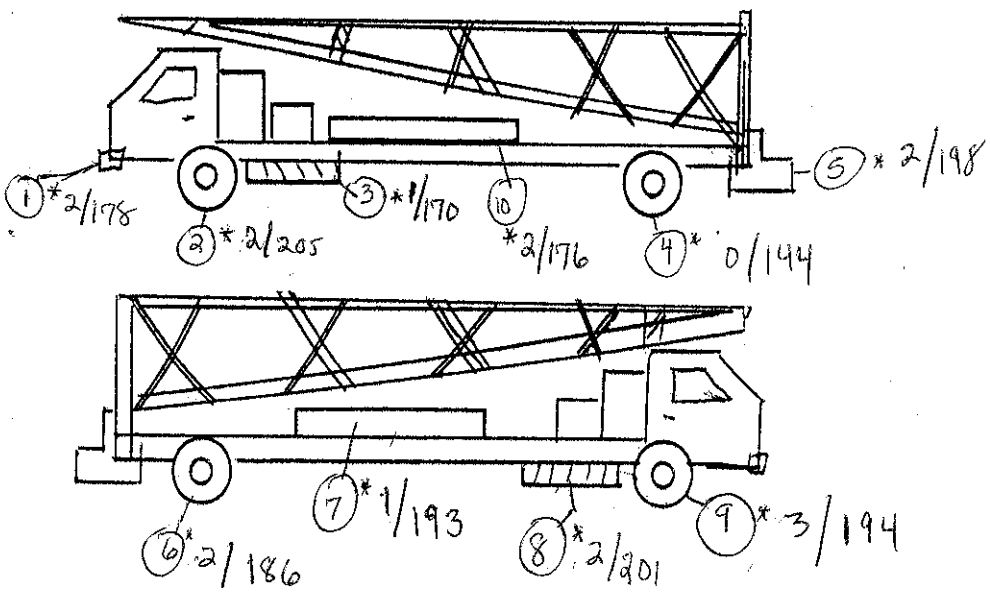
RWP# 08-1007.00-01

Survey # 12

Survey Type: (Out GOING) RELEASE

pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk)						circle one
No.	α	β	No.	α	β	
1	1	71	26			
2	D	98	27			
3	1	96	28			
4	3	83	29			
5	0	87	30			
6	D	63	31			
7	0	77	32			
8	0	66	33			
9	1	75	34			
10	2	58	35			
11			36			
12			37			
13			38			
14			39			
15			40			
16	N	A	41	N	A	
17	N		42			
18			43			
19			44			
20			45			
21			46			
22			47			
23			48			
24			49			
25			50			



* All scans of vehicle & equipment resulted in Average of no greater than 30-40 cpm.

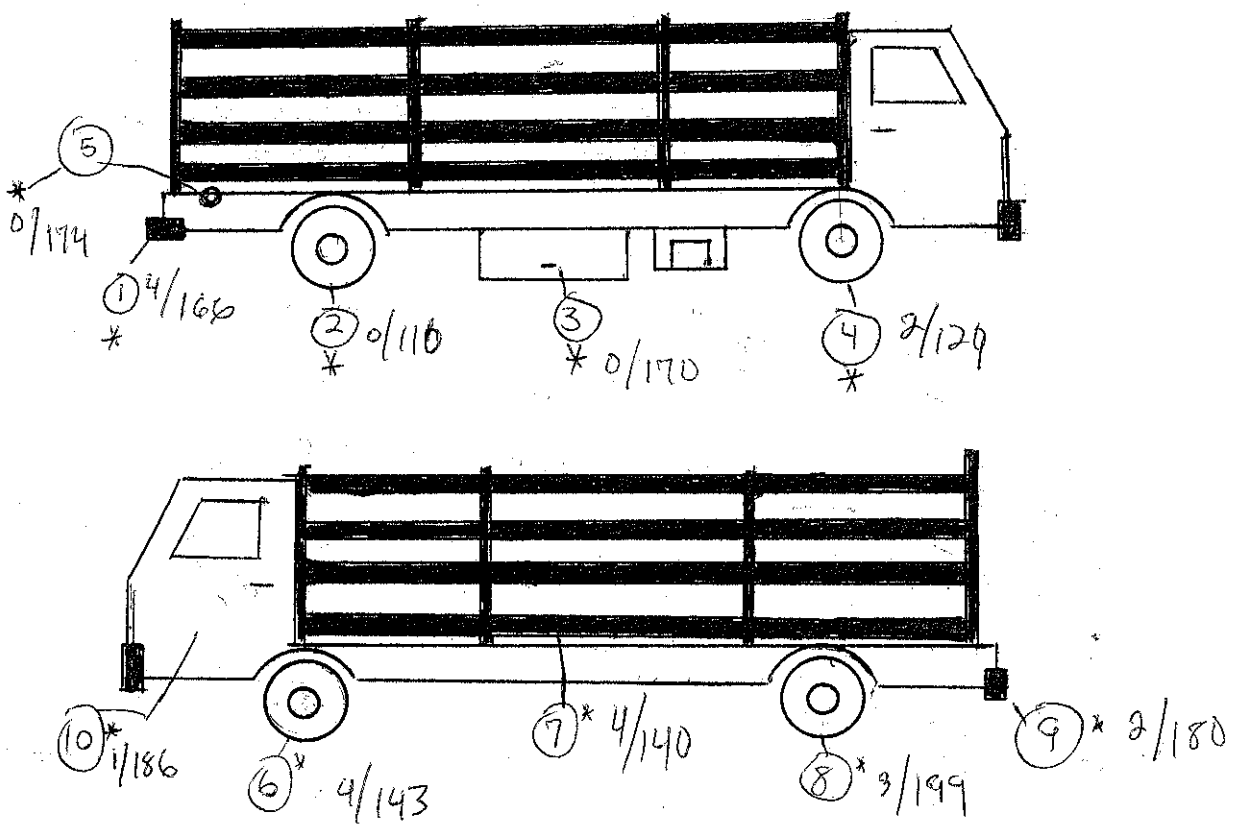
Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SMEAR RESULTS IN	D. Albert	11/7/07	2929	196226	0.363	0.123	0	36.2	N/A	09/08
COUNTS PER 2 MINUTES			2360	168043	0.15	0.10	0	176		10/08
100% of ACCESSIBLE	N A	N A	Model 3	79511	N/A	0.10	N/A	40		01/08
SURFACES & EQUIPMENT			BICRON	1716	N/A	N/A	N/A	N/A	5	07/08
SCANNED W/ 44-9						A				
SCAN RESULTS: 30-40 cpm	Reviewed By:	Date:			N					
		11/7/07								

Key
- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate ____ /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE Site:	RWP# 08-1007.00-01	Survey # 13	Survey Type: RELEASE	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	1	91	26		
2	0	97	27		
3	0	86	28		
4	0	73	29		
5	1	82	30		
6	0	84	31		
7	0	73	32		
8	0	79	33		
9	0	63	34		
10	1	77	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17	N	A	42	N	A
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due	Key
SMEAR RESULTS IN	D. Albert	11/7/07	2929	196226	.363	.123	0	36.2	N	09/08	
COUNTS PER 2 MINUTES			2360	168043	.15	.10	0	176		10/08	■ A/S Location
100% OF ACCESSIBLE	N	A	Model 3	79511	N/A	.10	N/A	40	A	01/08	⋆-⋆ Boundary
SURFACES + EQUIPMENT	N	N	BICRON	1716	N/A	N/A	N/A	N/A	5	07/08	○ Smear
SCANNED W/44-9.						A					□ Dose Rate ____ /hr
SCAN RESULTS: 30-40.	Reviewed By:	Date:		N							⋆ Direct Reading CPM/direct frisk
CPM	[signature]	11/7/07									△ Grab Sample

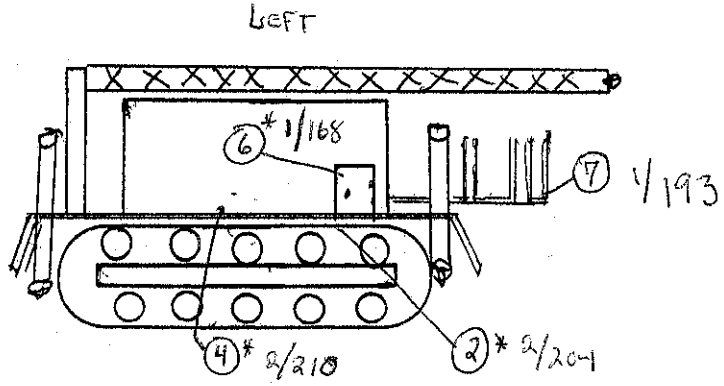
Location: HICKSVILLE
Site:

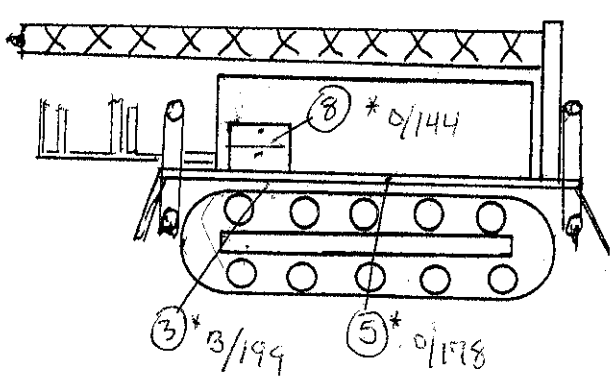
RWP# 08-1007.00-01 — Survey # 14 — Survey Type: INCOMING — pg. 1 of 1

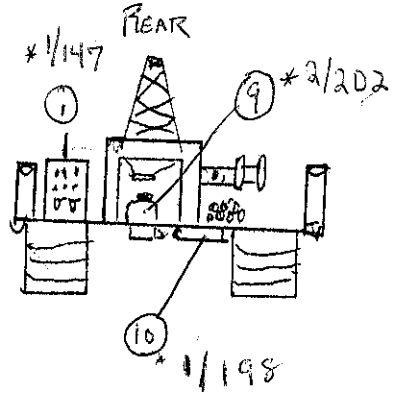
Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)
circle one

No.	α	β	No.	α	β
1	0	33	26		
2	0	83	27		
3	0	77	28		
4	0	104	29		
5	0	66	30		
6	0	66	31		
7	0	77	32		
8	0	71	33		
9	1	94	34		
10	0	96	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

Rig # GEO PROBE







Comments:
ALL SMEAR RESULTS IN COUNTS PER TWO MINUTES
100% of ACCESSIBLE SURFACES & EQUIPMENT SCANNED w/ 44-9. SCAN RESULTS WERE 30-310 cpm

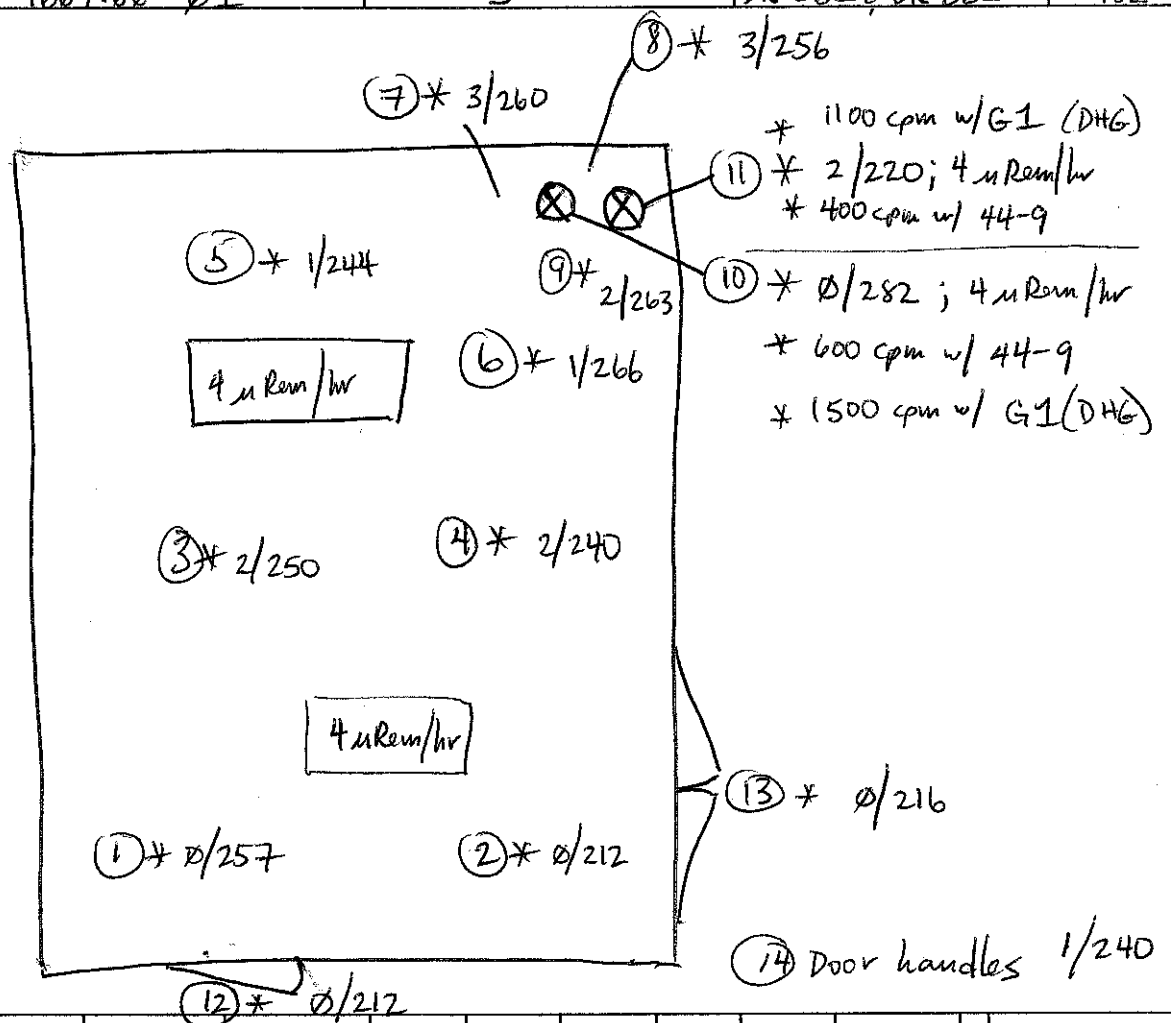
Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
J. Albert	11/8/07	2929	196226	.363	.123	0.3	32.9		09/08
		2360	168043	0.15	0.10	1	172	N/A	10/08
N	A	Model 3	79511	N/A	0.10	N/A	40		01/08
		Bicron	1716	N/A	N/A	N/A	N/A	5	07/09
				N			A		
Reviewed By:	Date:								
[signature]	11/8/07								

Key
- A/S Location
- Boundary
- Smear
- Dose Rate _____/hr
- Direct Reading CPM/direct frisk
- Grab Sample

Location: HICKSVILLE	RWP#	Survey #	Survey Type: Contamination	pg. 1 of 1
Site: BUILDING 70; DRAIN DRBB1 & DRBB2	08-1007-00-01	15	DR-BB1 & DR-BB2	

Smear ~~(CPM/100 cm²)~~ / Direct Count (CPM/Direct Frisk) → circle one

No.	α	β	No.	α	β
1	1	66	26		
2	1	79	27		
3	1	76	28		
4	1	82	29		
5	1	68	30		
6	1	73	31		
7	1	75	32		
8	1	78	33		
9	1	67	34		
10	121	330	35		
11	66	137	36		
12	Ø	82	37		
13	Ø	81	38		
14	3	94	39		
15			40		
16			41	N	A
17			42		
18			43		
19			44		
20			45		
21	N	A	46		
22			47		
23			48		
24			49		
25			50		



*=α/β⁻ cpm w/ 43-93

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Smear results in counts per 2 minutes. 100% of Accessible area scanned w/ ~~44~~ 43-93 & uRem. Swipe #10 = 166 α / 1074 β dpm/100 cm²	D. Albert	11/8/07	2929	196226	0.363	Ø.123	0.3	32.9	N/A	9/08
			43-93	184952	0.15	0.10	1	242	N/A	10/08
	N		44-9	79511	N/A	0.10	N/A	40	N/A	1/08
			BICRON uR	1716	N/A	N/A	N/A	N/A	5	7/08
Swipe #11 = 90 α / 289 β dpm/100 cm²	A		BICRON G1	196062	N/A	N/A	N/A	N/A	1202	5/08
	Reviewed By:	Date:					A			
	M. Zamolski	11/8/07				N				

Key

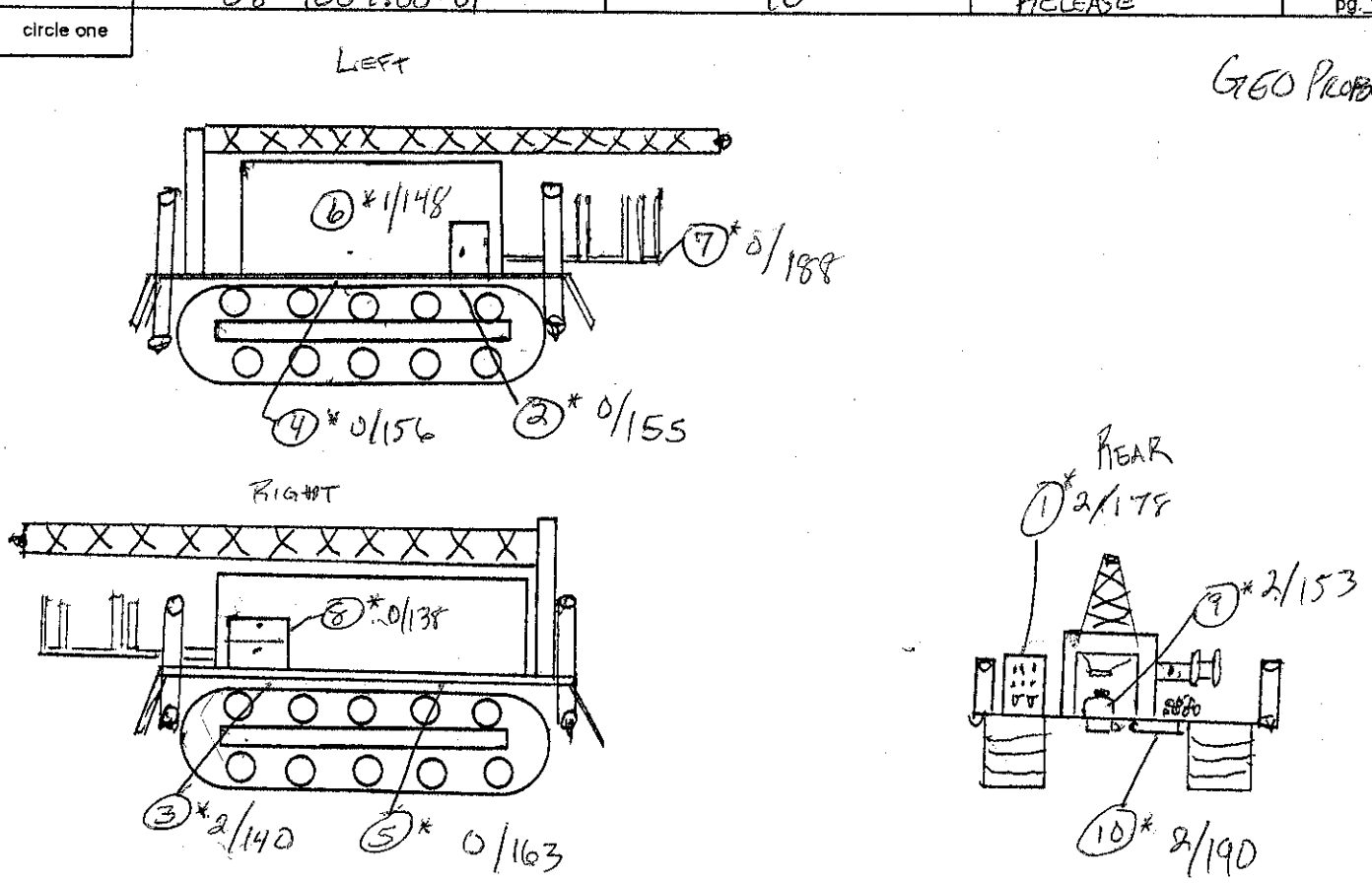
■	A/S Location
-	Boundary
○	Smear
□	Dose Rate uRem/hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: HICKSVILLE
Site:

RWP# 08-1007.00-01 | Survey # 16 | Survey Type: RELEASE | pg. 1 of 1

Smear (CPM/100 cm²)
Direct Count (CPM/Direct Frisk)
circle one

No.	α	β	No.	α	β
1	0	85	26		
2	0	80	27		
3	1	73	28		
4	0	86	29		
5	1	70	30	N/A	
6	1	93	31		
7	0	71	32		
8	0	93	33		
9	1	60	34		
10	0	102	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments:
ALL SMEAR RESULTS IN COUNTS PER TWO MINUTES 100% of ACCESSIBLE SURFACES & EQUIPMENT SCANNED W/44-9 SCAN RESULTS: 30-40 cpm

Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
D. Albert	11/9/07	2929	196226	.363	.123	.2	39.1		09/08
	N/A	2360	184952	0.15	0.10	1	167	N/A	10/08
N/A	N/A	Model 3	79511	N/A	0.10	N/A	40		01/08
		BICRON	1716	N/A	N/A	N/A	A	5	07/08
Reviewed By:	Date:								A
	11/9/07								

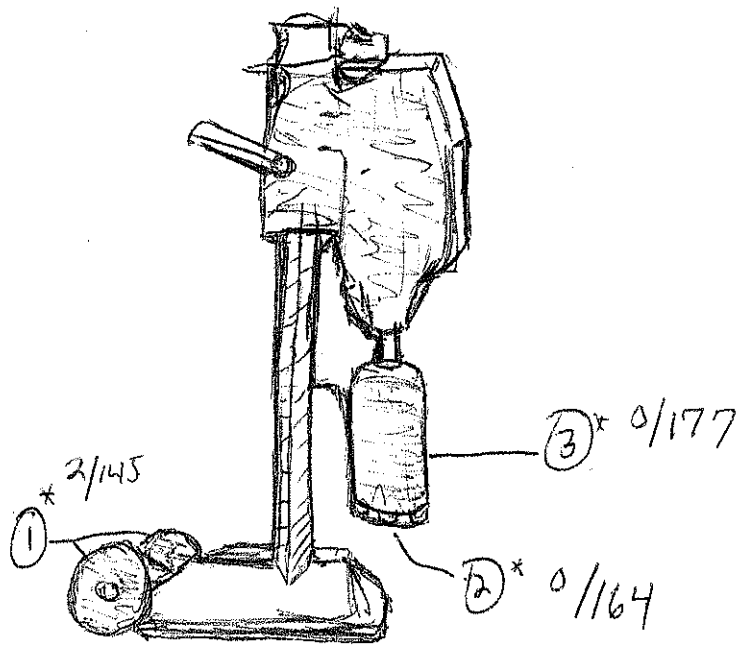
Key:
- ■ A/S Location
- ⋰ Boundary
- ○ Smear
- □ Dose Rate ____ /hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

Location: HICKSVILLE Site:	RWP# 08-1007.00-01	Survey # 17	Survey Type: RELEASE	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	82	26		
2	0	67	27		
3	1	86	28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

N A N A



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
ALL SMEARS ARE RESULTS	D Albert	11/9/07	2929	196226	.363	.123	0.2	39.1		09/08
OF COUNTS PER TWO			2360	184952	0.15	0.10	1	167	N/A	10/08
MINUTE. 100% of	N/A	N/A	Model 3	79511	N/A	0.10	N/A	40		01/08
Accessible SURFACES			BICRON	1716		N/A		N/A		07/08
& EQUIPMENT										
SCANNED w/ 44-9	Reviewed By:	Date:			N					
RESULTS: 30-40 cpm	[signature]	11/9/07								

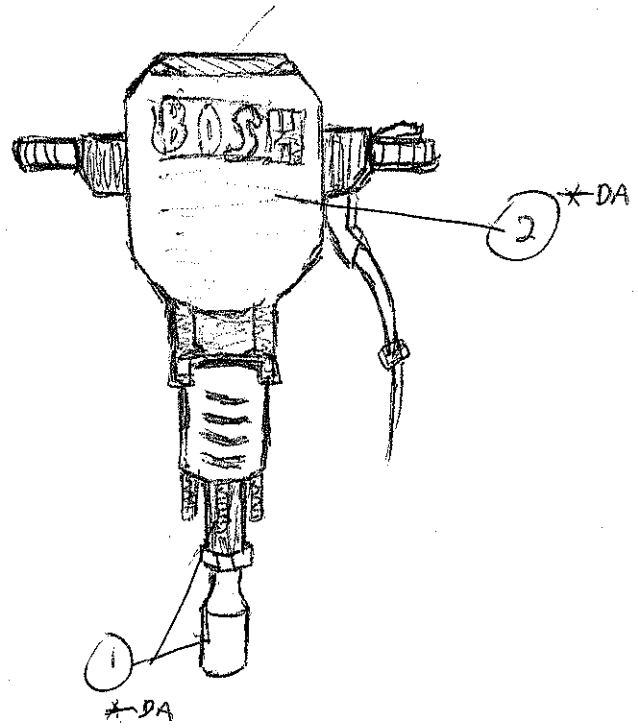
Key	
■	A/S Location
-	Boundary
○	Smear
□	Dose Rate ____/hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: Site: HICKSVILLE	RWP# 08-1007.00-01	Survey # 18	Survey Type: INCOMING	pg. 1 of 1

Smear (CPM/100 cm²) circle one

Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	2	78	26		
2	0	89	27	N/A	
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13	N		38		
14			39	A	
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
ALL SMEAR RESULTS	D. Albert	11/9/07	2929	196226	.363	.123	0.2	39.1		09/08
IN COUNTS PER	Gordon T.	11/9/07	2360	184952	0.15	0.10	1	167	N/A	10/08
TWO MINUTES			Model 3	79511	N/A	0.10	N/A	40		01/08
100% of ACCESSIBLE	N/A	N/A	BICRON	1716		N/A		N/A	5	07/08
SURFACES & EQUIPMENT					A					
SCANNED W/ 44-9	Reviewed By:	Date:								
SCAN RESULTS: 30-40 cpm	G M Lee	11/9/07		N						

Key

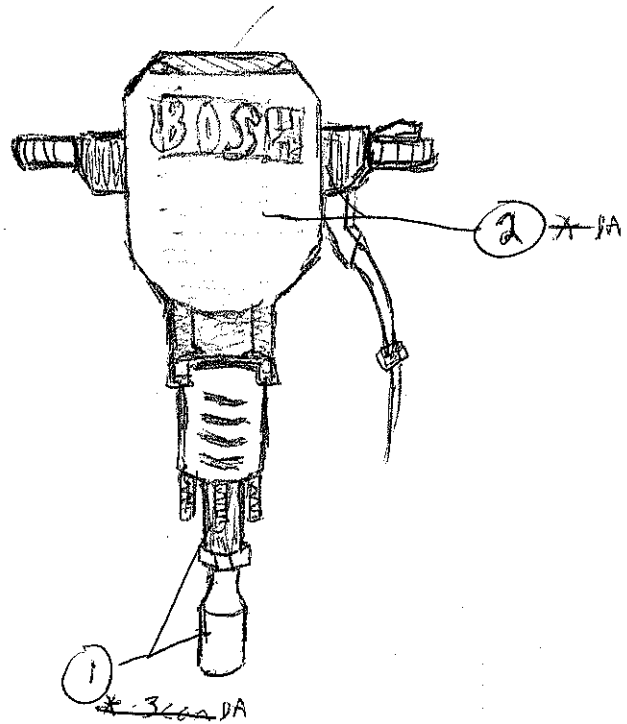
■	A/S Location
-	Boundary
○	Smear
□	Dose Rate ____/hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: HICKSVILLE
Site:

RWP# 08-100100-01 | Survey # 19 | Survey Type: RELEASE | pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	3	87	26	N/A	
2	0	97	27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9		N/A	34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



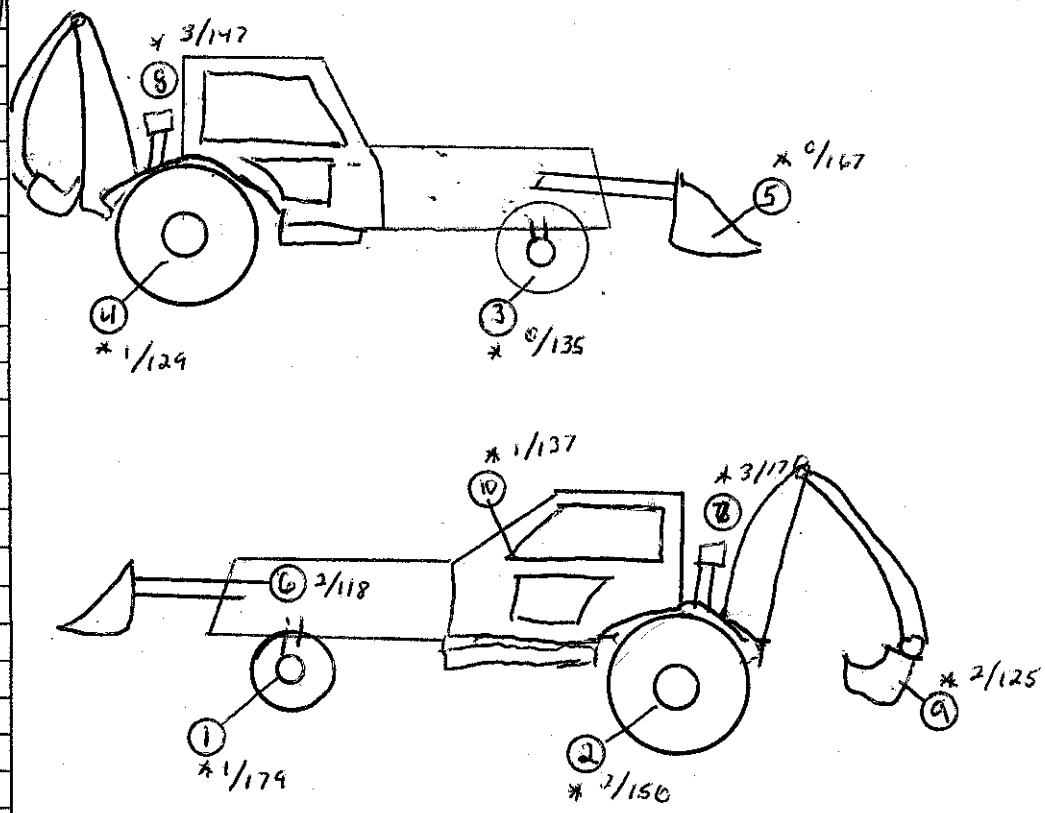
Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
ALL SMEAR RESULTS	D. ALBERT	11/9/07	2929	196826	0.363	0.123	0.2	39.1		09/08
IN COUNTS PER TWO			2360	184952	0.15	0.10	1	167	N/A	10/08
MINUTES 100% OF			Model 3	79511	N/A	0.10	N/A	40		01/08
ACCESSIBLE SURFACES	N	A	BICRON	1716					5	07/08
AND EQUIPMENT SCANNED					N					
W/ 44-9 SCAN	Reviewed By:	Date:	N	A				A	N	A
RESULTS = 30-40 cpm	[signature]	11/9/07								

Key: A/S Location; Boundary; Smear; Dose Rate ____ /hr; Direct Reading CPM/direct frisk; Grab Sample

Location: HERCULES	RWP#	Survey #	Survey Type:	pg. 1 of 1
Site: BLDG 70	08-1007.00	20		

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	73	26		
2	1	76	27		
3	0	77	28		
4	1	72	29		
5	0	97	30		
6	3	97	31		
7	0	69	32		
8	2	92	33		
9	0	97	34	N	
10	0	79	35		
11			36		
12			37		
13			38		
14			39		
15	N		40		
16			41		
17			42		
18			43		A
19		A	44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



α/β cpm

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
SMEAR RESULTS ARE IN	K GORDON	11/9/07	2929	196226	.363	.123	.2	39.1	N	9-26-08
COUNTS PER 1 MINUTES			2360	220246	15	.10	1	135	N	10-5-08
100% OF ALL ACCESSIBLE			MODEL 3	79498	N/A	.10	N/A	40	A	9-11-08
AREA SCANNED WITH										
44-9 40-60cpm				N						
	Reviewed By:	Date:					A			
	JM Diep	11/9/07								

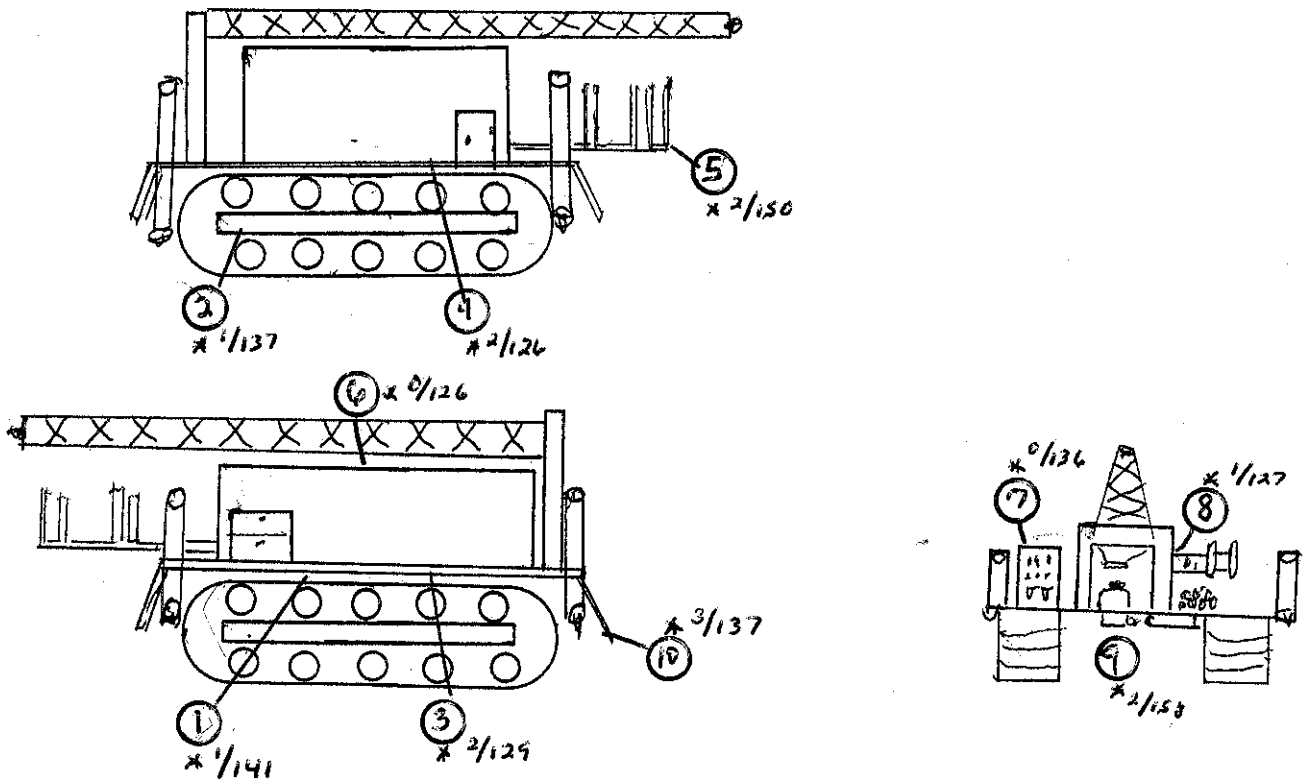
Key: ■ A/S Location; *-* Boundary; ○ Smear; □ Dose Rate _____/hr; * Direct Reading CPM/direct frisk; △ Grab Sample

Location: HICKSVILLE	RWP# 08-1007.00	vey # 21	Survey Type: RELEASE	pg. 1 of 1
Site: BLDG 70				

Smear (CPM/100 cm²) | circle one | TRACK RIG

Direct Count (CPM/Direct Frisk)

No.	α	β	No.	α	β
1	1	90	26		
2	1	101	27		
3	0	82	28		
4	2	80	29		
5	2	98	30		
6	0	91	31		
7	2	84	32	N	
8	1	92	33		
9	0	88	34		
10	0	78	35		
11			36		
12			37		
13			38		
14			39		
15	N		40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		A
23		A	48		
24			49		
25			50		



x/β- cpm

Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Smear Results In Counts	K Gordon	11/14/07	~~2929~~	~~137607~~	~~.10~~		~~.1~~	~~48~~		~~9-28-08~~
Per 2 minutes, 100%			~~2360~~	~~220246~~	~~.47~~			~~47~~		
Scan or All Accessible			2929	137607			.1	47	N	9-28-08
Surfaces with 44.9,			2360	220246	.15	.10	1	126		10-5-08
40.70cpm			Model 3	79498	N/A	.10	N/A	40	A	4-11-08
	Reviewed By:	Date:		N						
	[signature]	11/15/07							A	

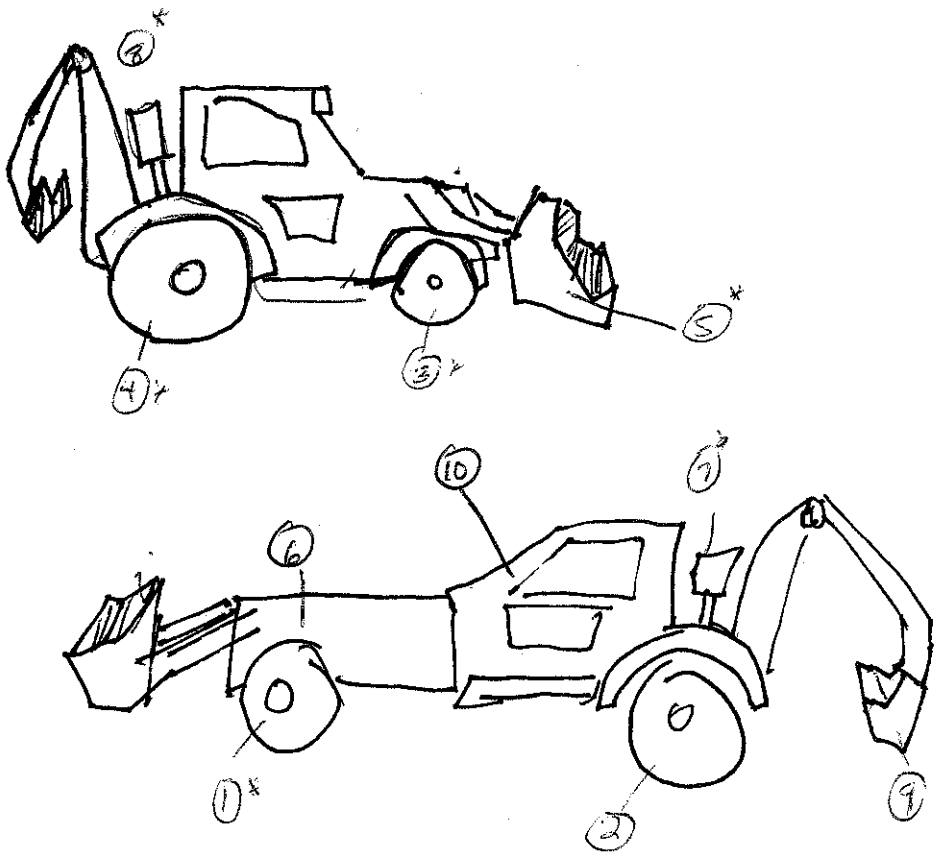
Key

■	A/S Location
⁘	Boundary
○	Smear
□	Dose Rate ____/hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: HICKSVILLE	RWP#	Survey #	Survey Type:	
Site: BLDG 10	08-1007.00-001	22	RELEASE SURVEY	pg. 1 of 1

Smear (CPM/100 cm²) / Direct Count (CPM/Direct Frisk) — circle one

No.	α	β	No.	α	β
1	0	72	26		
2	0	88	27		
3	0	90	28		
4	0	63	29		
5	0	92	30		
6	0	94	31		
7	0	78	32		
8	0	99	33		
9	1	86	34		
10	0	93	35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Smear results listed in	D. Albert	11/15/07	2929	196226	0.363	0.123	0.4	39.3	N/A	9/08
counts per 2 minutes.			BICRON	1716	N/A	N/A	N/A	N/A	5	7/08
Scanned 100% of		A	44-9	79552	N/A	0.10	N/A	40	N/A	2/08
accessible surfaces w/44-9.	N		43-93	220246	0.15	0.10	1	~~150~~ 180 DPM	N/A	10/08
Results were 30-40 cpm.										
	Reviewed By:	Date:					A			
	[signature]	11/15/07		N						

Key

■	A/S Location
-	Boundary
○	Smear
□	Dose Rate _____ /hr
*	Direct Reading CPM/direct frisk
△	Grab Sample

Location: HICKSVILLE
Site: BUILDING 70 RAD STORAGE AREA

RWP# 08-1007.00

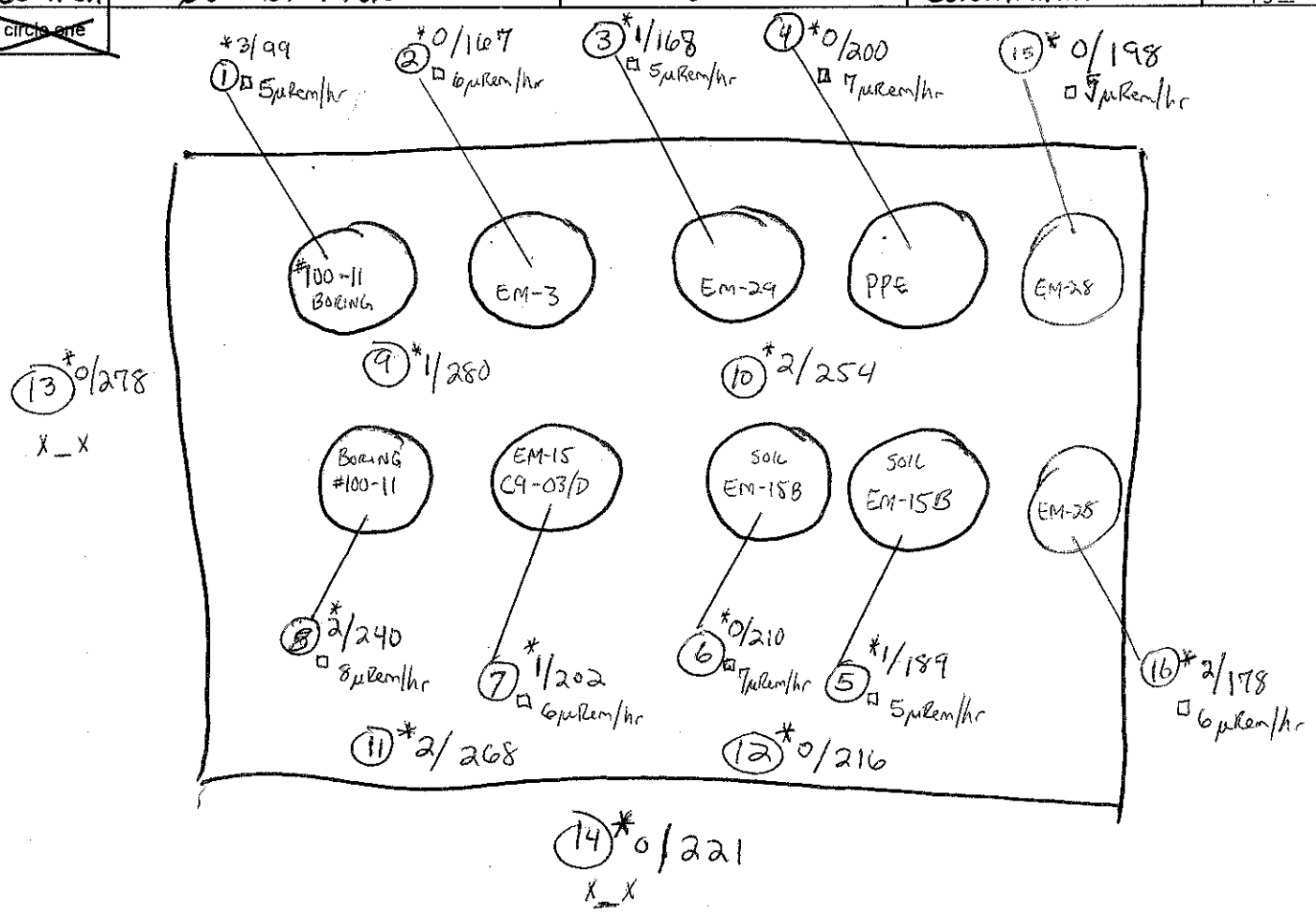
Survey # 23

Survey Type: CONTAMINATION

pg. 1 of 1

~~Smear (CPM/100 cm²)~~
~~Direct Count (CPM/Direct Frisk)~~
circle one

No.	α	β	No.	α	β
1	2	76	26		
2	0	69	27		
3	3	66	28		
4	0	71	29		
5	0	89	30		
6	1	79	31		
7	2	54	32		
8	2	86	33		
9	0	65	34		
10	1	70	35		
11	1	75	36		
12	0	87	37		
13	0	78	38	N	A
14	0	72	39		
15	0	88	40		
16			41		
17			42		
18			43		
19	N	A	44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		



Comments	Surveyed By:	Date:	Instrument	Serial #	α Eff.	β Eff.	α Bkg.	β Bkg	γ Bkg	Cal. Due
Smear results listed in	D. Albert	11/15/07	2929	196226	0.363	0.123	0.4	39.3	N/A	9/08
counts per 2 minutes.			BICRON	1716	N/A	N/A	N/A	N/A	5D	07/08
SCANNED 100% of access-			44-9	79552	N/A	0.10	N/A	40	N/A	2/08
ible surfaces w/ 44-9.	N		43-93	220246	0.15	0.10	1	156	N/A	10/08
ALL RESULTS WERE BELOW										
50 cpm.	Reviewed By:	Date:				N	A			
GENERAL AREA DOSE RATE = 4μRem/hr	J.M. Lee	11/15/07								

Key
- ■ A/S Location
- *-* Boundary
- ○ Smear
- □ Dose Rate μRem/hr
- * Direct Reading CPM/direct frisk
- △ Grab Sample

CABRERA SMEAR COUNTING WORKSHEET (Rev 6)

α eff	β eff
0.3630	0.1230

Sample Count Time (min)	Daily Background Count Time (min)
2.0	10.0

dpm/100 cm^2	
α Flag	β Flag
20	1000

* Morning Daily Count

seq. #	Sample ID# and Description	Date	Background Total Counts*		Sample Total Counts		Background (cpm)		Sample Counts (cpm)		Sample (dpm/100 cm^2)		> α flag	> β flag	Tech. Initial
			α	β	α	β	α	β	α	β	α	β			
1	Survey01-01	10/15/2007	1	365	1	79	0.1	36.5	0.50	40	1.1	24			DD
2	Survey01-02	10/15/2007	1	365	0	84	0.1	36.5	0.00	42	-0.3	45			DD
3	Survey01-03	10/15/2007	1	365	2	78	0.1	36.5	1.00	39	2.5	20			DD
4	Survey01-04	10/15/2007	1	365	2	87	0.1	36.5	1.00	44	2.5	57			DD
5	Survey01-05	10/15/2007	1	365	2	84	0.1	36.5	1.00	42	2.5	45			DD
6	Survey01-06	10/15/2007	1	365	2	87	0.1	36.5	1.00	44	2.5	57			DD
7	Survey01-07	10/15/2007	1	365	0	86	0.1	36.5	0.00	43	-0.3	53			DD
8	Survey01-08	10/15/2007	1	365	0	82	0.1	36.5	0.00	41	-0.3	37			DD
9	Survey01-09	10/15/2007	1	365	0	77	0.1	36.5	0.00	39	-0.3	16			DD
10	Survey01-10	10/15/2007	1	365	0	90	0.1	36.5	0.00	45	-0.3	69			DD
11	Survey01-11	10/15/2007	1	365	0	65	0.1	36.5	0.00	33	-0.3	-33			DD
12	Survey01-12	10/15/2007	1	365	0	66	0.1	36.5	0.00	33	-0.3	-28			DD
13	Survey01-13	10/15/2007	1	365	0	67	0.1	36.5	0.00	34	-0.3	-24			DD
14	Survey01-14	10/15/2007	1	365	1	72	0.1	36.5	0.50	36	1.1	-4			DD
15	Survey01-15	10/15/2007	1	365	1	82	0.1	36.5	0.50	41	1.1	37			DD
16	Survey01-16	10/15/2007	1	365	3	76	0.1	36.5	1.50	38	3.9	12			DD
17	Survey01-17	10/15/2007	1	365	0	60	0.1	36.5	0.00	30	-0.3	-53			DD
18	Survey01-18	10/15/2007	1	365	0	78	0.1	36.5	0.00	39	-0.3	20			DD
19	Survey01-19	10/15/2007	1	365	0	64	0.1	36.5	0.00	32	-0.3	-37			DD
20	Survey01-20	10/15/2007	1	365	0	87	0.1	36.5	0.00	44	-0.3	57			DD
21	Survey01-21	10/15/2007	1	365	0	76	0.1	36.5	0.00	38	-0.3	12			DD
22	Survey01-22	10/15/2007	1	365	0	68	0.1	36.5	0.00	34	-0.3	-20			DD
23	Survey01-23	10/15/2007	1	365	0	67	0.1	36.5	0.00	34	-0.3	-24			DD
24	Survey01-24	10/15/2007	1	365	1	72	0.1	36.5	0.50	36	1.1	-4			DD
25	Survey01-25	10/16/2007	0	390	0	69	0.0	39.0	0.00	35	0.0	-37			DD
26	Survey01-26	10/16/2007	0	390	0	67	0.0	39.0	0.00	34	0.0	-45			DD
27	Survey01-27	10/16/2007	0	390	0	75	0.0	39.0	0.00	38	0.0	-12			DD
28	Survey01-28	10/16/2007	0	390	0	68	0.0	39.0	0.00	34	0.0	-41			DD
29	Survey01-29	10/16/2007	0	390	1	82	0.0	39.0	0.50	41	1.4	16			DD
30	Survey01-30	10/16/2007	0	390	1	71	0.0	39.0	0.50	36	1.4	-28			DD
31	C13-01	10/16/2007	0	390	0	64	0.0	39.0	0.00	32	0.0	-57			DD
32	C13-02	10/16/2007	0	390	0	78	0.0	39.0	0.00	39	0.0	0			DD
33	C08-01	10/16/2007	0	390	0	86	0.0	39.0	0.00	43	0.0	33			DD
34	C08-02	10/16/2007	0	390	0	74	0.0	39.0	0.00	37	0.0	-16			DD
35	SU09-10/D	10/16/2007	0	390	0	73	0.0	39.0	0.00	37	0.0	-20			MMD
36	SU13-07/D	10/17/2007	1	376	1	67	0.1	37.6	0.50	34	1.1	-33			MMD
37	DR-7	10/17/2007	1	376	1	75	0.1	37.6	0.50	38	1.1	-1			MMD
38	DR-Y	10/17/2007	1	376	1	81	0.1	37.6	0.50	41	1.1	24			MMD
39	C07-01	10/17/2007	1	376	0	90	0.1	37.6	0.00	45	-0.3	60			MMD
41	C07-02	10/17/2007	1	376	3	57	0.1	37.6	1.50	29	3.9	-74			MMD
42	C13-03	10/17/2007	1	376	1	67	0.1	37.6	0.50	34	1.1	-33			MMD
43	SU14-10/D	10/18/2007	0	398	0	73	0.0	39.8	0.00	37	0.0	-27			MMD
44	C04-07	10/18/2007	0	398	0	66	0.0	39.8	0.00	33	0.0	-55			DD
45	C11-07	10/18/2007	0	398	0	59	0.0	39.8	0.00	30	0.0	-84			DD
46	C10-01	10/22/2007	2	379	0	73	0.2	37.9	0.00	37	-0.6	-11			MMD

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47	C10-02	10/22/2007	2	379	0	86	0.2	37.9	0.00	43	-0.6	41			MMD
48	C12-01	10/22/2007	2	379	0	67	0.2	37.9	0.00	34	-0.6	-36			MMD
49	C12-02	10/22/2007	2	379	0	73	0.2	37.9	0.00	37	-0.6	-11			MMD
50	C04-02	10/22/2007	2	379		77	0.2	37.9		39	-0.6	5			MMD
51	C09-01	10/22/2007	2	379	0	85	0.2	37.9	0.00	43	-0.6	37			MMD
52	Survey02-01	10/19/2007	2	357	0	73	0.2	35.7	0.00	37	-0.6	7			MMD
53	Survey02-02	10/19/2007	2	357	1	73	0.2	35.7	0.50	37	0.8	7			MMD
54	Survey02-03	10/19/2007	2	357	3	77	0.2	35.7	1.50	39	3.6	23			MMD
55	Survey02-04	10/19/2007	2	357	2	81	0.2	35.7	1.00	41	2.2	39			MMD
56	Survey02-05	10/19/2007	2	357	0	83	0.2	35.7	0.00	42	-0.6	47			MMD
57	Survey02-06	10/19/2007	2	357	0	89	0.2	35.7	0.00	45	-0.6	72			MMD
58	Survey02-07	10/19/2007	2	357	2	77	0.2	35.7	1.00	39	2.2	23			MMD
59	Survey02-08	10/19/2007	2	357	0	64	0.2	35.7	0.00	32	-0.6	-30			MMD
60	Survey02-09	10/19/2007	2	357	0	66	0.2	35.7	0.00	33	-0.6	-22			MMD
61	Survey02-10	10/19/2007	2	357	0	87	0.2	35.7	0.00	44	-0.6	63			MMD
62	Survey03-01	10/22/2007	2	379	0	98	0.2	37.9	0.00	49	-0.6	90			MMD
63	Survey03-02	10/22/2007	2	379	0	80	0.2	37.9	0.00	40	-0.6	17			MMD
64	Survey03-03	10/22/2007	2	379	0	79	0.2	37.9	0.00	40	-0.6	13			MMD
65	Survey03-04	10/22/2007	2	379	0	78	0.2	37.9	0.00	39	-0.6	9			MMD
66	Survey03-05	10/22/2007	2	379	1	64	0.2	37.9	0.50	32	0.8	-48			MMD
67	Survey03-06	10/22/2007	2	379	1	72	0.2	37.9	0.50	36	0.8	-15			MMD
68	Survey03-07	10/22/2007	2	379	1	73	0.2	37.9	0.50	37	0.8	-11			MMD
69	Survey03-08	10/22/2007	2	379	1	82	0.2	37.9	0.50	41	0.8	25			MMD
70	Survey03-09	10/22/2007	2	379	0	93	0.2	37.9	0.00	47	-0.6	70			MMD
71	Survey03-10	10/22/2007	2	379	0	84	0.2	37.9	0.00	42	-0.6	33			MMD
72	Survey04-01	10/23/2007	0	377	2	75	0.0	37.7	1.00	38	2.8	-2			MMD
73	Survey04-02	10/23/2007	0	377	2	66	0.0	37.7	1.00	33	2.8	-38			MMD
74	Survey04-03	10/23/2007	0	377	0	76	0.0	37.7	0.00	38	0.0	2			MMD
75	Survey04-04	10/23/2007	0	377	1	82	0.0	37.7	0.50	41	1.4	27			MMD
76	Survey04-05	10/23/2007	0	377	1	83	0.0	37.7	0.50	42	1.4	31			MMD
77	Survey04-06	10/23/2007	0	377	0	77	0.0	37.7	0.00	39	0.0	7			MMD
78	Survey04-07	10/23/2007	0	377	0	71	0.0	37.7	0.00	36	0.0	-18			MMD
79	Survey04-08	10/23/2007	0	377	0	82	0.0	37.7	0.00	41	0.0	27			MMD
80	Survey04-09	10/23/2007	0	377	1	68	0.0	37.7	0.50	34	1.4	-30			MMD
81	Survey04-10	10/23/2007	0	377	0	86	0.0	37.7	0.00	43	0.0	43			MMD
82	C09-02/D	10/23/2007	0	377	0	61	0.0	37.7	0.00	31	0.0	-59			MMD
83	C09-04/D	10/23/2007	0	377	2	77	0.0	37.7	1.00	39	2.8	7			MMD
84	SU08-02/D	10/23/2007	0	377	1	59	0.0	37.7	0.50	30	1.4	-67			MMD
85	SU08-11/D	10/24/2007	2	386	1	78	0.2	38.6	0.50	39	0.8	3			MMD
86	C09-03/D	10/24/2007	2	386	0	96	0.2	38.6	0.00	48	-0.6	76			MMD
87	C04-01/D	10/25/2007	1	351	1	80	0.1	35.1	0.50	40	1.1	40			MMD
88	C06-02/D	10/25/2007	1	351	0	92	0.1	35.1	0.00	46	-0.3	89			MMD
89	C06-03	10/25/2007	1	351	3	85	0.1	35.1	1.50	43	3.9	60			MMD
90	Survey05-01	10/25/2007	1	351	0	73	0.1	35.1	0.00	37	-0.3	11			MMD
91	Survey05-02	10/25/2007	1	351	1	67	0.1	35.1	0.50	34	1.1	-13			MMD
92	Survey05-03	10/25/2007	1	351	0	76	0.1	35.1	0.00	38	-0.3	24			MMD
93	Survey05-04	10/25/2007	1	351	1	81	0.1	35.1	0.50	41	1.1	44			MMD
94	Survey05-05	10/25/2007	1	351	2	72	0.1	35.1	1.00	36	2.5	7			MMD
95	Survey05-06	10/25/2007	1	351	2	66	0.1	35.1	1.00	33	2.5	-17			MMD
96	Survey05-07	10/25/2007	1	351	1	65	0.1	35.1	0.50	33	1.1	-21			MMD
97	Survey05-08	10/25/2007	1	351	0	91	0.1	35.1	0.00	46	-0.3	85			MMD
98	Survey05-09	10/25/2007	1	351	1	74	0.1	35.1	0.50	37	1.1	15			MMD
99	Survey05-10	10/25/2007	1	351	1	74	0.1	35.1	0.50	37	1.1	15			MMD
100	Survey06-01	10/25/2007	1	351	0	68	0.1	35.1	0.00	34	-0.3	-9			MMD

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101	Survey06-02	10/25/2007	1	351	0	76	0.1	35.1	0.00	38	-0.3	24			MMD
102	Survey06-03	10/25/2007	1	351	0	59	0.1	35.1	0.00	30	-0.3	-46			MMD
103	Survey06-04	10/25/2007	1	351	0	83	0.1	35.1	0.00	42	-0.3	52			MMD
104	Survey06-05	10/25/2007	1	351	0	86	0.1	35.1	0.00	43	-0.3	64			MMD
105	Survey06-06	10/25/2007	1	351	1	82	0.1	35.1	0.50	41	1.1	48			MMD
106	Survey06-07	10/25/2007	1	351	0	55	0.1	35.1	0.00	28	-0.3	-62			MMD
107	Survey06-08	10/25/2007	1	351	0	75	0.1	35.1	0.00	38	-0.3	20			MMD
108	Survey06-09	10/25/2007	1	351	1	55	0.1	35.1	0.50	28	1.1	-62			MMD
109	Survey06-10	10/25/2007	1	351	2	77	0.1	35.1	1.00	39	2.5	28			MMD
110	Survey07-01	10/26/2007	1	395	0	81	0.1	39.5	0.00	41	-0.3	8			MMD
111	Survey07-02	10/26/2007	1	395	1	65	0.1	39.5	0.50	33	1.1	-57			MMD
112	Survey07-03	10/26/2007	1	395	1	72	0.1	39.5	0.50	36	1.1	-28			MMD
113	Survey07-04	10/26/2007	1	395	0	76	0.1	39.5	0.00	38	-0.3	-12			MMD
114	Survey07-05	10/26/2007	1	395	0	59	0.1	39.5	0.00	30	-0.3	-81			MMD
115	Survey07-06	10/26/2007	1	395	2	63	0.1	39.5	1.00	32	2.5	-65			MMD
116	Survey07-07	10/26/2007	1	395	1	77	0.1	39.5	0.50	39	1.1	-8			MMD
117	Survey07-08	10/26/2007	1	395	0	66	0.1	39.5	0.00	33	-0.3	-53			MMD
118	Survey07-09	10/26/2007	1	395	1	78	0.1	39.5	0.50	39	1.1	-4			MMD
119	Survey07-10	10/26/2007	1	395	0	68	0.1	39.5	0.00	34	-0.3	-45			MMD
120	Survey08-01	10/26/2007	1	395	0	62	0.1	39.5	0.00	31	-0.3	-69			DD
121	Survey08-02	10/26/2007	1	395	2	78	0.1	39.5	1.00	39	2.5	-4			DD
122	Survey08-03	10/26/2007	1	395	0	76	0.1	39.5	0.00	38	-0.3	-12			DD
123	Survey08-04	10/26/2007	1	395	0	72	0.1	39.5	0.00	36	-0.3	-28			DD
124	Survey08-05	10/26/2007	1	395	0	67	0.1	39.5	0.00	34	-0.3	-49			DD
125	Survey08-06	10/26/2007	1	395	0	61	0.1	39.5	0.00	31	-0.3	-73			DD
126	Survey08-07	10/26/2007	1	395	0	73	0.1	39.5	0.00	37	-0.3	-24			DD
127	Survey08-08	10/26/2007	1	395	1	79	0.1	39.5	0.50	40	1.1	0			DD
128	Survey08-09	10/26/2007	1	395	0	72	0.1	39.5	0.00	36	-0.3	-28			DD
129	Survey08-10	10/26/2007	1	395	2	81	0.1	39.5	1.00	41	2.5	8			DD
130	Survey09-01	10/29/2007	1	395	0	75	0.1	39.5	0.00	38	-0.3	-16			DD
131	Survey09-02	10/29/2007	1	395	0	69	0.1	39.5	0.00	35	-0.3	-41			DD
132	Survey09-03	10/29/2007	1	395	0	63	0.1	39.5	0.00	32	-0.3	-65			DD
133	Survey09-04	10/29/2007	1	395	0	72	0.1	39.5	0.00	36	-0.3	-28			DD
134	Survey09-05	10/29/2007	1	395	1	71	0.1	39.5	0.50	36	1.1	-33			DD
135	Survey09-06	10/29/2007	1	395	2	68	0.1	39.5	1.00	34	2.5	-45			DD
136	Survey09-07	10/29/2007	1	395	1	73	0.1	39.5	0.50	37	1.1	-24			DD
137	Survey09-08	10/29/2007	1	395	1	66	0.1	39.5	0.50	33	1.1	-53			DD
138	Survey09-09	10/29/2007	1	395	1	76	0.1	39.5	0.50	38	1.1	-12			DD
139	Survey09-10	10/29/2007	1	395	0	75	0.1	39.5	0.00	38	-0.3	-16			DD
140	100-11	10/30/2007	3	381	0	73	0.3	38.1	0.00	37	-0.8	-13			DA
141	C03-02	10/30/2007	3	381	0	76	0.3	38.1	0.00	38	-0.8	-1			DA
142	C02-01	10/30/2007	3	381	1	84	0.3	38.1	0.50	42	0.6	32			DA
143	LPH-A/D	10/30/2007	3	381	0	71	0.3	38.1	0.00	36	-0.8	-21			DA
144	C03-01	10/30/2007	3	381	1	67	0.3	38.1	0.50	34	0.6	-37			DA
145	C02-02	10/30/2007	3	381	1	79	0.3	38.1	0.50	40	0.6	11			DA
146	Survey10-01	10/30/2007	3	381	0	77	0.3	38.1	0.00	39	-0.8	3			DA
147	Survey10-02	10/30/2007	3	381	0	70	0.3	38.1	0.00	35	-0.8	-25			DA
148	Survey10-03	10/30/2007	3	381	2	85	0.3	38.1	1.00	43	1.9	36			DA
149	Survey10-04	10/30/2007	3	381	0	59	0.3	38.1	0.00	30	-0.8	-70			DA
150	Survey10-05	10/30/2007	3	381	0	89	0.3	38.1	0.00	45	-0.8	52			DA
151	Survey10-06	10/30/2007	3	381	0	86	0.3	38.1	0.00	43	-0.8	40			DA
152	Survey10-07	10/30/2007	3	381	1	71	0.3	38.1	0.50	36	0.6	-21			DA
153	Survey10-08	10/30/2007	3	381	0	74	0.3	38.1	0.00	37	-0.8	-9			DA
154	Survey10-09	10/30/2007	3	381	0	84	0.3	38.1	0.00	42	-0.8	32			DA

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155	Survey10-10	10/30/2007	3	381	2	80	0.3	38.1	1.00	40	1.9	15			DA
156	C01-01	11/1/2007	0	365	1	64	0.0	36.5	0.50	32	1.4	-37			DA
157	C01-02	11/1/2007	0	365	0	63	0.0	36.5	0.00	32	0.0	-41			DA
158	C01-03	11/1/2007	0	365	0	85	0.0	36.5	0.00	43	0.0	49			DA
159	C05-01	11/1/2007	0	365	0	59	0.0	36.5	0.00	30	0.0	-57			DA
160	Rad Drum Storage Area-01	11/1/2007	0	365	2	83	0.0	36.5	1.00	42	2.8	41			DA
161	Rad Drum Storage Area-02	11/1/2007	0	365	0	65	0.0	36.5	0.00	33	0.0	-33			DA
162	Rad Drum Storage Area-03	11/1/2007	0	365	0	70	0.0	36.5	0.00	35	0.0	-12			DA
163	Rad Drum Storage Area-04	11/1/2007	0	365	1	68	0.0	36.5	0.50	34	1.4	-20			DA
164	Rad Drum Storage Area-05	11/1/2007	0	365	1	76	0.0	36.5	0.50	38	1.4	12			DA
165	Rad Drum Storage Area-06	11/1/2007	0	365	0	81	0.0	36.5	0.00	41	0.0	33			DA
166	Survery 11 -01	11/2/2007	0	184	0	81	0.0	18.4	0.00	41	0.0	180			DA
167	Survery 11-02	11/2/2007	0	184	0	83	0.0	18.4	0.00	42	0.0	188			DA
168	Survery 11-03	11/2/2007	0	184	1	95	0.0	18.4	0.50	48	1.4	237			DA
169	Survery 11-04	11/2/2007	0	184	1	93	0.0	18.4	0.50	47	1.4	228			DA
170	Survery 11-05	11/2/2007	0	184	1	91	0.0	18.4	0.50	46	1.4	220			DA
171	Survery 11-06	11/2/2007	0	184	2	72	0.0	18.4	1.00	36	2.8	143			DA
172	Survery 11-07	11/2/2007	0	184	0	68	0.0	18.4	0.00	34	0.0	127			DA
173	Survery 11-08	11/2/2007	0	184	0	77	0.0	18.4	0.00	39	0.0	163			DA
174	Survery 11-09	11/2/2007	0	184	1	71	0.0	18.4	0.50	36	1.4	139			DA
175	Survery 11-10	11/2/2007	0	184	1	62	0.0	18.4	0.50	31	1.4	102			DA
176	DR-K	11/5/2007	1	363	1	69	0.1	36.3	0.50	35	1.1	-15			DA
177	SU12-03	11/5/2007	1	363	0	78	0.1	36.3	0.00	39	-0.3	22			DA
178	SU12-04	11/6/2007	2	388	1	70	0.2	38.8	0.50	35	0.8	-31			DA
179	DR-J	11/6/2007	2	388	1	80	0.2	38.8	0.50	40	0.8	10			DA
180	DRH-A2	11/6/2007	2	388	1	72	0.2	38.8	0.50	36	0.8	-23			DA
181	140-07/D	11/6/2007	2	388	1	75	0.2	38.8	0.50	38	0.8	-11			DA
182	SU12-11/I	11/7/2007	0	362	0	58	0.0	36.2	0.00	29	0.0	-59			DA
183	SU12-12/I	11/7/2007	0	362	0	64	0.0	36.2	0.00	32	0.0	-34			DA
184	Survey 12-01	11/7/2007	0	362	1	71	0.0	36.2	0.50	36	1.4	-6			DA
185	Survey 12-02	11/7/2007	0	362	0	78	0.0	36.2	0.00	39	0.0	23			DA
186	Survey 12-03	11/7/2007	0	362	1	76	0.0	36.2	0.50	38	1.4	15			DA
187	Survey 12-04	11/7/2007	0	362	3	83	0.0	36.2	1.50	42	4.1	43			DA
188	Survey 12-05	11/7/2007	0	362	0	87	0.0	36.2	0.00	44	0.0	59			DA
189	Survey 12-06	11/7/2007	0	362	0	63	0.0	36.2	0.00	32	0.0	-38			DA
190	Survey 12-07	11/7/2007	0	362	0	77	0.0	36.2	0.00	39	0.0	19			DA
191	Survey 12-08	11/7/2007	0	362	0	66	0.0	36.2	0.00	33	0.0	-26			DA
192	Survey 12-09	11/7/2007	0	362	1	75	0.0	36.2	0.50	38	1.4	11			DA
193	Survey 12-10	11/7/2007	0	362	2	58	0.0	36.2	1.00	29	2.8	-59			DA
194	Survey 13-01	11/7/2007	0	362	1	91	0.0	36.2	0.50	46	1.4	76			DA
195	Survey 13-02	11/7/2007	0	362	0	77	0.0	36.2	0.00	39	0.0	19			DA
196	Survey 13-03	11/7/2007	0	362	0	86	0.0	36.2	0.00	43	0.0	55			DA
197	Survey 13-04	11/7/2007	0	362	0	73	0.0	36.2	0.00	37	0.0	2			DA
198	Survey 13-05	11/7/2007	0	362	1	82	0.0	36.2	0.50	41	1.4	39			DA
199	Survey 13-06	11/7/2007	0	362	0	89	0.0	36.2	0.00	45	0.0	67			DA
200	Survey 13-07	11/7/2007	0	362	0	73	0.0	36.2	0.00	37	0.0	2			DA
201	Survey 13-08	11/7/2007	0	362	0	79	0.0	36.2	0.00	40	0.0	27			DA
202	Survey 13-09	11/7/2007	0	362	0	63	0.0	36.2	0.00	32	0.0	-38			DA
203	Survey 13-10	11/7/2007	0	362	1	77	0.0	36.2	0.50	39	1.4	19			DA
204	DRM	11/7/2007	0	362	0	75	0.0	36.2	0.00	38	0.0	11			DA
205	Survey 14-01	11/8/2007	3	329	0	33	0.3	32.9	0.00	17	-0.8	-133			DA
206	Survey 14-02	11/8/2007	3	329	0	83	0.3	32.9	0.00	42	-0.8	70			DA
207	Survey 14-03	11/8/2007	3	329	0	77	0.3	32.9	0.00	39	-0.8	46			DA
208	Survey 14-04	11/8/2007	3	329	0	64	0.3	32.9	0.00	32	-0.8	-7			DA

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209	Survey 14-05	11/8/2007	3	329	0	66	0.3	32.9	0.00	33	-0.8	1			DA
210	Survey 14-06	11/8/2007	3	329	0	66	0.3	32.9	0.00	33	-0.8	1			DA
211	Survey 14-07	11/8/2007	3	329	0	77	0.3	32.9	0.00	39	-0.8	46			DA
212	Survey 14-08	11/8/2007	3	329	0	71	0.3	32.9	0.00	36	-0.8	21			DA
213	Survey 14-09	11/8/2007	3	329	1	94	0.3	32.9	0.50	47	0.6	115			DA
214	Survey 14-10	11/8/2007	3	329	0	76	0.3	32.9	0.00	38	-0.8	41			DA
215	DR-BB1	11/8/2007	3	329	76	219	0.3	32.9	38.00	110	103.9	623	FLAG		DA
216	DR-BB2	11/8/2007	3	329	166	263	0.3	32.9	83.00	132	227.8	802	FLAG		DA
217	Survey 15-01	11/8/2007	3	329	1	66	0.3	32.9	0.50	33	0.6	1			DA
218	Survey 15-02	11/8/2007	3	329	1	79	0.3	32.9	0.50	40	0.6	54			DA
219	Survey 15-03	11/8/2007	3	329	1	76	0.3	32.9	0.50	38	0.6	41			DA
220	Survey 15-04	11/8/2007	3	329	1	82	0.3	32.9	0.50	41	0.6	66			DA
221	Survey 15-05	11/8/2007	3	329	1	68	0.3	32.9	0.50	34	0.6	9			DA
222	Survey 15-06	11/8/2007	3	329	1	73	0.3	32.9	0.50	37	0.6	29			DA
223	Survey 15-07	11/8/2007	3	329	1	75	0.3	32.9	0.50	38	0.6	37			DA

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α eff	β eff
0.3630	0.1230

Sample Count Time (min)	Daily Background Count Time (min)
2.0	10.0

dpm/100 cm^2 α Flag	dpm/100 cm^2 β Flag
20	1000

* Morning Daily Count

seq. #	Sample ID# and Description	Date	Background Total Counts* α	Background Total Counts* β	Sample Total Counts α	Sample Total Counts β	Background (cpm) α	Background (cpm) β	Sample Counts (cpm) α	Sample Counts (cpm) β	Sample (dpm/100 cm^2) α	Sample (dpm/100 cm^2) β	> α flag	> β flag	Tech. Initial
1	Survey 15-08	11/8/2007	3	329	1	78	0.3	32.9	0.50	39	0.6	50			DD
2	Survey 15-09	11/8/2007	3	329	1	67	0.3	32.9	0.50	34	0.6	5			DD
3	Survey 15-10	11/8/2007	3	329	121	330	0.3	32.9	60.50	165	165.8	1074	FLAG	FLAG	DD
4	Survey 15-11	11/8/2007	3	329	66	137	0.3	32.9	33.00	69	90.1	289	FLAG		DD
5	Survey 15-12	11/8/2007	3	329	0	82	0.3	32.9	0.00	41	-0.8	66			DD
6	Survey 15-13	11/8/2007	3	329	0	81	0.3	32.9	0.00	41	-0.8	62			DD
7	Survey 15-14	11/8/2007	3	329	3	94	0.3	32.9	1.50	47	3.3	115			DD
8	Survey 16-1	11/9/2007	2	391	0	85	0.2	39.1	0.00	43	-0.6	28			DA
9	Survey 16-2	11/9/2007	2	391	0	80	0.2	39.1	0.00	40	-0.6	7			DA
10	Survey 16-3	11/9/2007	2	391	1	73	0.2	39.1	0.50	37	0.8	-21			DA
11	Survey 16-4	11/9/2007	2	391	0	86	0.2	39.1	0.00	43	-0.6	32			DA
12	Survey 16-5	11/9/2007	2	391	1	70	0.2	39.1	0.50	35	0.8	-33			DA
13	Survey 16-6	11/9/2007	2	391	1	93	0.2	39.1	0.50	47	0.8	60			DA
14	Survey 16-7	11/9/2007	2	391	0	71	0.2	39.1	0.00	36	-0.6	-29			DA
15	Survey 16-8	11/9/2007	2	391	0	93	0.2	39.1	0.00	47	-0.6	60			DA
16	Survey 16-9	11/9/2007	2	391	1	60	0.2	39.1	0.50	30	0.8	-74			DA
17	Survey 16-10	11/9/2007	2	391	0	102	0.2	39.1	0.00	51	-0.6	97			DA
18	Survey 17-1	11/9/2007	2	391	0	82	0.2	39.1	0.00	41	-0.6	15			DA
19	Survey 17-2	11/9/2007	2	391	0	67	0.2	39.1	0.00	34	-0.6	-46			DA
20	Survey 17-3	11/9/2007	2	391	1	86	0.2	39.1	0.50	43	0.8	32			DA
21	Survey 18-1	11/9/2007	2	391	2	78	0.2	39.1	1.00	39	2.2	-1			DA
22	Survey 18-2	11/9/2007	2	391	0	89	0.2	39.1	0.00	45	-0.6	44			DA
23	Survey 19-1	11/9/2007	2	391	3	87	0.2	39.1	1.50	44	3.6	36			DA
24	Survey 19-2	11/9/2007	2	391	0	97	0.2	39.1	0.00	49	-0.6	76			DA
25	Survey 20-1	11/9/2007	2	391	0	73	0.2	39.1	0.00	37	-0.6	-21			KG
26	Survey 20-2	11/9/2007	2	391	1	76	0.2	39.1	0.50	38	0.8	-9			KG
27	Survey 20-3	11/9/2007	2	391	0	77	0.2	39.1	0.00	39	-0.6	-5			KG
28	Survey 20-4	11/9/2007	2	391	1	72	0.2	39.1	0.50	36	0.8	-25			KG
29	Survey 20-5	11/9/2007	2	391	0	97	0.2	39.1	0.00	49	-0.6	76			KG
30	Survey 20-6	11/9/2007	2	391	3	97	0.2	39.1	1.50	49	3.6	76			KG
31	Survey 20-7	11/9/2007	2	391	0	69	0.2	39.1	0.00	35	-0.6	-37			KG
32	Survey 20-8	11/9/2007	2	391	3	92	0.2	39.1	1.50	46	3.6	56			KG
33	Survey 20-9	11/9/2007	2	391	0	97	0.2	39.1	0.00	49	-0.6	76			KG
34	Survey 20-10	11/9/2007	2	391	0	79	0.2	39.1	0.00	40	-0.6	3			KG
35	EM 35-01	11/12/2007	3	352	0	79	0.3	35.2	0.00	40	-0.8	35			DA
36	EM 35-02	11/12/2007	3	352	0	73	0.3	35.2	0.00	37	-0.8	11			DA
37	EM 28-01	11/12/2007	3	352	0	60	0.3	35.2	0.00	30	-0.8	-42			DA
38	EM 28-02	11/12/2007	3	352	4	106	0.3	35.2	2.00	53	4.7	145			DA
39	EM 28-03	11/12/2007	3	352	1	72	0.3	35.2	0.50	36	0.6	7			DA
41	EM 28-04	11/12/2007	3	352	0	81	0.3	35.2	0.00	41	-0.8	43			DA
42	EM 28-05	11/12/2007	3	352	0	70	0.3	35.2	0.00	35	-0.8	-2			DA
43	DR-CC	11/12/2007	3	352	1	74	0.3	35.2	0.50	37	0.6	15			DA
44	DR-Y	11/12/2007	3	352	1	82	0.3	35.2	0.50	41	0.6	47			DA
45	DR-BB	11/12/2007	3	352	0	88	0.3	35.2	0.00	44	-0.8	72			DA
46	100-06/D	11/12/2007	3	352	5	91	0.3	35.2	2.50	46	6.1	84			DA

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47	DR-AA	11/12/2007	3	352	1	101	0.3	35.2	0.50	51	0.6	124			DA
48	DR-X	11/12/2007	3	352	0	85	0.3	35.2	0.00	43	-0.8	59			DA
49	DR-W	11/12/2007	3	352	0	82	0.3	35.2	0.00	41	-0.8	47			DA
50	DR-Z	11/12/2007	3	352	2	89	0.3	35.2	1.00	45	1.9	76			DA
51	SU12-01/D	11/12/2007	3	352	0	68	0.3	35.2	0.00	34	-0.8	-10			DA
52	GPR C -01	11/13/2007	2	344	0	80	0.2	34.4	0.00	40	-0.6	46			DA
53	GPR C -02	11/13/2007	2	344	0	69	0.2	34.4	0.00	35	-0.6	1			DA
54	GPR C -03	11/13/2007	2	344	0	72	0.2	34.4	0.00	36	-0.6	13			DA
55	GPR C -04	11/13/2007	2	344	0	71	0.2	34.4	0.00	36	-0.6	9			DA
56	EM 16-01	11/13/2007	2	344	1	90	0.2	34.4	0.50	45	0.8	86			DA
57	EM 16-02	11/13/2007	2	344	0	89	0.2	34.4	0.00	45	-0.6	82			DA
58	EM 16-03	11/13/2007	2	344	0	72	0.2	34.4	0.00	36	-0.6	13			DA
59	EM 16-04	11/13/2007	2	344	0	75	0.2	34.4	0.00	38	-0.6	25			DA
60	EM 13-01	11/13/2007	2	344	0	71	0.2	34.4	0.00	36	-0.6	9			DA
61	EM 13-02	11/13/2007	2	344	0	72	0.2	34.4	0.00	36	-0.6	13			DA
62	EM 13-03	11/13/2007	2	344	0	80	0.2	34.4	0.00	40	-0.6	46			DA
63	EM 13-04	11/13/2007	2	344	0	78	0.2	34.4	0.00	39	-0.6	37			DA
64	EM 11-01	11/13/2007	2	344	0	63	0.2	34.4	0.00	32	-0.6	-24			DA
65	EM 11-02	11/13/2007	2	344	1	70	0.2	34.4	0.50	35	0.8	5			DA
66	EM 11-03	11/13/2007	2	344	1	97	0.2	34.4	0.50	49	0.8	115			DA
67	EM 11-04	11/13/2007	2	344	2	78	0.2	34.4	1.00	39	2.2	37			DA
68	EM 8/9-01	11/14/2007	1	366	1	66	0.1	36.6	0.50	33	1.1	-29			DA
69	EM 8/9-02	11/14/2007	1	366	1	110	0.1	36.6	0.50	55	1.1	150			DA
70	EM 8/9-03	11/14/2007	1	366	1	76	0.1	36.6	0.50	38	1.1	11			DA
71	EM 8/9-04	11/14/2007	1	366	0	87	0.1	36.6	0.00	44	-0.3	56			DA
72	Pipe Anomally	11/14/2007	1	366	0	74	0.1	36.6	0.00	37	-0.3	3			DA
73	EM 7-01	11/14/2007	1	366	0	88	0.1	36.6	0.00	44	-0.3	60			DA
74	EM 7-02	11/14/2007	1	366	0	81	0.1	36.6	0.00	41	-0.3	32			DA
75	EM 7-03	11/14/2007	1	366	0	86	0.1	36.6	0.00	43	-0.3	52			DA
76	EM 7-04	11/14/2007	1	366	0	96	0.1	36.6	0.00	48	-0.3	93			DA
77	EM 31-01	11/14/2007	1	366	0	91	0.1	36.6	0.00	46	-0.3	72			DA
78	EM 31-02	11/14/2007	1	366	1	97	0.1	36.6	0.50	49	1.1	97			DA
79	EM 31-03	11/14/2007	1	366	1	78	0.1	36.6	0.50	39	1.1	20			DA
80	EM 31-04	11/14/2007	1	366	0	87	0.1	36.6	0.00	44	-0.3	56			DA
81	DR-Z #2	11/15/2007	4	393	1	61	0.4	39.3	0.50	31	0.3	-72			DA
82	EM 34-01	11/15/2007	4	393	0	92	0.4	39.3	0.00	46	-1.1	54			DA
83	EM 34-02	11/15/2007	4	393	2	76	0.4	39.3	1.00	38	1.7	-11			DA
84	EM 34-03	11/15/2007	4	393	0	82	0.4	39.3	0.00	41	-1.1	14			DA
85	EM 34-04	11/15/2007	4	393	2	80	0.4	39.3	1.00	40	1.7	6			DA
86	EM 30-01	11/15/2007	4	393	0	82	0.4	39.3	0.00	41	-1.1	14			DA
87	EM 30-02	11/15/2007	4	393	0	64	0.4	39.3	0.00	32	-1.1	-59			DA
88	EM 30-03	11/15/2007	4	393	0	77	0.4	39.3	0.00	39	-1.1	-7			DA
89	EM 30-04	11/15/2007	4	393	0	92	0.4	39.3	0.00	46	-1.1	54			DA
90	Survey 22-01	11/15/2007	4	393	0	72	0.4	39.3	0.00	36	-1.1	-27			DA
91	Survey 22-02	11/15/2007	4	393	0	88	0.4	39.3	0.00	44	-1.1	38			DA
92	Survey 22-03	11/15/2007	4	393	0	90	0.4	39.3	0.00	45	-1.1	46			DA
93	Survey 22-04	11/15/2007	4	393	0	63	0.4	39.3	0.00	32	-1.1	-63			DA
94	Survey 22-05	11/15/2007	4	393	0	92	0.4	39.3	0.00	46	-1.1	54			DA
95	Survey 22-06	11/15/2007	4	393	0	74	0.4	39.3	0.00	37	-1.1	-19			DA
96	Survey 22-07	11/15/2007	4	393	0	78	0.4	39.3	0.00	39	-1.1	-2			DA
97	Survey 22-08	11/15/2007	4	393	0	79	0.4	39.3	0.00	40	-1.1	2			DA
98	Survey 22-09	11/15/2007	4	393	1	86	0.4	39.3	0.50	43	0.3	30			DA
99	Survey 22-10	11/15/2007	4	393	0	93	0.4	39.3	0.00	47	-1.1	59			DA
100	Survey 23-01	11/15/2007	4	393	2	76	0.4	39.3	1.00	38	1.7	-11			DA

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101	Survey 23-02	11/15/2007	4	393	0	69	0.4	39.3	0.00	35	-1.1	-39			DA
102	Survey 23-03	11/15/2007	4	393	3	66	0.4	39.3	1.50	33	3.0	-51			DA
103	Survey 23-04	11/15/2007	4	393	0	71	0.4	39.3	0.00	36	-1.1	-31			DA
104	Survey 23-05	11/15/2007	4	393	0	89	0.4	39.3	0.00	45	-1.1	42			DA
105	Survey 23-06	11/15/2007	4	393	1	79	0.4	39.3	0.50	40	0.3	2			DA
106	Survey 23-07	11/15/2007	4	393	2	84	0.4	39.3	1.00	42	1.7	22			DA
107	Survey 23-08	11/15/2007	4	393	2	86	0.4	39.3	1.00	43	1.7	30			DA
108	Survey 23-09	11/15/2007	4	393	0	65	0.4	39.3	0.00	33	-1.1	-55			DA
109	Survey 23-10	11/15/2007	4	393	1	70	0.4	39.3	0.50	35	0.3	-35			DA
110	Survey 23-11	11/15/2007	4	393	1	75	0.4	39.3	0.50	38	0.3	-15			DA
111	Survey 23-12	11/15/2007	4	393	0	87	0.4	39.3	0.00	44	-1.1	34			DA
112	Survey 23-13	11/15/2007	4	393	0	78	0.4	39.3	0.00	39	-1.1	-2			DA
113	Survey 23-14	11/15/2007	4	393	0	72	0.4	39.3	0.00	36	-1.1	-27			DA
114	Survey 23-15	11/15/2007	4	393	0	88	0.4	39.3	0.00	44	-1.1	38			DA

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REMEDIAL INVESTIGATION REPORT

APPENDIX C

Photo Logs

Sylvania Corning FUSRAP Site

Hicksville, Nassau County, New York

Prepared for:
UNITED STATES ARMY CORPS OF ENGINEERS
Kansas City District
And
New York District

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Photograph Description: Typical setup of cart mounted Geoprobe 420M power pack inside Building 70 office space.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 1



Photograph Description: Typical view of truck mounted Geoprobe 66 DT drilling rig inside east warehouse of Building 70.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 2



Photograph Description: Typical geoprobe operations on west side of Building 70.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 3



Photograph Description: Typical core fixed geometry scanning with 2-inch NaI detector.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 4



Photograph Description: Typical setup of concrete coring machine inside office space in B70.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 5



Photograph Description: Radiological scanning of concrete core.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 6



Photograph Description: Typical concrete core section from B70.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 7



Photograph Description: View of concrete filled structure (potential sump [SMP-1]) near northwest corner of B70 central warehouse. (SMP-1).

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 8



Photograph Description: Typical view of track mounted Geoprobe 66 DT drilling rig on east side of Building 140.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 9



Photograph Description: Typical view of test pit scanning with gamma detectors.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 10



Photograph Description: Piping debris from Test Pit EM-2 located between B40 and B100.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 11



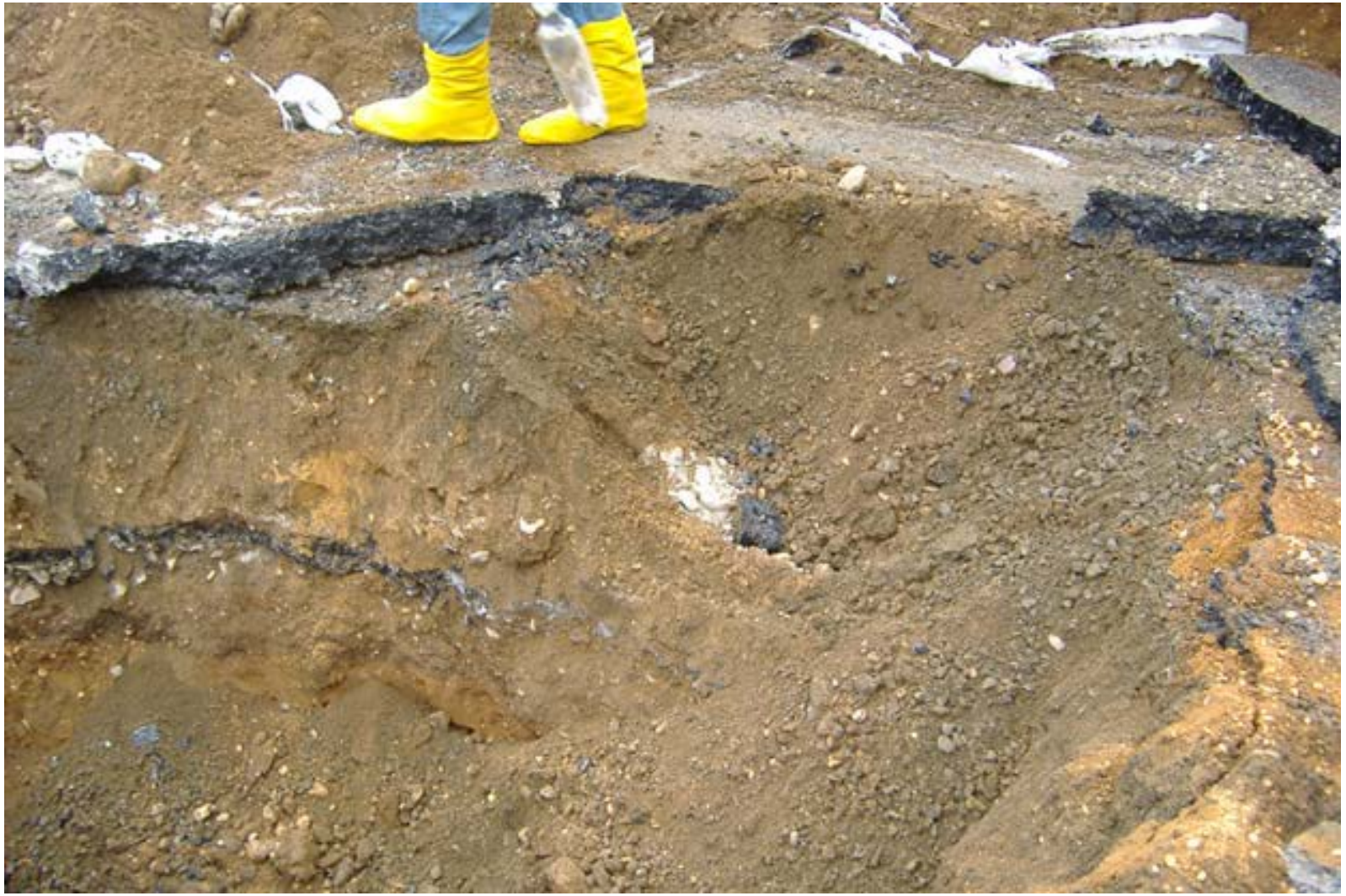
Photograph Description: Piping debris in Test Pit EM-3/GPR-A located between B140 and B100.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 12



Photograph Description: Two separate metal pipes located in the shallow subsurface of EM-5. Excavation approximately 2 feet BGS.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 13



Photograph Description: In EM-15b, most elevated radiation levels were shallow (2 feet BGS) above the asphalt layer that may have been a historic parking lot.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 14



Photograph Description: Concrete wall observed in test pit EM-26 located on north side of B70.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 15



Photograph Description: Slag “nugget” observed in test pit GPR-F. Note nugget is approximately 3-inches in diameter.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 16



Photograph Description: Excavated to a total depth of 4 feet BGS in GPR-F (both trenches)

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 17



Photograph Description: Drain DR-AA, Note that drain is filled with concrete

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 18



Photograph Description: Drain DR-Z

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 19



Photograph Description: Downhole gamma logging at C12-02

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 20



Photograph Description: Geoprobe at Drain DR-CC

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 21



Photograph Description: Jackhammer driving Macrocore on borehole DR-W

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 22



Photograph Description: Test Pit EM-7

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 23



Photograph Description: Metal pipe removed from Test Pit EM-7 at 1 foot BGS

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 24



Photograph Description: 3 inch diameter metal pipe found at 2 feet BGS in Test Pit EM-7

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 25



Photograph Description: Rebar found in Test Pit EM-8 at approximately 4.5 feet BGS

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 26



Photograph Description: Concrete and metal debris removed from Test Pit EM-8

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 27



Photograph Description: Test Pit EM-9

SYLVANIA CORNING FUSRAP SITE
HICKSVILLE, NASSAU COUNTY, NEW YORK

Photo No.
28



Photograph Description: Concrete debris removed from Test Pit EM-9

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 29



Photograph Description: Test Pit EM-11

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 30



Photograph Description: Test Pit EM-11 excavated to 10 feet BGS

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 31



Photograph Description: Soil excavated from Test Pit EM-11

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 32



Photograph Description: Radiation and PID scan of soil in backhoe from Test Pit EM-13.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 33



Photograph Description: Black staining found at 3 feet BGS in Test Pit EM-13

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 34



Photograph Description: Soil removed from Test Pit EM-13, from approximately 3 feet BGS

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 35



Photograph Description: Metal pipe found in Test Pit EM-13. Pipe runs north-south at approximately 4 feet BGS.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 36



Photograph Description: Black plastic wire conduit found in Test Pit EM-16

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 37



Photograph Description: Test Pit EM-16 showing gray PVC found during excavation

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 38



Photograph Description: Concrete wall found in Test Pit EM-28

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 39



Photograph Description: Soil from Test Pit EM-28 being scanned for radiation

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 40



Photograph Description: Buried drywell found in Test Pit EM-28

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 41



Photograph Description: Crushed lead lined container observed in Test Pit EM-29a on east side of B70

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 42



Photograph Description: Test Pit EM-30

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 43



Photograph Description: Test Pit EM-30

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 44



Photograph Description: 4 inch by 2 foot section of metal pipe found in Test Pit EM-30 at 1 foot BGS

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 45



Photograph Description: 4 inch diameter pipe found at 2 feet BGS in Test Pit EM-31

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 46



Photograph Description: Example of debris found in Test Pit EM-31, at 1 foot BGS

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 47



Photograph Description: Pipe found in Test Pit EM-31

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 48



Photograph Description: Cable found in Test Pit EM-34

SYLVANIA CORNING FUSRAP SITE
HICKSVILLE, NASSAU COUNTY, NEW YORK

Photo No.
49



Photograph Description: Test Pit EM-34 and cable uncovered during excavation

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 50



Photograph Description: View of Test Pit EM-35

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 51



Photograph Description: Pipe found at 1.5 feet BGS in EM-35.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 52



Photograph Description: Vacuum truck removing soil, clearing boring for underground utility lines.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 53



Photograph Description: Video camera survey of DR-E inside B70.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 54



Photograph Description: Soil core from MW-13D (286' to 296').

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 55



Photograph Description: View of setup at offsite well MW-15D.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 56



Photograph Description: Soil core from MW-15D. Clay layer from 173’ to 186’.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 57



Photograph Description: Sample filtering for radiation analysis at MW-20D.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 58



Photograph Description: Drilling setup at MW-22D.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 59



Photograph Description: Drilling setup at MW-22D.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 60



Photograph Description: Soil core from MW-31D (277' to 297').

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 61



Photograph Description: E & E personnel collecting groundwater samples from boring 32D.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 62



Photograph Description: Setup to begin developing on well MW-26.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 63



Photograph Description: Drilling setup at MW-22I.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 64



Photograph Description: Drilling setup at MW-27D.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 65



Photograph Description: Drilling setup at MW-52D on the driving range.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 66



Photograph Description: 24DD

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 67



Photograph Description: Drilling setup on MW-56S on the driving range.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 68



Photograph Description: Well development setup on MW-27I.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 69



Photograph Description: Drilling setup on RI-P-45.

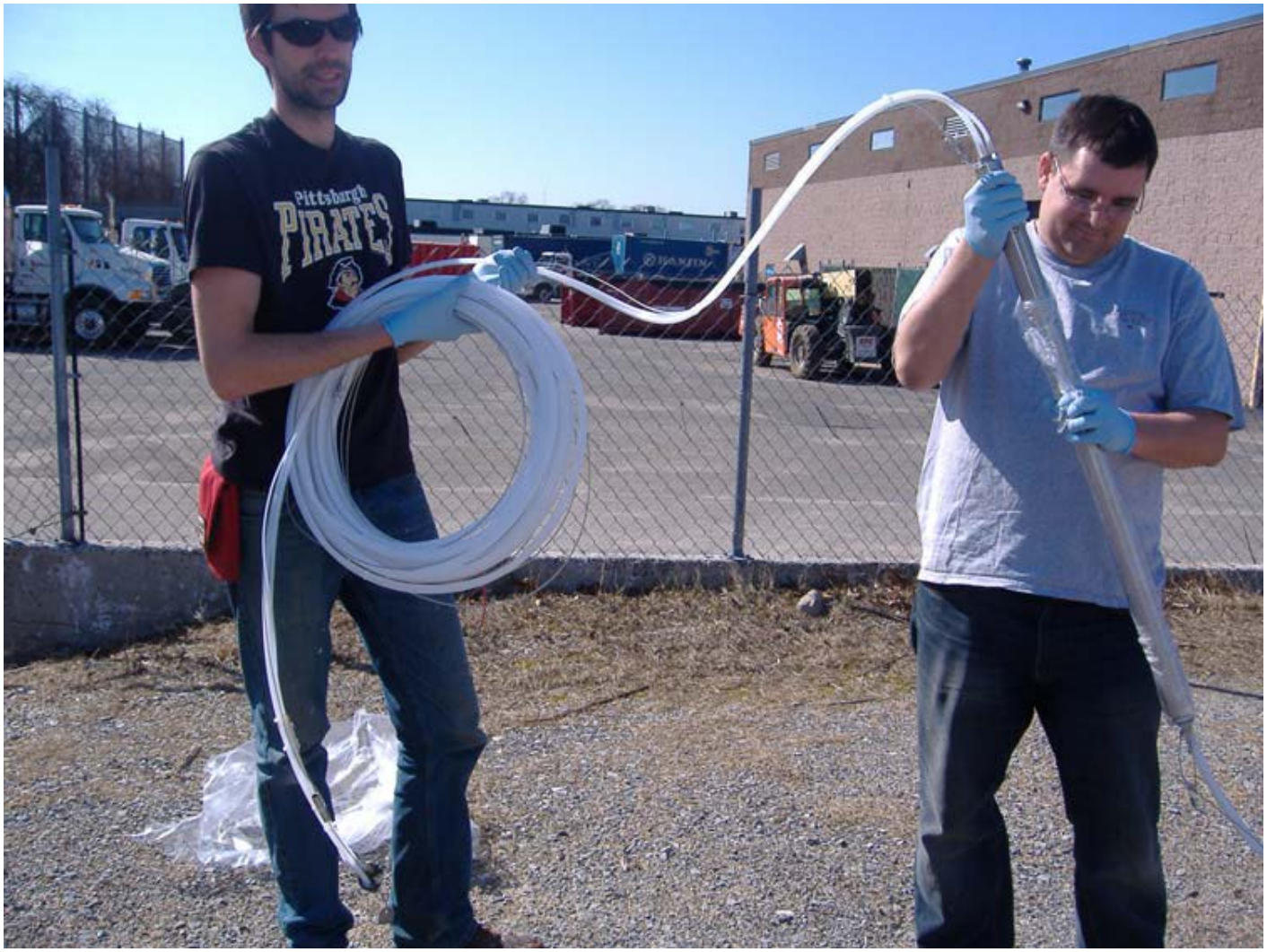
	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 70



Photograph Description: Drilling setup on 16S.

SYLVANIA CORNING FUSRAP SITE
HICKSVILLE, NASSAU COUNTY, NEW YORK

Photo No.
71



Photograph Description: Installing the designated pump into monitoring well MW-28D.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 72



Photograph Description: Groundwater sampling at MW-13D.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 73



Photograph Description: Hand clearing 5 feet before drilling activities commence on a borehole to insure no underground utilities/obstructions are present.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 74



Photograph Description: Drilling setup offsite at MW-213

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 75



Photograph Description: Sonic drilling setup at MW-207. (2012)

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 76



Photograph Description: Sonic drilling setup at MW-217

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 77



Photograph Description: Collection of soil cores into plastic sleeves from a core barrel.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 78



Photograph Description: Typical soil cores seen throughout the project are in plastic sleeves.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 79



Photograph Description: Sand transition to clay in a soil core taken at MW-205

SYLVANIA CORNING FUSRAP SITE
HICKSVILLE, NASSAU COUNTY, NEW YORK

Photo No.
80



Photograph Description: Screening soil cores using a PID and 2-inch gamma scintillator.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 81



Photograph Description: Point used for direct push groundwater sampling. Connects to a reverse threaded rod that has a small hole within the threads to allow groundwater at the points' depth to enter the rods.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 82



Photograph Description: Using an electric fishing reel with high pound fishing line to raise and lower the stainless steel bailer to collect vertical water profile samples from deep wells. (MW-209) (2011)

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 83



Photograph Description: Collecting vertical water profile sample at MW-209 using a stainless steel bailer. (2011)

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 84



Photograph Description: Decontamination of drilling rods using a steam cleaner

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 85



Photograph Description: 8’’ casing shoe which is attached at the bottom of the casing rods.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 86



Photograph Description: Installation of PVC well casing with a stabilizer located just above the well screen to keep the well centered in the borehole.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 87



Photograph Description: Tub and mixer used for creating grout batches during monitoring well installations

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 88



Photograph Description: Mixing up grout mix with water to put on top of a constructed well to hold it in place.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 89



Photograph Description: Well development air lift setup using liquid nitrogen.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 90



Photograph Description: Well development air lift setup using compressed gas tanks (nitrogen).

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 91



Photograph Description: Downhole assembly for air-lift development using nitrogen. The blue tubing is the discharge and the white is the airlline.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 92



Photograph Description: Low-flow groundwater sampling at MW-53S in the Cantiague Park Driving Range east of the site.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 93



Photograph Description: Low-flow groundwater sampling setup at the Department of Public Works property at the MW-15 cluster.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 94



Photograph Description: **G**roundwater sampling setup using Waterras to sample at Achor Chem wells.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 95



Photograph Description: Low-flow groundwater sampling and setup at the MW-30 cluster south of building 70.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 96



Photograph Description: Low-flow groundwater sampling of MW-209 cluster.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 97



Photograph Description: Septic Tank System location in front of B70. View looking south with lid for Septic Tank 2 on right hand side of photo.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 98



Photograph Description: Septic Tank 1 location. View looking east with active sewer pipe inside.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 99



Photograph Description: Radiological monitoring of material inside tanks with 2-inch gamma scintillator.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 100



Photograph Description: Inside Septic Tank 3 - View looking westerly with overflow pipe from Septic Tank 1 entering from the north.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 101



Photograph Description: DRYH-G drywell structure. View looking downward inside drywell with hanging light to illuminate bottom sludge..

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 102



Photograph Description: DRYH-G influent pipe (1 pipe only). View looking northwest with pipe coming in from north. Note that pipe is half full of sludge.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 103



Photograph Description: DRYH-H influent pipe #1 (suspected to be a roof drain pipe). View looking northwest.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 104



Photograph Description: DRYH-I location. View looking south. Dry well located east of beginning of trench closer to tree (arrow).

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 105



Photograph Description: DRYH-I influent pipe (1 pipe only, originates from suspected roof drain). View looking southerly with pipe entering from southeast.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 106



Photograph Description: DR-BB effluent pipe flowing westward. View facing east with DR-BB connect at Y in background of photo and DRYH-I roof drain pipe crossing over top .

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 107



Photograph Description: DR-BB sludge backed up in effluent pipe (sampled). View looking downward with pipe approximately due west (right).

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 108



Photograph Description: DRYH-J location. View looking east toward B70 and downward.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 109



Photograph Description: DRYH-J drywell. View looking downward with DR-BB pipe entering from north.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 110



Photograph Description: Drain DR-Z test pit. View looking downward and found floor drain DR-Z piping junction with floor drain DR-W piping.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 111



Photograph Description: View of drain pipe beneath sidewalk. Pipe changes from red clay pipe to PVC, then ends (appears to have been cut). View looking west.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 112



Photograph Description: Completed test trench looking for historical cesspools (not located). View looking south.

	SYLVANIA CORNING FUSRAP SITE HICKSVILLE, NASSAU COUNTY, NEW YORK		Photo No. 113

REMEDIAL INVESTIGATION REPORT

APPENDIX D

Boring Logs, Well Construction Diagrams, Well Development Logs, Groundwater Sampling Purge Logs and Field Documentation

Sylvania Corning FUSRAP Site

Hicksville, Nassau County, New York

Prepared for:
UNITED STATES ARMY CORPS OF ENGINEERS
Kansas City District
And
New York District

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Drilling Log

Page 1 of 7

BORING NO.:	MW-13D
WELL NO.:	MW-13D-300
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
DRILLER:	M. Mclean
PROJECT NO:	2001764.012.05
DATE STARTED:	11/18/2008
DATE FINISHED:	11/21/2008
INSPECTOR:	B. Cole, E&E, Inc.
NORTHING (ft):	219754.525
EASTING (ft):	1108775.202
GROUND ELEVATION (ft):	145.53

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 6	
Total Depth (ft): 326.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft): 64.30	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
290.65	0		GW-GC	60	0			Gravel with some sand silt and clay - well graded.
287.65			SW					Sand with few to little gravel - tan-brown, well graded.
284.65			SW	75	0			Sand with gravel - tank-light brown , well graded.
	10							
274.65			SW	75	5.8			Sand with few to some gravel - tan-brown-light gray, well graded.
	20							
264.65			SP	80	0			Sand with little gravel - fine-medium grain, tan-brown, poorly graded.
	30							
254.65			SW	75	0			Sand with little to some gravel - medium-fine grain, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-13D
	Page 2 of 7	WELL NO.: MW-13D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
244.65			SP	85	0			Sand with little to some gravel and trace to no silt - medium-coarse;fine-medium grain, well graded.
	50							
234.65			SP	60	0			Sand with few to little gravel and trace silt - medium grain, brown-tan, poorly graded.
	60							
224.65			SW	80	0			Sand with few to little gravel and trace silt - medium grain, well graded.
	70							
219.65			SP					Sand with trace gravel - meduim grain, poorly graded.
214.65			SP	75	0		VP03	Sand with trace gravel - medium-coarse grain, tan, poorly graded.
	80							
204.65			SP	80	0		VP04	Sand with trace to no silt/clay - medium-coarse grain, tan, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-13D
	Page 3 of 7	WELL NO.: MW-13D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
194.65			SW	50	0		VP05	Sand - fine-coarse grain, tan, well graded.
	100							
184.65			NR	0	0		VP06	No Recovery.
	110							
174.65			SP	50	0		VP07	Sand with trace to no gravel - medium grain, gray, poorly graded.
	120							
164.65			NR	0	0		VP08	No Recovery.
	130							
154.65			SW	90	0		VP09	Sand with some gravel and trace to no silt clay - fine-coarse grain, tan, well graded.
	140							
149.65			SP					Sand with trace gravel and trace to no silt/clay - medium grain, tan, poorly graded.
144.65			SW	40	0		VP10	Sand with few to little gravel - fine-coarse grain, light tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-13D
	Page 4 of 7	WELL NO.: MW-13D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
134.65			NR	0	0		VP11	No Recovery.
	160							
				0	0		VP12	
	170							
114.65			SW	80	0		VP13	Sand with few to little gravel and trace silt/clay - fine-coarse grain, light tan, well graded.
	180							
104.65			SW	90	0		VP14	Sand with few to little gravel - fine-coarse grain, light tan-light gray, well graded.
	190							
94.65			SW	95	0		VP15	Sand with few to little gravel - fine grain, light tan, well graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-13D
	Page 5 of 7	WELL NO.: MW-13D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
84.65			SW	90	0		VP16	Sand with few to little gravel and trace to no silt/clay - fine-coarse grain, light tan-light gray, well graded.
	210							
74.65			SW	80	0		VP17	Sand with some gravel - fine-coarse grain, light tan, well graded.
70.65	220		SP					Sand with trace to no gravel - medium-fine grain, light tan, poorly graded.
64.65			SW	60	0		VP18	Sand with trace to few gravel - fine-coarse grain, light tan, well graded.
	230							
54.65			SW	75	0		VP19	Sand with trace to few fine gravel - fine-coarse grain, light tan, well graded.
	240							
44.65			SW	65	0		VP20	Sand with trace to no gravel - fine-coarse grain, light tan, well graded.
	250							
34.65			NR	0	0		VP21	No Recovery.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-13D
	Page 6 of 7	WELL NO.: MW-13D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
24.65			SP	80	0		VP22	Sand with trace fine gravel - medium grain, light tan, poorly graded.
	270							
14.65			SW	80	0		VP23	Sand with trace to few gravel and trace silt - fine-coarse grain, light tan-light brown, well graded.
	280							
4.65			SW	80	0		VP24	Sand with few to little gravel, and trace to few silt - fine grain, gray-brown, well graded.
	290							
-5.35			SW	95	0		VP25	Sand with few gravel and trace to no silt/clay - fine-coarse grain, orange-brown, well graded.
	300							
-15.35			SP	95	0		VP26	Sand with trace silt - fine-medium grain, light gray-light tan, poorly graded.
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-13D
	Page 7 of 7	WELL NO.: MW-13D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-25.35	320		SP	5	0		VP27	Sand with trace to few silt - fine-medium grain, gray, poorly graded.
	330						VP28	**End of Soil Core Collection and Groundwater Profiling at 326 ft bgs**

Drilling Log

BORING NO.: MW-14DD

WELL NO.: MW-14DD-375

CLIENT: USACE Kansas City District

PROJECT: Sylvania Corning FUSRAP

DRILLING CONTRACTOR: Miller Drilling

DRILLING METHOD: Rotary Sonic

PROJECT NO: 2001764.012.05

DATE STARTED: 11/10/2009

DATE FINISHED: 12/11/2009

DRILLER: A. Carson

INSPECTOR: P. Connelly, CDM

NORTHING (ft): 219846.0726

EASTING (ft): 1109089.177

GROUND ELEVATION (ft): 144.13

BOREHOLE DATA

Diameter (in): 8

Total Depth (ft): 392.00

Disposition of Hole: Monitoring Well

Depth to Water (ft): 63.11

SAMPLES FOR CHEMICAL ANALYSIS

Volatile Organic Compounds (SW8260B)

Total Nickel (SW6010B)

Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
143.97	0		SW	100	1.0	5000		Sand and gravel - dark brown, well graded.
141.47			SP					Sand with little gravel - medium grain, tan, poorly graded.
138.97			SP	100	1.9	5000		Sand with little gravel - medium grain, dark tan-orange, poorly graded.
135.97			ML					Silt with little gravel - brown
134.97	10		SP					Sand with little gravel - medium grain, dark tan-orange, poorly graded.
131.97			SW	100	0.8	5000		Sand with little gravel - medium-coarse grain, tan-orange, well graded.
128.97			SW	50	1.6	5000		Sand and gravel - medium-coarse grain, dark orange, well graded.
123.97	20							
118.97			SW	100	1.3	5000		Sand and gravel - medium-coarse grain, orange, well graded.
116.97			SW					Sand with some gravel - medium-coarse grain, orange, well graded.
	30							
108.97			SW	45	1.4	5000		Sand and gravel - medium-coarse grain, dark orange/brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-14DD
	Page 2 of 8	WELL NO.: MW-14DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
104.47	40							
98.97			SW	100	1.8	5000		Sand and gravel - very fine-coarse grain, light tan, well graded.
94.97	50		SW					Sand with little gravel - medium-coarse grain, dark tan, well graded.
92.97			SW					Sand and gravel - very fine-coarse grain, light tan, well graded.
88.97			SW	100	1.9	5000		Sand with little gravel - medium-coarse grain, light tan, well graded.
	60							
	⊠							
78.97			SW	100	0.9	5000		Sand with some gravel - medium-coarse grain, brown/tan, well graded.
	70							
69.97			SW	100	0.0	5000	VP03	Sand with some gravel - medium-coarse grain, brown/tan, well graded.
65.97			SP					Sand - medium-coarse grain, gray/tan, poorly graded.
63.97	80		SP					Sand - medium grain, tan, poorly graded.
				100	0.0	5000	VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-14DD
	Page 3 of 8	WELL NO.: MW-14DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
48.97			SP	100	0.0	5000	VP05	Sand - fine-medium grain, tan, poorly graded.
	100						VP06	
35.97			SW					Sand and gravel - fine-medium grain, tan, well graded.
	110							
30.97			SP					Sand - fine-medium grain, tan, poorly graded.
28.97			SP	100	0.0	5000	VP07	Sand with some gravel - medium-coarse grain, dark tan, poorly graded.
	120							
18.97			SW				VP08	Sand and gravel - medium-coarse grain, dark tan, well graded.
	130							
				100	0.0	5000	VP09	
	140							
0.97			SP				VP10	Sand with little gravel - medium-coarse grain, dark tan, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-14DD
	Page 4 of 8	WELL NO.: MW-14DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-9.03			SW					Sand and gravel - medium-coarse grain, dark tan, well graded.
-11.03			SP	100	0.0	5000	VP11	Sand - fine-medium grain, dark tan, poorly graded.
	160							
							VP12	
	170							
-27.03			SP					Sand with trace gravel - fine-medium grain, dark tan, poorly graded.
-31.03			SP	100	0.0	5000	VP13	Sand - medium grain, dark tan, poorly graded.
	180							
							VP14	
	190							
-51.03			SP	100	0.0	5000	VP15	Sand with little gravel - medium with little coarse grain, dark tan, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-14DD
	Page 5 of 8	WELL NO.: MW-14DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP16	
-66.03	210		SP					Sand - medium grain, dark tan, poorly graded.
-71.03			SP	100	0.0	5000		Sand - medium-coarse grain, dark tan, poorly graded.
	220							
-77.03			SP					Sand and gravel - medium grain, dark tan, poorly graded.
-81.03			SW				VP18	Sand with trace gravel - medium-coarse grain, orange, well graded.
	230							
-88.03			SP					Sand - fine grain, dark tan, poorly graded.
				100	0.0	5000	VP19	
	240							
-99.03			SP					Sand and gravel - medium grain, orange/red, poorly graded.
							VP20	
	250							
-111.03			SP	100	0.0	5000	VP21	Sand with trace silt - fine-medium grain, orange/tan, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-14DD
	Page 6 of 8	WELL NO.: MW-14DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
							VP22	
	270							
-131.03			SP	50	0.0	5000	VP23	Sand - fine grain, tan/orange, poorly graded.
	280							
-141.03							VP24	
	290							
-151.03			SP	50	0.0	5000	VP25	Sand with little silt - fine grain, tan/gray, poorly graded.
-155.03			ML					Silt - gray/tan
-156.03	300							
-161.03			SP	75	0.0	5000	VP26	Sand - fine-medium grain, tan, poorly graded.
-165.03	310		SP					Sand - fine grain, light gray, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-14DD
	Page 7 of 8	WELL NO.: MW-14DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP27	
-176.03	320							
							VP28	
			NR	0	--			No Recovery.
	330						VP29	
-191.03			SP	75	0.0	5000		Sand - fine grain, gray, poorly graded.
	340						VP30	
-206.03	350						VP31	
-211.03			SP	100	0.0	5000		Sand - fine grain, gray/tan, poorly graded.
	360						VP32	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-14DD
	Page 8 of 8	WELL NO.: MW-14DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	370						VP33	
								End of Soil Core Collection at 375 ft bgs
	380						VP34	
	390						VP35	**End of Groundwater Profiling at 392 ft bgs**

Drilling Log

BORING NO.: MW-15DD

WELL NO.: MW-15DD-370

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 1/4/2010
DRILLING CONTRACTOR: Miller Drilling	**DATE FINISHED:** 1/19/2010
DRILLING METHOD: Rotary Sonic	**DRILLER:** C. Boyd
BOREHOLE DATA / **SAMPLES FOR CHEMICAL ANALYSIS**	**INSPECTOR:** J. Button, CDM
Diameter (in): 8	**NORTHING (ft):** 219742.6759
Total Depth (ft): 392.00 — Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109354.764
Disposition of Hole: Monitoring Well — Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 144.57
Depth to Water (ft): 63.35 — Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
144.17	0		SW	100	0.0	4950		Sand with little gravel - fine-medium grain, dusky yellow/brown, well graded.
142.17			SW					Sand with little gravel - fine-coarse grain, dark yellow/brown, well graded.
139.17			SW	100	0.0	4550		Sand with little gravel - fine-coarse grain, dark yellow/brown, well graded.
135.17			SW					Sand with little silt and little gravel - fine-medium grain, light yellow/brown, well graded.
134.17	10		SW	30	0.0	4000		Sand with little gravel and trace silt - coarse grain, dark yellow/brown, well graded.
129.17			SW	80	0.0	4500		Sand with trace gravel - fine-coarse grain, light yellow/brown, well graded.
124.17	20		SW	60	0.0	4200		Sand with trace gravel - fine-coarse grain, light yellow/brown, well graded.
119.17			SW	80	0.0	5400		Sand with trace gravel - fine-coarse grain, light yellow/brown, well graded.
	30							
109.17			SW	80	0.0	5000		Sand with trace gravel - fine-coarse grain, light yellow/brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-15DD
	Page 2 of 8	WELL NO.: MW-15DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
104.17	40		GW					Gravel and sand with trace silt - fine-medium grain, light yellow/brown, well graded.
102.17			SW					Sand with little gravel - fine-medium grain, light yellow/brown, well graded.
99.17			SW	100	0.0	5000		Sand with trace gravel - fine-medium grain, light brown, well graded.
94.17	50		SW	100	0.0	5000		Sand with trace gravel - fine-medium grain, light brown, well graded.
89.17			SW	100	0.0	5000		Sand with trace gravel - fine-medium grain, light brown, well graded.
84.17	60		NR	0	--			No Recovery.
79.17			SP	100	0.0	5000		Sand - fine grain, tan, poorly graded.
78.17			SW					Sand - fine-coarse grain, tan, well graded.
74.17	70		SW	100	0.0	5000		Sand - fine-coarse grain, tan, well graded.
69.17			SW	15	0.0	5000	VP03	Sand and gravel - medium grain, tan, well graded.
66.17	80						VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-15DD
	Page 3 of 8	WELL NO.: MW-15DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
49.17			SP	50	0.0	5000	VP05	Sand - fine-medium grain, tan, poorly graded.
	100							
39.17							VP06	
	110							
29.17			SP	50	0.0	5000	VP07	Sand - fine-medium grain, tan, poorly graded.
24.17	120		SW					Sand and gravel - fine-coarse grain, tan, well graded.
19.17							VP08	
	130							
9.17			SW	100	0.0	5000	VP09	Sand and gravel - fine grain, tan, well graded.
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-15DD
	Page 4 of 8	WELL NO.: MW-15DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-5.83	150		SW					Sand with some gravel - fine grain, tan, well graded.
-10.83			SW	75	0.0	5000	VP11	Sand with some gravel - medium grain, tan, well graded.
	160							
-20.83			SP				VP12	Sand with little gravel and trace clay - fine-medium grain, tan, poorly graded.
-25.83	170							
-30.83			SW	100	0.0	5000	VP13	Sand - fine-coarse grain, tan, well graded.
-33.83			SW					Sand with trace gravel - fine-coarse grain, red, well graded.
	180							
-37.83			SP					Sand with little silt - fine grain, yellow/orange, poorly graded.
							VP14	
	190							
-50.83			SP	100	0.0	5000	VP15	Sand - fine grain, yellow tan, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-15DD
	Page 5 of 8	WELL NO.: MW-15DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP16	
	210							
-70.83			SP	100	0.0	5000	VP17	Sand - fine grain, orange tan, poorly graded.
	220							
							VP18	
-82.83			ML					Silt with some clay and some sand - green/gray
	230							
-90.83			SP	100	0.0	5000	VP19	Sand - fine grain, light gray-tan mottling, poorly graded.
	240							
							VP20	
	250							
-106.83			SP					Sand - fine grain, tan-orange, poorly graded.
-110.83			SP	50	0.0	5000		Sand - fine grain, tan-orange, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-15DD
	Page 6 of 8	WELL NO.: MW-15DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
-116.83			CL					Clay with silt - purple/gray
-117.83			SP					Sand - fine grain, gray, poorly graded.
-120.83							VP22	
	270							
-130.83			SP	100	0.0	5000	VP23	Sand - fine grain, gray-orange mottled, poorly graded.
	280							
							VP24	
	290							
-150.83			SP	100	0.0	5000	VP25	Sand - fine grain, dark gray, poorly graded.
	300							
							VP26	
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-15DD
	Page 7 of 8	WELL NO.: MW-15DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP27	
-169.83			ML					Silt with clay - dark gray
-170.83			CL	100	0.0	5000		Clay with little silt - dark gray
	320							
-180.83			SM	100	0.0	5000		Sand with silt - fine grain, dark gray, poorly graded.
							VP28	
-184.83			ML					Silt with clay - dark gray-orange mottled.
	330							
-190.83			SP	75	0.0	5000		Sand - fine-medium grain, orange/tan, poorly graded.
	340						VP29	
-202.83			SP				VP30	Sand - fine-medium grain, green/gray, poorly graded.
-205.83	350							
							VP31	
-210.83			SP	75	0.0	5000		Sand - fine-medium grain, gray/tan, poorly graded.
	360							
							VP32	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-15DD
	Page 8 of 8	WELL NO.: MW-15DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-225.83	370						VP33	**End of Soil Core Collection at 370 ft bgs**
-230.83	380						VP34	
	390						VP35	**End of Groundwater Profiling at 392 ft bgs**
	400							

Drilling Log

BORING NO.: MW-16D

WELL NO.: MW-16D-290

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 2/19/2009
DRILLING CONTRACTOR: Boart Longyear	**DATE FINISHED:** 3/2/2009
DRILLING METHOD: Rotary Sonic	**DRILLER:** G. Sealey
BOREHOLE DATA / **SAMPLES FOR CHEMICAL ANALYSIS**	**INSPECTOR:** S. Craig, E&E, Inc.
Diameter (in): 6	**NORTHING (ft):** 220170.3925
Total Depth (ft): 396.00 — Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109648.172
Disposition of Hole: Monitoring Well — Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 145.12
Depth to Water (ft): 63.13 — Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
144.65	0		SW	100	0	5500		Sand with some gravel and trace silt - medium-coarse grain, reddish brown, well graded.
			SW	85	0	5500		Sand with some gravel and trace silt - medium-coarse grain, reddish brown, well graded.
	10							
	20							
	30							
108.65			SP	90	0	5500		Sand with some gravel and trace silt - medium grain, reddish brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-16D
	Page 2 of 8	WELL NO.: MW-16D-290

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
104.65	40		SP					Sand with few gravel and trace silt - medium grain, reddish brown, poorly graded.
96.65	50		SP					Sand with silt and clay - medium grain, reddish brown, poorly graded.
88.65	60		SP					Sand with few silt and clay - medium grain, reddish brown, poorly graded.
78.65	70		SP	80	0	5500	VP03	Sand with trace gravel and silt - medium grain, brown, poorly graded.
58.65	90		SP	90	0	5500	VP04	Sand with trace silt - medium grain, brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-16D
	Page 3 of 8	WELL NO.: MW-16D-290

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
28.65			SP	95	0	5500	VP07	Sand with trace to few silt - medium-fine grain, brown-brown/gray, poorly graded.
	120							
							VP08	
	130							
8.65			SP				VP09	Sand with trace silt - medium grain, brown, poorly graded.
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-16D
	Page 4 of 8	WELL NO.: MW-16D-290

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-7.35			SP					Sand with silty/clayey sand - medium grain, brown, poorly graded.
-11.35			CL	100	0	5500	VP11	Clay with silt and sand - brown-gray
-15.35	160		CL					Clay with silt - gray-brown
							VP12	
	170							
-31.35			SP				VP13	Sand with trace to few silt - fine-medium grain, brown-tan, poorly graded.
	180							
							VP14	
	190							
				100	0	5500	VP15	Sand with trace to few silt - fine-medium grain, brown-tan, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-16D
	Page 5 of 8	WELL NO.: MW-16D-290

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	210						VP16	
	220						VP17	
	230						VP18	
	240			100	0	5500	VP19	Sand with trace to few silt - fine-medium grain, brown-tan, poorly graded.
	250						VP20	
							VP21	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-16D
	Page 6 of 8	WELL NO.: MW-16D-290

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
							VP22	
	270							
-131.35			SP	90	0	5500	VP23	Sand with trace silt - medium grain, brown-tan, poorly graded.
	280							
-141.35			SP	100	0	5500	VP24	Sand with few silt - fine-medium grain, brown-gray, poorly graded.
	290							
							VP25	
	300							
							VP26	
-165.35	310		CL					Clay - gray

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-16D
	Page 7 of 8	WELL NO.: MW-16D-290

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			CL	100	0	5500	VP27	Clay - gray
-175.35	320							
							VP28	
-183.35								
	330							
							VP29	
	340							
-199.35								
							VP30	**End of Soil Core Collection at 346 ft bgs**
	350							
							VP31	
	360							
							VP32	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-16D
	Page 8 of 8	WELL NO.: MW-16D-290

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	370						VP33	
	380						VP34	
	390						VP35	**End of Groundwater Profiling at 396 ft bgs**
	400							

Drilling Log

BORING NO.: MW-17S

WELL NO.: MW-17S-75

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 2/20/2009
DRILLING CONTRACTOR: Boart Longyear	**DATE FINISHED:** 2/22/2009
DRILLING METHOD: Sonic	**DRILLER:** F. Lavoie
BOREHOLE DATA	**INSPECTOR:** M. Werth, E&E, Inc.
Diameter (in): 6	**NORTHING (ft):** 219668.802
Total Depth (ft): 75.00	**EASTING (ft):** 1108969.47
Disposition of Hole: Monitoring Well	**GROUND ELEVATION (ft):** 144.83
Depth to Water (ft): 63.33	

SAMPLES FOR CHEMICAL ANALYSIS

- Volatile Organic Compounds (SW8260B)
- Total Nickel (SW6010B)
- Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
144.41	0		SM	100	5.2	4300		Sand with silt and little gravel - medium grain, brown, poorly graded.
				100	0			
137.41			ML					Silt with sand and some gravel - fine grain, light brown.
134.41	10		SM	100	0	4300		Sand with silt and trace gravel - fine-medium grain, reddish brown-brown, poorly graded.
131.41			SW					Sand with some gravel - coarse grain, brown, well graded.
129.41			ML	100	0			Silt with sand and trace gravel - fine grain, light brown, poorly graded.
125.91			SM					Sand with silt and some gravel - brown, well graded.
124.41	20		SW	100	0	4300		Sand with some gravel - medium-coarse grain, brown-dark brown, well graded.
			SW	100	0	4300		Sand with some gravel - medium-coarse grain, brown-dark brown, well graded.
118.41			SM					Sand with silt and little gravel - fine-medium grain, light brown, poorly graded.
116.41			SW					Sand with some gravel - reddish brown, well graded.
114.41	30		SW	100	0	4300		Sand with some gravel - medium-coarse grain, brown, well graded.
112.41			GP					Gravel with some sand - brown, well graded.
109.41			SM	100	0	4300		Sand with silt and little gravel - medium grain, brown-dark brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-17S
	Page 2 of 2	WELL NO.: MW-17S-75

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
104.41	40		SP	100	0	4300		Sand with little gravel - medium grain, brown, poorly graded.
97.41			SM	100				Sand with silt and trace gravel and clay - medium grain, brown, poorly graded.
94.41	50		SP	100	0	4300		Sand - medium grain, brown, poorly graded.
93.41			SM					Sand with silt - medium-fine grain, reddish brown-dark gray, poorly graded.
90.41			CL					Clay with silt - brown-gray.
			CL	100	0			
88.41			SM					Sand with silt and trace clay - medium grain, brown, poorly graded.
	60		SM	100	0			Sand with silt and trace clay - medium grain, brown, poorly graded.
83.41			CL					Clay with silt - fine grain, brown-gray.
81.41	⊠		SM					Sand with silt and trace clay - medium grain, brown, poorly graded.
79.41			SP	100	0	4500		Sand - medium grain, brown, poorly graded.
	70		SP	100	0			Sand - medium grain, brown, poorly graded.
								End of Soil Core Collection at 75 ft bgs

Drilling Log

Page 1 of 4

BORING NO.:	MW-18I
WELL NO.:	MW-18I-128
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Miller Drilling
DRILLING METHOD:	Rotary Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	11/17/2009
DATE FINISHED:	12/15/2009
DRILLER:	C. Boyd
INSPECTOR:	S. Britch, CDM
NORTHING (ft):	219610.2682
EASTING (ft):	1109338.721
GROUND ELEVATION (ft):	144.35

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	8	
Total Depth (ft):	158.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	62.96	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
144.09	0		SP	75	0.0	5000		Sand with trace gravel - fine-medium grain, tan, poorly graded.
136.09	10		SP	100	0.2	5600		Sand and gravel - fine-medium grain, tan, poorly graded.
131.09			SP					Sand with some gravel - fine-medium grain, tan, poorly graded.
126.09	20		SP	50	0.3	5300		Sand with little gravel - fine-medium grain, tan-brown, poorly graded.
116.09	30		SP	50	0.3	5200		Sand with little gravel - fine-medium grain, tan, poorly graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-18I
	Page 2 of 4	**WELL NO.:** MW-18I-128

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
106.09			GW	60	0.0	4900		Gravel and Sand - fine-coarse grain, tan-brown, well graded.
	40							
101.09			SP					Sand with trace gravel - fine-medium grain, tan, poorly graded.
96.09			SW	70	0.0	5000		Sand and gravel - fine-coarse grain, tan-brown, well graded.
	50							
86.09			SW	20	0.0	5000		Sand with some gravel and trace silt - fine-coarse grain, tan-gray, well graded.
	60							
	⊠							
76.09			SP	70	0.1	4800		Sand - fine-medium grain, tan, poorly graded.
	70							
71.09			SW					Sand and gravel - fine-coarse grain, tan, well graded.
69.09			SP					Sand - fine-medium grain, tan, poorly graded.
66.09			GP	80	0.0	4800		Gravel and sand with trace gravel - fine grain, tan, poorly graded.
	80							
56.09			GP	70	0.0	4800		Gravel - fine grain, tan, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-18I
	Page 3 of 4	WELL NO.: MW-18I-128

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
51.09			SW					Sand and gravel - fine-coarse grain, tan, well graded.
46.09	100		NR	0				No Recovery
36.09	110		SW	70	0.0	4900	VP07	Sand with some gravel - fine-coarse grain, tan, well graded.
26.09	120		GW	60	0.0	5300		Gravel and sand - fine-coarse grain, tan, well graded.
16.09	130							**End of Soil Core Collection at 128 ft bgs**
							VP09	
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-18I
	Page 4 of 4	WELL NO.: MW-18I-128

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150						VP11	
	160							**End of Groundwater Profiling at 158 ft bgs**

Drilling Log

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BORING NO.:	MW-19D
WELL NO.:	MW-19D-305
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	11/27/2008
DATE FINISHED:	12/9/2008
DRILLER:	M. McLean
INSPECTOR:	S. Craig, E&E, Inc.
NORTHING (ft):	219606.3733
EASTING (ft):	1108952.408
GROUND ELEVATION (ft):	143.60

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	316.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	62.10	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
143.12	0		SW	90	0			Sand with some gravel and few to trace silt and trace clay - brown-gray, well graded.
137.12	10		SW	90	0			Sand with some silt and few to little gravel - fine-coarse grain, light brown-dark brown, well graded.
127.12	20		SM	90	0			Silty sand with some gravel - light brown-dark brown, well graded.
117.12	30		SW	70	0			Sand with some gravel - fine-coarse grain, brown-orange brown, well graded.
107.12			SW	75	0			Sand with little to some gravel - fine-coarse grain, brown-orange brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-19D
	Page 2 of 7	WELL NO.: MW-19D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
100.12			SW					Sand with little to some gravel and few to little silt - fine-coarse grain, brown-orange brown, well graded.
97.12			SM	85	0			Sand with silt - fine-coarse grain, brown, poorly graded.
95.12			CL					Clay with few gravel - fine grain, brown
93.62	50		ML					Sand with Silt, and little gravel - fine grain, poorly graded.
89.12			SP					Sand with few gravel and trace silt - medium grain, light brown, poorly graded.
87.12			SP	80	0			Sand with trace to no silt - fine-medium grain, tan-brown, poorly graded.
	60	▽						
77.12			SW	60	0			Sand with trace to no silt - fine-medium grain, light brown, well graded.
	70							
67.12			SP	60	0		VP03	Sand with trace gravel - medium grain, tan-brown, poorly graded.
	80							
57.12			SW	65	0		VP04	Sand with trace to no gravel - fine-medium grain, light brown-tan, well graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-19D
	Page 3 of 7	WELL NO.: MW-19D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
47.12			SW	45	0		VP05	Sand with few gravel and trace to no silt - fine-coarse grain, light brown-tan, well graded.
	100							
37.12			SW	55	0		VP06	Sand with few gravel - fine-coarse grain, light brown, well graded.
	110							
27.12			SW	60	0			Sand with few gravel - fine-coarse grain, tan-brown, well graded.
							VP07	
	120							
17.12			SW	60	0		VP08	Sand with few gravel - fine-coarse grain, light brown, well graded.
	130							
7.12			SW	90	0		VP09	Sand with trace gravel - fine-coarse grain, light brown-tan, well graded.
	140							
-2.88			SW	50	0		VP10	Sand with few gravel and trace to no silt - fine grain, light brown-light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-19D
	Page 4 of 7	WELL NO.: MW-19D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-12.88			SW	45	0		VP11	Sand with little gravel - fine grain, light brown-tan, well graded.
	160							
-22.88			SW	90	0		VP12	Sand with little gravel and trace to no silt - fine grain, well graded.
	170							
-32.88			SW	95	0		VP13	Sand with few to some gravel and trace to no silt - fine grain, tan-light brown, well graded.
	180							
-42.88			SW	75	0		VP14	Sand with few gravel - fine grain, light tan-light brown, well graded.
	190							
-52.88			NR	0			VP15	No Recovery.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-19D
	Page 5 of 7	WELL NO.: MW-19D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-62.88	210		SP	100	0		VP16	Sand - medium grain, light brown, poorly graded.
-72.88	220		NR	0				No Recovery.
-82.88	230		SW	100	0	4500	VP18	Sand with little gravel - coarse-medium grain, light brown, well graded.
-88.88			SW					Sand with little gravel - coarse-medium grain, light brown, well graded.
-92.88	240		SP	100	0	4500		Sand with few gravel - coarse-medium grain, light brown, poorly graded.
-96.88			SP					Sand with few gravel - coarse-medium grain, light brown, poorly graded.
-102.88	250		SP	100	0	4500	VP20	Sand with trace gravel - coarse-medium grain, light brown, poorly graded.
-104.88			SP					Sand with trace gravel - coarse-medium grain, light brown, poorly graded.
-112.88			SP	100	0	4500	VP21	Sand with few gravel - coarse-medium grain, light brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-19D
	Page 6 of 7	WELL NO.: MW-19D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
-120.88			SP					Sand with few gravel - coarse-medium grain, light brown, poorly graded.
-122.88			SP	100	29.3	4500		Sand with trace clay - coarse-medium grain, light brown, poorly graded.
							VP22	
	270							
-128.88			SP					Sand with trace gravel - coarse-medium grain, light brown, poorly graded.
							VP23	
-136.88	280		SP					Sand with few gravel and trace clay - coarse-medium grain, light brown, poorly graded.
-142.88			SP	100	0	4500	VP24	Sand with few gravel - coarse-medium grain, light brown-pinkish/red/brown, poorly graded.
-144.88			SP					Sand with few gravel - coarse-medium grain, pinkish/reddish, poorly graded.
	290							
-152.88			SP	30	0	4500	VP25	Sand with little gravel - coarse-medium grain, red/pink-light brown, poorly graded.
	300							
-162.88			SP	100	0	4500	VP26	Sand with little gravel - coarse-medium grain, red/pink-light brown, poorly graded.
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-19D
	Page 7 of 7	WELL NO.: MW-19D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-168.88			SM					Silty sand with clay - medium-fine grain, gray, poorly graded.
-171.88							VP27	**End of Soil Core Collection and Groundwater Profiling at 316 ft bgs**
	320							

Drilling Log

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BORING NO.:	MW-20D
WELL NO.:	MW-20D-310
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	11/24/2008
DATE FINISHED:	12/9/2008
DRILLER:	J. Sigler
INSPECTOR:	S. Craig, E&E, Inc.
NORTHING (ft):	219561.5549
EASTING (ft):	1109312.958
GROUND ELEVATION (ft):	144.29

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	310.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	62.81	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
143.94	0		GW	100	1.6	5000		Gravel with some sand - fine-coarse grain, brown, well graded.
137.94	10		GW	80	0	5000		Gravel with some sand - fine-coarse grain, brown-tan, well graded.
127.94	20		GP	80	0	5000		Gravel with some sand - fine-coarse grain, tan-light brown, poorly graded.
117.94	30		SW	30	0	5000		Gravel with some sand and trace silt - fine grain, reddish tan, well graded.
107.94			SW	40	0	5000		Gravel with some sand and trace silt - fine grain, reddish tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-20D
	Page 2 of 6	WELL NO.: MW-20D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
97.94			SW	65	0	5000		Gravel with some sand and trace silt - fine-medium grain, reddish tan, well graded.
	50							
87.94			SW	60	0	5000		Sand with few gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	60							
			SW	50	0	5000	VP03	Sand with few gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	70							
67.94			SW	60	0	5000	VP04	Sand with few gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	80							
57.94			SW	80	0	5000	VP05	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-20D
	Page 3 of 6	WELL NO.: MW-20D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
47.94			SW	70	0	5000	VP06	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown/light gray, well graded.
	100							
37.94			SW	70	0	5000	VP07	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	110							
			SW	60	0	5000	VP08	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	120							
17.94			SW	60	0	5000	VP09	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	130							
			SW	30	0	5000	VP10	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	140							
-2.06			SW	70	0	5000	VP11	Sand with trace silt and trace to no gravel - medium-coarse grain, tan-light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-20D
	Page 4 of 6	WELL NO.: MW-20D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-12.06			SW	60	0	5000	VP12	Sand with few to trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	160							
			SW	70	0	5000	VP13	Sand with few to trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	170							
-32.06			SW	80	0	5000	VP14	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	180							
-42.06			SW	70	0	5000	VP15	Sand with little gravel and trace silt - medium-coarse grain, tan-light brown/gray, well graded.
	190							
-52.06			SW	70	0	5000	VP16	Sand with few to trace gravel and trace silt. - medium-coarse grain, tan-light brown, well graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-20D
	Page 5 of 6	WELL NO.: MW-20D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-62.06			SW	80	0	5000	VP17	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	210							
-72.06			SW	80	0	5000	VP18	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	220							
-82.06			SW	70	0	5000	VP19	Sand with few to trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	230							
-92.06			SW	70	0	5000	VP20	Sand with mostly to trace gravel and little to trace silt - medium-coarse grain, tan-light brown, well graded.
	240							
-102.06			SW	30	0	5000	VP21	Sand with few to trace gravel and trace silt - medium-coarse grain, tan, well graded.
	250							
-112.06			SW	70	0	5000	VP22	Sand with mostly to few gravel and trace silt - medium-coarse grain, tan-red, well

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-20D
	Page 6 of 6	WELL NO.: MW-20D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
								graded.
	260							
-122.06			SW	80	0	5000	VP23	Sand with trace gravel and trace silt - medium-coarse grain, tan-light brown, well graded.
	270							
-132.06			SW	60	0	5000	VP24	Sand with trace gravel - medium-fine grain, tan, well graded.
	280							
-141.06			SM	60	0	5000	VP25	Sand with silt - medium-fine grain, gray, poorly graded.
	290							
-152.06			SM	70	0	5000	VP26	Sand with silt and trace gravel - medium-fine grain, gray, poorly graded.
	300							
			SM	100	0	5000		Sand with silt and trace gravel - medium-fine grain, gray, poorly graded.
	310							**End of Soil Core Collection and Groundwater Profiling at 310 ft bgs**

Drilling Log

BORING NO.:	MW-21D
WELL NO.:	MW-21D-310
CLIENT:	USACE Kansas City District
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	11/19/2008
DRILLING CONTRACTOR:	Boart Longyear
DATE FINISHED:	11/22/2008
DRILLING METHOD:	Sonic
DRILLER:	B. Grim
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	S. Craig, E&E, Inc.
Diameter (in):	6
NORTHING (ft):	219483.9736
Total Depth (ft):	310.00
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1108737.268
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 143.62
Depth to Water (ft):	62.11
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
143.09	0		SW	40	0	5000		Sand with some gravel - medium grain, brown, well graded.
137.09			SW	80	0	5000		Sand with some gravel - medium grain, brown, well graded.
	10							
127.09			SP	70	0	5000		Sand with some gravel - medium grain, brown, poorly graded.
	20							
117.09			SW	80	0	5000		Sand with some gravel - medium grain, brown, well graded.
	30							
107.09			SP	80	0	5000		Sand with some gravel - fine-medium grain, brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-21D
	Page 2 of 6	WELL NO.: MW-21D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
97.09			SP	80	0	5000		Sand with some gravel and few clay - medium grain, brown, poorly graded.
	50							
87.09			SW	80	0	5000		Sand with few gravel - medium grain, brown, well graded.
	60							
77.09			SW	60	0	5000		Sand with trace gravel - medium grain, tan-light brown, well graded.
	70							
67.09			SP	70	0	5000	VP03	Sand - medium grain, tan-light brown, poorly graded.
	80							
			SP	60	0	5000	VP04	Sand - medium grain, tan-light brown, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-21D
	Page 3 of 6	WELL NO.: MW-21D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	60	0	5000	VP05	Sand - medium grain, tan-light brown, poorly graded.
	100							
			SP	60	0	4400	VP06	Sand - medium grain, tan-light brown, poorly graded.
	110							
			SP	50	0	4400	VP07	Sand - medium grain, tan-light brown, poorly graded.
	120							
			SP	60	3.1	4400		Sand - medium grain, tan-light brown, poorly graded.
	130							
			SP	30	0	4400	VP09	Sand - medium grain, tan-light brown, poorly graded.
	140							
			SP	40	0	4400	VP10	Sand - medium grain, tan-light brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-21D
	Page 4 of 6	WELL NO.: MW-21D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-12.91			NR	0	--			No Recovery.
	160							
-22.91			SP	80	0	4000	VP12	Sand - medium grain, tan-light brown, poorly graded.
	170							
-32.91			NR	0	--		VP13	No Recovery.
	180							
-42.91			SP	80	0	4000	VP14	Sand - medium grain, tan-light brown, poorly graded.
	190							
-52.91			SW	100	2.1	4000	VP15	Sand with few gravel - medium grain, tan-light brown, well graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-21D
	Page 5 of 6	WELL NO.: MW-21D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-62.91			SP	60	0	4000	VP16	Sand with little gravel - medium grain, tan-light brown, poorly graded.
	210							
-72.91			SP	25	0	4000	VP17	Sand with little gravel - medium grain, tan-light brown, poorly graded.
	220							
-82.91			SP	60	0	4000	VP18	Sand with little gravel - medium grain, tan-light brown, poorly graded.
	230							
-92.91			SP	60	2	5500	VP19	Sand - medium grain, tan-light brown, poorly graded.
	240							
-102.91			SP	70	0	5500	VP20	Sand with some gravel - medium grain, tan-light brown, poorly graded.
	250							
-112.91			SP	60	0	5500	VP21	Sand with some gravel - medium grain, tan-light brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-21D
	Page 6 of 6	WELL NO.: MW-21D-310

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
-122.91			SP	80	2.1	5500	VP22	Sand with few gravel - medium grain, tan-light brown, poorly graded.
	270							
-132.91			SP	80	0	5500	VP23	Sand with some gravel - fine grain, tan-light brown, poorly graded.
	280							
-142.91			SP	70	0	5500	VP24	Sand - medium grain, tan-light brown, poorly graded.
	290							
-152.91			SW	80	0	5500	VP25	Sand with little gravel - medium grain, tan-red/brick, well graded.
	300							
			SW	100	--		VP26	Sand with little gravel - medium grain, tan-red/brick, well graded.
	310							**End of Soil Core Collection and Groundwater Profiling at 310 ft bgs**

Drilling Log

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BORING NO.:	MW-22D
WELL NO.:	MW-22D-315
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	12/10/2008
DATE FINISHED:	12/17/2008
DRILLER:	D. Cunningham
INSPECTOR:	M. Werth, E&E, Inc.
NORTHING (ft):	219392.4326
EASTING (ft):	1109334.388
GROUND ELEVATION (ft):	144.56

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	325.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	62.61	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
144.10	0		SP	100	0	5000		Sand with little gravel and trace clay - medium grain, dark brown, poorly graded.
143.10			SP					Sand with little gravel - medium grain, light brown, poorly graded.
139.10			SP	100	0	5000		Sand with little gravel and trace clay - medium grain, dark brown, poorly graded.
136.10			SP					Sand with little gravel and trace clay - dark brown, poorly graded.
	10					5000		
129.10			SP	100	0	5000		Sand with little gravel and trace clay - poorly graded.
124.10	20		SW					Sand with little gravel - coarse grain, brown, well graded.
119.10			SW	40	4.1	5000		Sand with few gravel - medium-coarse grain, red brown-light brown to brown, well graded.
	30							
109.10			SW	50	22	5000		Sand with little gravel - coarse grain, brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-22D
	Page 2 of 7	WELL NO.: MW-22D-315

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
104.10	40		SP					Sand with few gravel - medium grain, red brown , poorly graded.
			SP	80	126	5000		Sand with few gravel - medium grain, red brown , poorly graded.
96.10			SP					Sand with trace clay - medium grain, red brown, poorly graded.
	50							
89.10			SP	80	7.1	5000		Sand with few gravel - medium grain, red brown, poorly graded.
88.10			SP					Sand with few gravel - light brown-red brown, poorly graded.
	60							
79.10			SP	50	1	5000		Sand with silt and few gravel - medium grain, light brown, poorly graded.
	70							
72.10			SP					Sand with silt and trace gravel - medium grain, light brown, poorly graded.
69.10			SP	100	0	5000	VP03	Sand with trace clay - coarse grain, light brown, poorly graded.
64.10	80		SP					Sand with trace clay - light brown, poorly graded.
59.10			SP	100	0	5000	VP04	Sand - medium grain, light brown, poorly graded.
56.10								
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-22D
	Page 3 of 7	WELL NO.: MW-22D-315

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	50	0	5000	VP05	Sand - light brown, poorly graded.
48.10								
	100							
			SP	100	0	5000	VP06	Sand - light brown, poorly graded.
	110							
32.10			SP					Sand - coarse grain, light brown, poorly graded.
			SP	100	0	5000	VP07	Sand - coarse grain, light brown, poorly graded.
24.10	120		SP					Sand - coarse grain, light brown, poorly graded.
			SP	100	0	5000	VP08	Sand - coarse grain, light brown, poorly graded.
	130							
			SP	100	0	5000	VP09	Sand - coarse grain, light brown, poorly graded.
	140							
-0.90			SP	90	0	5000	VP10	Sand - medium grain, light brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-22D
	Page 4 of 7	WELL NO.: MW-22D-315

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-7.90			SP					Sand - medium grain, light brown, poorly graded.
-10.90			SP	80	0	5000	VP11	Sand - medium grain, light brown, poorly graded.
-15.90	160							
-20.90			SP	50	0	5000	VP12	Sand with trace silty sand - medium grain, light brown, poorly graded.
-23.90			SP					Sand with trace silty sand - light brown, poorly graded.
	170							
-30.90			SW	80	0	5000		Sand with trace gravel - medium-coarse grain, light brown, well graded.
							VP13	
	180							
-39.90			SP	100	0	5000		Sand with trace gravel - medium grain, light brown, poorly graded.
	190							
-47.90			SP					Sand with silty sand - medium grain, light brown-red brown, poorly graded.
-50.90			SW	100	0		VP15	Sand with trace gravel - medium-coarse grain, light brown, well graded.
-55.90	200		SW					Sand with silt and trace gravel - medium-coarse grain, light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-22D
	Page 5 of 7	WELL NO.: MW-22D-315

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SW	10	0		VP16	Sand with silt and trace gravel - medium-coarse grain, light brown, well graded.
-63.90			SW					Sand with silt - medium-coarse grain, light brown, well graded.
	210							
-70.90			SP	85	0		VP17	Sand with trace silt - medium-fine grain, light brown-tan, poorly graded.
	220							
-80.90			SP	90	0		VP18	Sand - medium-fine grain, light brown, poorly graded.
	230							
-90.90			SW	80	0			Sand with trace gravel - tan, well graded.
	240							
-100.90			SW	75	0		VP20	Sand with trace to few gravel and with few silt - medium-fine grain, orange-brown to 250' then dark reddish brown (rust), well graded.
	250							
-110.90			SP	80	0		VP21	Sand - medium-fine grain, reddish brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-22D
	Page 6 of 7	WELL NO.: MW-22D-315

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
-117.90			SP					Sand - medium grain, brown, poorly graded.
-120.90			SP	90	0		VP22	Sand - medium grain, gray brown, poorly graded.
	270							
-130.90			SP	90	110		VP23	Sand with little silt - very fine grain, gray , poorly graded.
	280							
-136.90			CH					Clay - gray
-139.90			SP					Sand with little silt - very fine grain, gray , poorly graded.
-140.90			SP	90	25		VP24	Sand - medium grain, gray, poorly graded.
-144.90	290		SP					Sand with little gravel - medium grain, gray, poorly graded.
-149.90			SP					Sand - very fine grain, dark gray, poorly graded.
-150.90			SM-SC	90	400		VP25	Sand with silt - very fine grain, black
-155.90	300		CL					Clay with trace to few silt - dark gray
-160.90			SP	85	0		VP26	Sand with trace gravel - medium grain, brown, poorly graded.
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-22D
	Page 7 of 7	WELL NO.: MW-22D-315

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-167.90			CH					Clay - gray
-170.90			SP	85	0		VP27	Sand with little silt - medium grain, light brown, poorly graded.
	320							
							VP28	**End of Soil Core Collection and Groundwater Profiling at 325 ft bgs**
	330							

Drilling Log

BORING NO.: MW-23D

WELL NO.: MW-23D-340

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 1/12/2009
DRILLING CONTRACTOR: Boart Longyear	**DATE FINISHED:** 1/27/2009
DRILLING METHOD: Sonic	**DRILLER:** M. McLean
BOREHOLE DATA	**INSPECTOR:** B. Cole, E&E, Inc.
Diameter (in): 6	**NORTHING (ft):** 219265.7369
Total Depth (ft): 386.00	**EASTING (ft):** 1108976.585
Disposition of Hole: Monitoring Well	**GROUND ELEVATION (ft):** 142.19
Depth to Water (ft): 61.04	

SAMPLES FOR CHEMICAL ANALYSIS

- Volatile Organic Compounds (SW8260B)
- Total Nickel (SW6010B)
- Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
141.59	0		SW	80	0	5000		Sand with little gravel and silt - fine grain, brown, well graded.
135.59			SW	90	0	5000		Sand with little gravel and trace to no silt - medium-coarse grain, brown, well graded.
	10							
125.59			SW	90	0	5000		Sand with some to little gravel - fine-coarse grain, dark brown-tan, well graded.
	20							
115.59			SW	90	0	5000		Sand with little to few gravel and few to trace silt - fine grain, brown, well graded.
	30							
105.59			SP	90	0	5000		Sand with little gravel and trace silt - medium grain, brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-23D
	Page 2 of 8	WELL NO.: MW-23D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
95.59			SP	60	0	5000		Sand - fine grain, tan-gray-orange/brown, poorly graded.
	50							
85.59			SW	75	0	4500		Sand with few to trace gravel and trace silt - fine-coarse grain, brown, well graded.
	60 ⊠							
							VP02	
	70							
65.59			SW	75	0	4500	VP03	Sand with few to trace gravel and trace silt - fine-coarse grain, brown, well graded.
	80							
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-23D
	Page 3 of 8	WELL NO.: MW-23D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
45.59			SW	30	0	4500	VP05	Sand with few to trace gravel - fine-coarse grain, brown, well graded.
	100							
							VP06	
	110							
25.59			SP	90	0	4500	VP07	Sand with few gravel - medium-coarse grain, tan-brown, poorly graded.
	120							
							VP08	
	130							
5.59			SP	85	0	4500	VP09	Sand with trace gravel - medium grain, light brown, poorly graded.
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-23D
	Page 4 of 8	WELL NO.: MW-23D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-14.41			SP	75	0	4500	VP11	Sand - medium grain, light brown, poorly graded.
	160							
							VP12	
	170							
-34.41			SW	80	0	4500	VP13	Sand with trace to no gravel - fine-coarse grain, light brown, well graded.
	180							
							VP14	
	190							
-54.41			SP	75	0	4500	VP15	Sand with trace gravel and trace silt - medium grain, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-23D
	Page 5 of 8	WELL NO.: MW-23D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP16	
	210							
-74.41			SP	80	0	4500	VP17	Sand with trace to no gravel - medium grain, light brown, poorly graded.
	220							
							VP18	
	230							
-94.41			SP	80	0	4500	VP19	Sand with trace gravel and trace to no silt - medium grain, light brown, poorly graded.
	240							
							VP20	
	250							
-114.41			SP	90	0	4500	VP21	Sand with few to trace gravel and trace to no silt - medium-coarse grain, light

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-23D
	Page 6 of 8	WELL NO.: MW-23D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
								brown-orange/brown, poorly graded.
	260							
							VP22	
	270							
-134.41			SW	90	0	4500	VP23	Sand with few to trace gravel - fine-coarse grain, orange-brown, well graded.
	280							
							VP24	
-146.41			SW					Sand with some gravel - red-brown, well graded.
-147.41	290		SM					Sand with silt - fine grain, gray, poorly graded.
-154.41			SM	90	0	4500	VP25	Sand with silt and trace to no clay - fine grain, gray, poorly graded.
	300							
-161.41			SM					Sand with silt and clay - fine grain, gray-brown, poorly graded.
-164.41			SM				VP26	Sand with silt - fine grain, gray-brown, poorly graded.
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-23D
	Page 7 of 8	WELL NO.: MW-23D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-174.41	320		SW	90	0	4500	VP27	Sand with few to trace silt and few to trace clay - fine-coarse grain, gray-brown, well graded.
-184.41	330		SP				VP28	Sand with trace to no silt - medium grain, gray, well graded.
-194.41	340						VP29	**End of Soil Core Collection at 336 ft bgs**
	350						VP30	
	360						VP31	
							VP32	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-23D
	Page 8 of 8	WELL NO.: MW-23D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	370						VP33	
	380						VP34	**End of Groundwater Profiling at 386 ft bgs**
	390							

Drilling Log

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BORING NO.:	MW-24DD
WELL NO.:	MW-24DD-370
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	1/5/2009
DATE FINISHED:	1/12/2009
DRILLER:	M. McLean
INSPECTOR:	M. Werth, E&E, Inc.
NORTHING (ft):	219337.157
EASTING (ft):	1109085.213
GROUND ELEVATION (ft):	142.82

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	386.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	64.95	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
145.58	0		SP	80	0	5000		Sand with little to few gravel and few silt - fine grain, brown, poorly graded.
143.58			SP					Sand with trace gravel - fine grain, tan-brown, poorly graded.
139.58			SP	80	0	5000		Sand with trace gravel - fine grain, tan-brown, poorly graded.
	10							
129.58			SP	80	0	5000		Sandwith trace gravel - fine grain, poorly graded.
	20							
123.58			SW					Sand with little gravel - fine-coarse grain, brown, well graded.
121.58			SP					Sand - fine grain, tan-brown, poorly graded.
119.58			SP	20	0	5000		Sand with little gravel - fine grain, tan/brown-brown, poorly graded.
	30							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-24DD
	Page 2 of 8	WELL NO.: MW-24DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
99.58			SM	85	0	5000		Sand with silt - fine grain, brown
97.58			SW					Sand with little gravel - fine-coarse grain, well graded.
	50							
94.58			SP					Sand - fine grain, tan-brown, poorly graded.
89.58			SP	50	0	5000		Sand with trace to no gravel - medium grain, brown, poorly graded.
	60							
	▽							
79.58			SP	80	0	5000	VP02	Sand with trace gravel - gray-tan, poorly graded.
	70							
69.58			SW	60	0	4800	VP03	Sand with trace to no gravel - fine-coarse grain, tan-brown, well graded.
	80							
59.58			SP	60	0	5000	VP04	Sand - medium-coarse grain, tan-brown, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-24DD
	Page 3 of 8	WELL NO.: MW-24DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
49.58			SP	60	0	5000	VP05	Sand - medium grain, light tan, poorly graded.
	100							
39.58			SP	60	0	5000	VP06	Sand with trace gravel - fine-medium grain, tan-brown, poorly graded.
	110							
29.58			SP	75	0	5000	VP07	Sand with trace silt and trace to no gravel - fine-medium grain, tan-brown, poorly graded.
	120							
19.58			SW	75	0	5000	VP08	Sand - fine-coarse grain, light brown, well graded.
	130							
9.58			SW	80	0	4000	VP09	Sand with trace to no silt - fine-coarse grain, light brown, well graded.
	140							
-0.42			SW	80	0	4000	VP10	Sand - fine-coarse grain, light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-24DD
	Page 4 of 8	WELL NO.: MW-24DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-10.42			SP	90	0	4000	VP11	Sand - medium-coarse grain, light brown, poorly graded.
	160							
-20.42			SW	80	0	4000	VP12	Sand - fine-coarse grain, light brown, well graded.
	170							
-30.42			SW	65	0	4000	VP13	Sand with trace silt - fine-coarse grain, light brown, well graded.
	180							
-40.42			SP	60	0	4000	VP14	Sand with trace to no silt - medium-coarse grain, poorly graded.
	190							
-50.42			SW	80	0	4000	VP15	Sand with trace gravel - fine-coarse grain, light brown, well graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-24DD
	Page 5 of 8	WELL NO.: MW-24DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-60.42			SW	75	0	4000	VP16	Sand - fine-coarse grain, light brown, well graded.
	210							
-70.42			SW	80	0	4000	VP17	Sand - fine-coarse grain, light brown, well graded.
	220							
-80.42			SP	85	0	5000		Sand - medium grain, light brown, poorly graded.
	230						VP18	
-90.42			SW	75	0	5000	VP19	Sand with trace to no gravel - fine-coarse grain, light brown, well graded.
	240							
-100.42			SW	90	0	4000	VP20	Sand with trace to no gravel and trace to no silt - fine-coarse grain, dark/light brown-orange/red-brown, well graded.
	250							
							VP21	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-24DD
	Page 6 of 8	WELL NO.: MW-24DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
-120.42			SP	90	0	4000	VP22	Sand with trace gravel - medium-coarse grain, tan-orange tan, poorly graded.
	270							
-129.42			SP	90	0	4000	VP23	Sand with trace gravel - fine-medium grain, light brown, poorly graded.
-133.42	280		SW					Sand with some gravel - medium-very coarse grain, well graded.
-135.42			SM					Sand with silt - light gray
-140.42			SM	90	0	5000	VP24	Sand with silt - fine grain, light gray
	290							
			SM	90	0	4500	VP25	Sand with silt - fine grain, light gray
	300							
-160.42			CH				VP26	Clay - gray
-164.42	310		SM					Sand with silt - fine grain, gray-tan-brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-24DD
	Page 7 of 8	WELL NO.: MW-24DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-170.42			SM	75	0	4500	VP27	Sand with silt - medium-fine grain, gray-tan-dark brown, poorly graded.
	320							
-180.42			SP	90	0	4500	VP28	Sand - medium grain, tan-gray, poorly graded.
	330							
-190.42			SP	90	0	4500	VP29	Sand - medium grain, poorly graded.
	340							
-200.42			SP	60	0	4500	VP30	Sand - medium grain, gray-tan, poorly graded.
	350							
-210.42			SP	90	0	4500	VP31	Sand with trace to no silt - medium-fine grain, light tan-tan/brown, poorly graded.
	360							
							VP32	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-24DD
	Page 8 of 8	WELL NO.: MW-24DD-370

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	370							**End of Soil Core Collection at 370 ft bgs**
							VP33	
	380							
							VP34	**End of Groundwater Profiling at 386 ft bgs**
	390							

Drilling Log

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BORING NO.:	MW-25D
WELL NO.:	MW-25D-350
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	12/9/2008
DATE FINISHED:	12/17/2008
DRILLER:	M. Bond
INSPECTOR:	S. Craig, E&E, Inc.
NORTHING (ft):	219227.6352
EASTING (ft):	1108769.844
GROUND ELEVATION (ft):	142.32

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	350.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	61.51	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
142.09	0		SM	40	1	4500		Sand with silt, some gravel and trace clay - medium-fine grain, reddish tan, poorly graded.
136.09			SW	60	3.1	4500		Sand with some gravel and trace silt - medium-fine grain, reddish tan, well graded.
	10							
126.09			SW	50	3.5	4500		Sand with mostly gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	20							
116.09			SW	30	0.3	4500		Sand with mostly gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	30							
106.09			SW	60	4.4	4500		Sand with mostly gravel and trace silt - medium-coarse grain, reddish tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-25D
	Page 2 of 7	WELL NO.: MW-25D-350

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
96.09			SW	60	3.2	4500		Sand with mostly gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	50							
86.09			SW	40	4.1	4500		Sand with few to trace gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	60							
76.09			SW	40	3.8	4500		Sand with few to trace gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	70							
66.09			SW	40	0	4500	VP03	Sand with some to trace gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	80							
56.09			SW	60	0.2	4500	VP04	Sand with few to trace gravel and trace silt - medium-coarse grain, reddish tan, well graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-25D
	Page 3 of 7	WELL NO.: MW-25D-350

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
46.09			SW	70	1.4	4500	VP05	Sand with trace gravel and trace silt - medium-coarse grain, tan, well graded.
	100							
36.09			SW	70	0	4500	VP06	Sand with trace gravel and trace silt - medium-fine grain, tan, well graded.
	110							
26.09			SW	60	0.7	4500	VP07	Sand with trace gravel and trace silt - medium-coarse grain, tan, well graded.
	120							
16.09			SW	60	0.2	4500	VP08	Sand with trace gravel and trace silt - medium-coarse grain, tan, well graded.
	130							
6.09			SW	60	0	4500	VP09	Sand with trace gravel and trace silt - medium-coarse grain, tan, well graded.
	140							
-3.91			SW	30	0	4500	VP10	Sand with trace gravel and trace silt - medium-coarse grain, tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-25D
	Page 4 of 7	WELL NO.: MW-25D-350

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-13.91			SW	70	0	4500	VP11	Sand with trace gravel and trace silt - medium-coarse grain, tan, well graded.
	160							
-23.91			SP	100	0	4500	VP12	Sand with few silt and trace to no gravel - fine-medium grain, tan, poorly graded.
	170							
-33.91			SW	60	0	4500	VP13	Sand with mostly gravel and trace silt - medium-coarse grain, tan, well graded.
	180							
			SW	50	0	4500	VP14	Sand with mostly gravel and trace silt - medium-coarse grain, tan, well graded.
	190							
-53.91			SP	60	0	4500	VP15	Sand with some to trace gravel and trace silt - medium grain, tan, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-25D
	Page 5 of 7	WELL NO.: MW-25D-350

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-63.91	210		SP	70	0	4500	VP16	Sand with some to trace gravel and trace silt - fine-coarse grain, tan, poorly graded.
-73.91	220		SP	70	0	4500	VP17	Sand with mostly gravel and trace silt - medium-coarse grain, tan, poorly graded.
-83.91	230		SW	80	0	4500	VP18	Sand with mostly gravel and trace silt - fine-coarse grain, tan, well graded.
-93.91	240		SW	60	0	4500	VP19	Sand with some gravel and trace silt - fine-coarse grain, tan, well graded.
-103.91	250		SP	60	0	4500	VP20	Sand with some to trace gravel and trace silt - fine grain, tan, poorly graded.
-113.91			SP	40	0	4500	VP21	Sand with trace gravel and trace silt - medium-coarse grain, tan, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-25D
	Page 6 of 7	WELL NO.: MW-25D-350

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
-123.91			SP	60	0	4500	VP22	Sand with trace gravel and trace silt - coarse grain, brown-tan-gray, poorly graded.
	270							
-133.91			SP	50	0	4500	VP23	Sand with trace silt and trace to no gravel - coarse grain, tan-brown, poorly graded.
	280							
-143.91			SW	70	0	4500	VP24	Sand with trace gravel and trace silt - medium-coarse grain, brown, well graded.
	290							
-153.91			GW	70	0	4500	VP25	Gravel with sand and trace silt - fine-coarse grain, reddish brown, well graded.
	300							
			GW	60	0	4500	VP26	Gravel with sand and trace silt - fine-coarse grain, reddish brown, well graded.
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-25D
	Page 7 of 7	WELL NO.: MW-25D-350

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-173.91	320		SM	60	0	4500	VP27	Sand with silt - fine-medium grain, reddish, poorly graded.
-183.91	330		SP	60	0	4500	VP28	Sand with trace silt - medium-coarse grain, reddish, poorly graded.
-193.91	340		SW	80	0	4500	VP29	Sand with trace silt - fine-coarse grain, reddish, poorly graded.
	350						VP30	**End of Soil Core Collection and Groundwater Profiling at 350 ft bgs**

Drilling Log

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BORING NO.:	MW-26D
WELL NO.:	MW-26D-276
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	12/17/2008
DATE FINISHED:	12/22/2008
DRILLER:	M. Bond
INSPECTOR:	S. Craig, E&E, Inc
NORTHING (ft):	219260.2859
EASTING (ft):	1108868.609
GROUND ELEVATION (ft):	142.40

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	310.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	61.15	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
142.03	0		ML	100	0	5000		Silt with clay and some gravel - fine-coarse grain, brown
136.03			SP	60	0	5000		Sand with some gravel and trace silt - coarse grain, brown
	10							
126.03			SW	50	0	5000		Sand with some gravel and trace silt - medium-coarse grain, brown-red, well graded.
	20							
116.03			SW	50	0	5000		Sand with mostly gravel trace silt - medium-coarse grain, brown, well graded.
	30							
106.03			SP	60	0	5000		Sand with mostly gravel and trace silt - coarse grain, brown/red-orange, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-26D
	Page 2 of 6	WELL NO.: MW-26D-276

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
96.03			SP	60	0	5000		Sand with some gravel and trace silt - coarse grain, brown/orange-red, poorly graded.
	50							
86.03			SP	60	0	5000		Sand with some gravel and trace silt - medium grain, brown-tan-red, poorly graded.
	60 ▽							
76.03			SP	50	0	5000	VP02	Sand with some gravel and trace silt - medium-coarse grain, brown, poorly graded.
	70							
66.03			SP	20	0	5000	VP03	Sand with mostly gravel and trace silt - medium-coarse grain, tan, poorly graded.
	80							
			SP	20	0	5000	VP04	Sand with mostly gravel and trace silt - medium-coarse grain, tan, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-26D
	Page 3 of 6	WELL NO.: MW-26D-276

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
46.03			SP	50	0	5000	VP05	Sand with mostly gravel and trace silt - medium-coarse grain, tan, poorly graded.
	100							
			SP	50	0	5000	VP06	Sand with mostly gravel and trace silt - medium-coarse grain, tan, poorly graded.
	110							
26.03			SP	40	0	5000	VP07	Sand with mostly gravel and trace silt - medium-coarse grain, tan, poorly graded.
	120							
			SP	40	0	5000	VP08	Sand with mostly gravel and trace silt - medium-coarse grain, tan, poorly graded.
	130							
			SP	70	0	5000	VP09	Sand with mostly gravel and trace silt - medium-coarse grain, tan, poorly graded.
	140							
-3.97			SW	50	0	5000	VP10	Sand with some gravel and trace silt - fine-coarse grain, brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-26D
	Page 4 of 6	WELL NO.: MW-26D-276

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
			SW	50	0	5000	VP11	Sand with some gravel and trace silt - fine-coarse grain, brown, well graded.
	160							
-23.97			SP	40	0	5000	VP12	Sand with mostly gravel and trace silt - medium-coarse grain, tan-brown, poorly graded.
	170							
			SP	40	0	5000	VP13	Sand with mostly gravel and trace silt - medium-coarse grain, tan-brown, poorly graded.
	180							
-43.97			SP	50	0	5000	VP14	Sand with some gravel and trace silt - medium-coarse grain, tan-brown, poorly graded.
	190							
			SP	50	0	5000	VP15	Sand with some gravel and trace silt - medium-coarse grain, tan-brown, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-26D
	Page 5 of 6	WELL NO.: MW-26D-276

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-63.97	210		SP	40	0	5000	VP16	Sand with trace to no gravel and trace silt - medium grain, tan, poorly graded.
	220		SP	50	0	5000	VP17	Sand with trace to no gravel and trace silt - medium grain, tan, poorly graded.
-83.97	230		SW	60	0	5000	VP18	Sand with some to trace gravel and trace silt - fine-coarse grain, tan, well graded.
	240		SW	60	0	5000	VP19	Sand with some to trace gravel and trace silt - fine-coarse grain, tan, well graded.
-103.97	250		SW	50	0	5000	VP20	Sand with few to trace gravel and trace silt - fine-coarse grain, tan, well graded.
			SW	50	0	5000	VP21	Sand with few to trace gravel and trace silt - fine-coarse grain, tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-26D
	Page 6 of 6	WELL NO.: MW-26D-276

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-123.97	260		SW	50	0	5000	VP22	Sand with few to trace gravel and trace silt - fine-coarse grain, tan, well graded.
-133.97	270		SW	60	0	5000	VP23	Sand with trace to no gravel and trace silt - fine-coarse grain, tan-orange/red, well graded.
-143.97	280		SW	60	0	5000	VP24	Sand with some to trace gravel and trace silt - fine-coarse grain, orange/red, well graded.
-153.97	290		SM	60	0	5000	VP25	Sand with silt - fine-very fine grain, gray
	300						VP26	
	310							**End of Soil Core Collection and Groundwater Profiling at 310 ft bgs**

Drilling Log

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BORING NO.:	MW-27DD
WELL NO.:	MW-27DD-375
CLIENT:	USACE Kansas City District
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	1/12/2009
DRILLING CONTRACTOR:	Boart Longyear
DATE FINISHED:	1/23/2009
DRILLING METHOD:	Sonic
DRILLER:	M. Bond
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	M. Werth, E&E Inc.
Diameter (in):	6
NORTHING (ft):	219240.6382
Total Depth (ft):	387.00
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109097.51
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 141.83
Depth to Water (ft):	60.95
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
141.45	0		SW	80	0.0	4500		Sand with few gravel - medium grain, dark brown, well graded.
136.45			SM					Sand with some silt and few gravel - medium grain, dark brown, well graded.
134.45			SW	100	0.0	4500		Sand with some gravel - coarse grain, redbrown-dark brown, well graded.
133.45	10							
			SW	100	0.0	4500		Sand with some gravel - coarse grain, redbrown-dark brown, well graded.
	20							
117.45			SW					Sand with some gravel - coarse grain, redbrown-brown, well graded.
114.45			SW	100	0.0	4500		Sand with some gravel - medium-coarse grain, redbrown-brown, well graded.
	30							
109.45			SW					Sand with some gravel - redbrown-brown, well graded.
				100	0.0	4500		

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-27DD
	Page 2 of 8	WELL NO.: MW-27DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
101.45	40		SW					Sand with some gravel - coarse grain, redbrown-dark brown, well graded.
96.45			SP					Sand - medium grain, light brown, poorly graded.
			SP	100	0.0	4500		Sand with trace gravel - medium grain, light brown, poorly graded.
93.45	50							
			SP	100	0.0	4500		Sand with trace gravel - medium grain, light brown, poorly graded.
	60 ⊠							
78.45			SW					Sand with some gravel - medium grain, brown-dark brown, well graded.
74.45			SW	80	0.0	5000		Sand with trace gravel - medium grain, brown-dark brown/gray, well graded.
	70							
64.45			SW	90	0.0	5000	VP03	Sand with trace gravel - medium grain, tan/dark brown, well graded.
	80							
54.45			SW	90	0.0	5000	VP04	Sand with some gravel - medium grain, tan, well graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-27DD
	Page 3 of 8	WELL NO.: MW-27DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
44.45			SW	70	0.0	3000	VP05	Sand with some gravel and trace silt - medium grain, tan-light brown, well graded.
	100							
			SW	90	0.0	3500	VP06	Sand with some gravel and trace silt - medium grain, tan-light brown, well graded.
	110							
24.45			SW	70	0.0	3700	VP07	Sand with little gravel and trace silt - medium grain, tan-light brown, well graded.
	120							
			SW	80	0.0	3700	VP08	Sand with little gravel and trace silt - medium grain, tan-light brown, well graded.
	130							
4.45			SW	80	0.0	3800	VP09	Sand with trace silt - medium grain, tan-light brown, well graded.
	140							
			SW	90	0.0	3800	VP10	Sand with trace silt - medium grain, tan-light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-27DD
	Page 4 of 8	WELL NO.: MW-27DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
			SW	90	0.0	4000	VP11	Sand with trace silt - medium grain, tan-light brown, well graded.
	160							
			SW	80	0.0	4100	VP12	Sand with trace silt - medium grain, tan-light brown, well graded.
	170							
-35.55			SW	70	0.0	3800	VP13	Sand with some gravel and trace silt - medium grain, tan-light brown, well graded.
	180							
-45.55			SW	70	0.0	3800	VP14	Sand with some gravel and trace silt - medium grain, tan-light brown, well graded.
	190							
-55.55			SW	80	0.0	3800	VP15	Sand with few gravel and trace silt - medium grain, tan-light brown, well graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-27DD
	Page 5 of 8	WELL NO.: MW-27DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SW	70	0.0	3800	VP16	Sand with few gravel and trace silt - medium grain, tan-light brown, well graded.
	210							
-75.55			SW	70	0.0	3900	VP17	Sand with trace gravel and trace silt - medium grain, tan-light brown, well graded.
	220							
			SW	60	0.0	3700	VP18	Sand with trace gravel and trace silt - medium grain, tan-light brown, well graded.
	230							
-95.55			SW	70	0.0	4500	VP19	Sand with few gravel and trace silt - medium grain, tan-light brown-brown, well graded.
	240							
-105.55			SW	70	0.0	4400	VP20	Sand with some gravel and trace silt - medium grain, brown, well graded.
	250							
							VP21	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-27DD
	Page 6 of 8	WELL NO.: MW-27DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-115.55	260		SW	70	0.0	4500		Sand with some gravel and trace silt - medium grain, brown-redbrown, well graded.
-125.55	270		SW	70	0.0	4500	VP22	Sand with trace gravel - medium grain, redbrown, well graded.
-135.55	280		SW	70	0.0	4500	VP23	Sand with trace gravel - fine grain, redbrown-gray, well graded.
-145.55	290		SM	80	0.0	4500	VP24	Sand with some silt - fine grain, gray, well graded.
-155.55	300		SM-SC	80	0.0	4500	VP25	Sand with some silt and sand with some clay - fine grain, gray/brown, poorly graded.
-165.55	310		SW	70	0.0	4600		Sand with little silt/clay - very fine grain, gray-light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-27DD
	Page 7 of 8	WELL NO.: MW-27DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-175.55	320		SW	60	0.0	4500	VP27	Sand with little silt/clay - very fine grain, gray, well graded.
-185.55	330		SW	60	0.0	4500	VP28	Sand with little silt/clay - very fine-fine grain, gray-brown, well graded.
-195.55	340		SW	70	0.0	4500	VP29	Sand with little silt/clay - medium grain, brown, well graded.
-205.55	350		SC	70	0.0	4500	VP30	Sand with trace silt/clay and sand with some clay - medium grain, brown-gray, well graded.
-215.55	360		SW	70	0.0	4700	VP31	Sand with trace silt/clay - medium grain, gray-light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-27DD
	Page 8 of 8	WELL NO.: MW-27DD-375

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
				60	0.0	4400	VP32	
	370							
-235.55			SW	70	0.0	4700	VP33	Sand with trace silt/clay to few silt/clay - medium grain, gray, well graded.
	380							
							VP34	**End of Soil Core Collection and Groundwater Profiling at 387 ft bgs**
	390							

Drilling Log

BORING NO.:	MW-28D
WELL NO.:	MW-28D-287
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
DRILLER:	M. Bond
PROJECT NO:	2001764.012.05
DATE STARTED:	1/5/2009
DATE FINISHED:	1/11/2009
INSPECTOR:	M. Werth, E&E, Inc.
NORTHING (ft):	219275.2837
EASTING (ft):	1109274.056
GROUND ELEVATION (ft):	144.93

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 6	
Total Depth (ft): 317.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft): 66.16	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
147.23	0		SM	80	0.0	4800		Sand with some silt and trace gravel - medium grain, brown, poorly graded.
			SM	90	0.0	4900		Sand with some silt and trace gravel - medium grain, brown, poorly graded.
	10							
132.23			SW					Sand with little gravel - fine-coarse grain, redbrown, well graded.
130.23			SW	90	0.0	4900		Sand with little gravel - medium-coarse grain, redbrown, well graded.
	20							
126.23			SP					Sand with some gravel, trace clay, and trace gravel - fine-medium grain, dark brown, poorly graded.
120.23			SP	100	1.1	4900		Sand with little gravel - medium grain, redbrown, poorly graded.
	30							
115.23			SM					Sand with some silt and trace gravel - dark brown, well graded.
110.23			SW	100	2.1	4900		Sand with trace gravel - medium-coarse grain, redbrown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-28D
	Page 2 of 7	WELL NO.: MW-28D-287

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
107.23	40		SW					Sand with trace gravel - medium-coarse grain, redbrown, well graded.
			SW	100	3.9	5100		Sand with trace gravel - medium-coarse grain, redbrown, well graded.
99.23			SP					Sand with trace clay and trace gravel - medium grain, brown-redbrown, poorly graded.
	50							
90.23			SP	100	66.3	5100		Sand with trace gravel - medium grain, light brown, poorly graded.
	60							
83.23			SP					Sand with few gravel - medium grain, dark brown, poorly graded.
	⊠							
80.23			SP	90	5.1	5100		Sand with trace gravel - medium grain, brown-redbrown, poorly graded.
	70							
70.23			SP	60	0.0	5100	VP03	Sand - medium grain, light brown-brown, poorly graded.
	80							
60.23			SP	70	0.0	4900	VP04	Sand - medium grain, brown, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-28D
	Page 3 of 7	WELL NO.: MW-28D-287

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
51.23			SP	80	0.0	3800	VP05	Sand - medium-coarse grain, brown-light brown, poorly graded.
	100							
40.23			SP	80	0.0	4500	VP06	Sand - medium-coarse grain, light brown-brown, poorly graded.
	110							
30.23			SP	80	0.0	4100	VP07	Sand - coarse grain, light brown-brown, poorly graded.
	120							
			SP	100	2.0	4000	VP08	Sand - coarse grain, light brown-brown, poorly graded.
	130							
			SP	100	0.0	4000	VP09	Sand - coarse grain, light brown-brown, poorly graded.
	140							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-28D
	Page 4 of 7	WELL NO.: MW-28D-287

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-1.77	150		SP	70	0.0	5200	VP10	Sand - coarse grain, light brown, poorly graded.
-9.77			SP	100	0.0	5200	VP11	Sand with some silt - coarse grain, light brown, poorly graded.
-12.77	160		SP			5000		Sand - medium-coarse grain, light brown-brown, poorly graded.
-19.77			SP	100	0.0	5000	VP12	Sand with some silt - medium-coarse grain, light brown, poorly graded.
	170							
-28.77			SP					Sand with some silt - medium-coarse grain, light brown, poorly graded.
			SP	100	2.9	5000	VP13	Sand with some silt - medium-coarse grain, light brown, poorly graded.
	180							
-36.77			SP					Sand - medium grain, light brown, poorly graded.
-39.77			SP	70	0.0	4000	VP14	Sand with some silt - medium grain, light brown, poorly graded.
	190							
-49.77			SP	80	0.0	4000	VP15	Sand - medium grain, light brown, poorly graded.
	200							
-53.77			SP					Sand with some silt - medium grain, light brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-28D
	Page 5 of 7	WELL NO.: MW-28D-287

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0.0	4500	VP16	Sand with some silt - medium grain, light brown, poorly graded.
-60.77			SP					Sand with some silt - coarse grain, light brown, poorly graded.
	210							
-69.77			SP	100	0.0	4500	VP17	Sand with some silt - coarse grain, light brown, poorly graded.
	220							
-74.77			SP					Sand with some silt - medium-coarse grain, light brown-gray, poorly graded.
-76.77			SP					Sand with some silt - medium-coarse grain, light tan-gray, poorly graded.
-77.77			SP					Sand with some silt - medium-coarse grain, very light brown-reddish orange, poorly graded.
-79.77			SP	100	0.0	4500	VP18	Sand - medium-coarse grain, reddish orange, poorly graded.
	230							
-84.77			SP					Sand - coarse grain, reddish orange, poorly graded.
			SP	100	0.0	4500		Sand with few gravel - coarse grain, reddish-orange, poorly graded.
-91.77							VP19	
-92.77	240		SP					Sand with little gravel - coarse grain, reddish-orange, poorly graded.
-95.77			SP					Sand with few gravel - medium-coarse grain, light brown, poorly graded.
-97.77			SP					Sand with few clay and trace gravel - medium grain, light tan-gray, poorly graded.
-98.77			SP	100	0.0	4500	VP20	Sand with little gravel - coarse grain, reddish-orange, poorly graded.
-100.77			SW					Sand with little gravel - medium-coarse grain, reddish-orange, well graded.
	250							
-108.77			SW				VP21	Sand with little gravel - coarse grain, reddish-orange, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-28D
	Page 6 of 7	WELL NO.: MW-28D-287

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-109.77			SP	100	0.0	4500		Sand - coarse grain, reddish-orange, poorly graded.
	260							
-119.77			SP	100	0.0	4000	VP22	Sand with some silt - medium grain, light brown, poorly graded.
	270							
-124.77			SP					Sand - medium grain, light brown, poorly graded.
-129.77			SP	100	0.0	4000	VP23	Sand with some silt - medium grain, light brown, poorly graded.
	280							
-135.77			SP			4000		Sand with trace clay and some silt - fine-medium grain, brown-gray, poorly graded.
-139.77			SC	80	0.0	4000	VP24	Sand with few clay - dark gray
	290							
-144.77			CL					Clay - dark gray
-148.77			CL	100	0.0	5000		Clay - dark gray
-151.77	300		SM			4500		Sand with some silt and trace clay - fine-medium grain, light gray-dark gray, poorly graded.
-156.77			SM					Sand with some silt and trace clay - fine-medium grain, light gray-dark brown, poorly graded.
				100	0.0	4500	VP26	Sand with some silt and trace clay - fine-medium grain, light gray-dark brown, poorly graded.
-162.77	310		SM	100	0.0	4500		Sand with some silt and trace clay - fine grain, light gray, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-28D
	Page 7 of 7	WELL NO.: MW-28D-287

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	320						VP27	**End of Soil Core Collection and Groundwater Profiling at 317 ft bgs**

Drilling Log

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BORING NO.:	MW-29S
WELL NO.:	MW-29S-76
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	2/19/2009
DATE FINISHED:	2/20/2009
DRILLER:	F. Lavoie
INSPECTOR:	M. Werth, E&E, Inc.
NORTHING (ft):	219106.091
EASTING (ft):	1109090.227
GROUND ELEVATION (ft):	142.26

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	110.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	61.37	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SM	100	0	4200		Sand with silt and some gravel - fine grain, reddish brown, well graded.
			SM					Sand with silt, some gravel and trace clay - fine grain, dark brown, well graded.
				50	58.6	4200		
			SM					Sand with silt, some gravel and trace clay - fine grain, light brown-dark brown, poorly graded.
	10		SM	100	0	4200		Sand with wilt and some gravel - fine-coarse grain, light brown, well graded.
				100	0			
			SM					Silt with sand and some gravel - fine grain, light brown, poorly graded.
	20		NR	0	--			No Recovery.
			SW	10	0			Sand with some gravel - coarse grain, brown, well graded.
	30		SM	100	0	4200		Sand and some gravel, trace Silt - fine grain, light brown, poorly graded.
			SM	100	0	4200		Sand and some gravel, trace Silt - fine grain, light brown, poorly graded.

PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-29S	
Page 2 of 3	**WELL NO.:** MW-29S-76	

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			ML					Sand with Silt, some gravel and trace clay - coarse grain, dark brown, poorly graded.
	40		SW	100	0	4200		Sand with some gravel - coarse grain, brown, well graded.
			ML	100	0	4200		Silt with sand and little gravel - fine grain, light brown, poorly graded.
			SW					Sand with little gravel and trace clay - coarse grain, brown/reddish brown-gray, well graded.
	50		SM	100	0	4200		Sand with silt with trace gravel - fine grain, brown-light brown, well graded.
			SW	100	0	4600		Sand with trace gravel - medium-coarse grain, brown, well graded.
	60		SW	100	0	4600		Sand with trace gravel - medium-coarse grain, brown, well graded.
			SW	100	0		VP03	Sand with trace gravel - medium-coarse grain, brown, well graded.
	70		SW	100	0	4600		Sand - coarse grain, brown, well graded.
			SW	100	0		VP04	Sand - coarse grain, brown, well graded.
	80		SW	100	0	4600		Sand - coarse grain, brown, well graded.
			SW	100	0	4600	VP05	Sand with few gravel - medium-coarse grain, brown, well graded.
	90		SW	100	0	4600		Sand - medium-coarse grain, brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-29S
	Page 3 of 3	WELL NO.: MW-29S-76

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SW	100	0		VP06	Sand - medium-coarse grain, brown, well graded.
	100		SW	100	0			Sand - medium-coarse grain, brown, well graded.
			SW	100	0		VP07	Sand with mostly to some gravel - medium-coarse grain, brown, well graded.
	110							**End of Soil Core Collection and Groundwater Profiling at 110 ft bgs**

Drilling Log

Page 1 of 8

BORING NO.:	MW-30D
WELL NO.:	MW-30D-340
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	2/19/2009
DATE FINISHED:	2/26/2009
DRILLER:	M. Bond
INSPECTOR:	B. Cole, E&E, Inc.
NORTHING (ft):	218955.7272
EASTING (ft):	1108779.664
GROUND ELEVATION (ft):	140.88

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	399.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	60.65	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
140.90	0		SW	90	0	6000		Sand with little gravel - fine-coarse grain, brown, well graded.
135.90			SM					Sand with little gravel and silt - fine-coarse grain, brown, well graded.
133.90			SM	90	0	6000		Sand with little gravel and silt - fine grain, brown, well graded.
	10							
123.90			SW	90	0	6000		Sand with little gravel - fine-coarse grain, tan-brown, well graded.
	20							
113.90			SW	90	0	6000		Sand with little gravel - tan/brown-gray, well graded.
	30							
103.90			SW	90	0	6000		Sand with little gravel and mostly to few silt - fine-coarse grain, brown, well

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
								graded.
93.90	40		SW	90	0	6000		Sand with little gravel and trace silt - fine-coarse grain, well graded.
	50							
83.90			SP	90	0	6000		Sand with little to no gravel - medium grain, tan, poorly graded.
	60							
73.90			SP	95	0	6000	VP02	Sand with trace silt - medium grain, gray, poorly graded.
	70							
69.90			SP					Sand with trace gravel - fine-coarse grain, gray, poorly graded.
63.90			SP	75	0	5700	VP03	Sand with trace gravel - medium grain, tan-gray, poorly graded.
	80							
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-30D
	Page 3 of 8	WELL NO.: MW-30D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
43.90			SW	75	0	5700	VP05	Sand with little to few gravel - fine-coarse grain, tan, well graded.
	100							
							VP06	
	110							
23.90			SP	50	0	5700	VP07	Sand with trace gravel - medium grain, tan, poorly graded.
	120							
							VP08	
	130							
3.90			SP	50	0	5700	VP09	Sand with trace to no gravel - fine-medium grain, tan, poorly graded.
	140							
							VP10	

PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-30D	
Page 4 of 8	**WELL NO.:** MW-30D-340	

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-16.10			SW	80	0	5500	VP11	Sand with few to trace silt and trace gravel - fine-coarse grain, tan-tan/gray, well graded.
	160						VP12	
	170							
-31.10			GW					Gravel with few to trace sand - fine-coarse grain, tan, well graded.
-34.10			SW					Sand with few to trace silt and trace gravel - fine-coarse grain, tan-tan/gray, well graded.
-36.10			SW	90	0	5500	VP13	Sand with little gravel and trace silt - fine grain, tan, well graded.
	180							
-44.10			SP				VP14	Sand with trace silt - medium grain, tan-gray, poorly graded.
-48.10	190		SW					Sand with little gravel - tan, well graded.
-56.10			SP	90	0.0	6000	VP15	Sand with trace gravel and trace silt - medium grain, tan-gray, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-30D
	Page 5 of 8	WELL NO.: MW-30D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP16	
	210							
-76.10			SP	90	0.0	6000	VP17	Sand with trace gravel and trace silt - medium grain, tan, poorly graded.
	220							
							VP18	
	230							
-96.10			SP	90	0.0	6000	VP19	Sand with trace gravel and trace silt - medium grain, tan, poorly graded.
	240							
-106.10			SW				VP20	Sand with few gravel and trace silt - fine-coarse grain, tan, well graded.
	250							
							VP21	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-30D
	Page 6 of 8	WELL NO.: MW-30D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-116.10			SW	90	0.0	6000		Sand with few gravel and trace silt - fine-coarse grain, tan-orange, well graded.
	260							
-121.10			SM					Sand with some silt - fine-medium grain, gray-brown-orange-tan, poorly graded.
							VP22	
	270							
-136.10			SM	90	0.0	5500	VP23	Sand with some silt - fine-medium grain, brown, poorly graded.
	280							
-140.10			CL					Clay - dark gray
-147.10			CL					Clay - gray-brown
	290							
-152.10			SP					Sand with trace silt - medium grain, poorly graded.
			SP	90	0.0	8000	VP25	Sand with trace silt - medium grain, poorly graded.
	300							
-159.10			SM					Sand with some silt - dark gray, poorly graded.
-166.10			SP	90	0.0	5500	VP26	Sand with trace silt - fine-medium grain, tan-gray, poorly graded.
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-30D
	Page 7 of 8	WELL NO.: MW-30D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP27	
	320							
-180.10			SM					Sand with some silt - tan-gray, poorly graded.
							VP28	
-186.10			SW	90	0.0	5500		Sand with some silt to trace silt - medium grain, light gray, well graded.
	330							
							VP29	
-196.10			SM					Sand with some silt - dark gray, poorly graded.
	340							
							VP30	
-206.10			SP	90	0.0	4500		Sand with trace silt - medium grain, brown, poorly graded.
	350							
-210.10			SM					Sand with some silt - fine grain, dark gray, poorly graded.
					0.0	4500	VP31	
	360							
								End of Soil Core Collection at 367 ft bgs

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-30D
	Page 8 of 8	WELL NO.: MW-30D-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	370						VP32	
	380						VP33	
	390						VP34	
							VP35	
	400							**End of Groundwater Profiling at 399 ft bgs**

Drilling Log

BORING NO.:	MW-31D
WELL NO.:	MW-31D-330
CLIENT:	USACE Kansas City District
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	2/9/2009
DRILLING CONTRACTOR:	Boart Longyear
DATE FINISHED:	2/13/2009
DRILLING METHOD:	Sonic
DRILLER:	M. Bond
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	B. Cole, E&E, Inc.
Diameter (in):	6
NORTHING (ft):	218996.6211
Total Depth (ft):	397.00
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1108997.4
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 140.79
Depth to Water (ft):	60.63
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
140.84	0		SW	90	0	4500		Sand with some gravel and few silt - fine-coarse grain, light brown-dark brown, well graded.
133.84	10		SW	90	0	4500		Sand with little gravel and trace to no silt - fine-coarse grain, light brown-dark brown, well graded.
123.84	20		SW	75	0	4500		Sand with some gravel and trace silt - fine-coarse grain, light brown-dark brown, well graded.
113.84	30		SW	75	0	4500		Sand with little gravel - fine-medium grain, brown, well graded.
103.84			SW	75	0	4500		Sand with litle gravel - fine-coarse grain, orange-brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-31D
	Page 2 of 8	WELL NO.: MW-31D-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
96.84			SP					Sand - fine grain, light tan, poorly graded.
93.84			SP	80	0	4600		Sand - fine-very fine grain, light tan, poorly graded.
	50							
83.84			SP	80	0	4700		Sand with trace to no gravel - fine-very fine grain, tan/brown-light tan, poorly graded.
	60							
73.84			SW	90	0	4800		Sand with few to trace silt and trace to no gravel - fine-coarse grain, brown, well graded.
	70							
63.84			SW	80	0	4500	VP02	Sand with trace to no silt - fine-coarse grain, tan, well graded.
	80							
							VP03	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-31D
	Page 3 of 8	WELL NO.: MW-31D-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
43.84			SW	75	0	4500	VP04	Sand trace to no gravel and trace to no silt - fine-coarse grain, light tan-light gray, well graded.
	100							
							VP05	
	110							
23.84			SP	90	0	4500	VP06	Sand with trace gravel - medium-coarse grain, light gray, poorly graded.
	120							
							VP07	
	130							
3.84			SW	75	0	4500	VP08	Sand with few gravel and trace to no silt - fine-coarse grain, light tan-light gray, well graded.
	140							
							VP09	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-31D
	Page 4 of 8	WELL NO.: MW-31D-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-16.16			SP	75	0	4500	VP10	Sand with trace gravel and trace silt - medium grain, light tan-light gray, poorly graded.
	160							
							VP11	
	170							
-34.16			SW					Sand with some gravel and trace silt - fine grain, brown, well graded.
-36.16			SP	90	0	4500	VP12	Sand - medium grain, light brown-light tan, poorly graded.
	180							
							VP13	
	190							
-54.16			SP					Sand with little gravel and trace to no silt - medium grain, tan-brown, poorly graded.
-56.16			SW	90	0	4500	VP14	Sand with trace to no gravel - fine-medium grain, tan-brown, well graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-31D
	Page 5 of 8	WELL NO.: MW-31D-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP15	
	210							
-76.16			SW	90	0	4500	VP16	Sand with little to trace gravel and trace to no silt - light brown-light tan, well graded.
	220							
							VP17	
	230							
-96.16			SW	90	0		VP18	Sand with little gravel and little silt - fine grain, brown-orange/brown, well graded.
	240							
							VP19	
	250							
-114.16			SP				VP20	Sand - medium grain, light gray, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-31D
	Page 6 of 8	WELL NO.: MW-31D-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-116.16			SP	95	0	5000		Sand with trace gravel and trace silt - medium grain, light brown-light gray, poorly graded.
	260							
							VP21	
	270							
-131.16			CL					Clay - brown
-136.16			SP	90	0	5000	VP22	Sand with clay - fine grain, brown, poorly graded.
	280							
-143.16			CL					Clay - brown-dark gray
							VP23	
	290							
-154.16			SM					Sand with silt - fine grain, gray-brown, poorly graded.
-155.16			CL					Clay - dark gray
-156.16			CL	90	0	5000	VP25	Clay with little sand - dark gray
	300							
-166.16			CL	90	0	5000	VP26	Clay with silt - gray-brown
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-31D
	Page 7 of 8	WELL NO.: MW-31D-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-176.16			SP	95	0		VP27	Sand - medium grain, tan-gray, poorly graded.
	320							
-186.16			SP	90	0	4500	VP28	Sand with trace silt - medium grain, gray, poorly graded.
	330							
							VP29	
	340							
-200.16			SP					Sand with some silt - medium grain, gray, poorly graded.
-203.16			SW					Sand with trace silt - fine-coarse grain, gray-brown, well graded.
-206.16			SP	90	0	4500	VP30	Sand with trace silt - medium grain, gray-brown, poorly graded.
	350							
-216.16			CL	90	0	4500	VP31	Clay with sand - black
	360							
-221.16			CL					Clay - dark gray

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-31D
	Page 8 of 8	WELL NO.: MW-31D-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-225.66			SP					Sand - medium grain, brown, poorly graded.
								End of Soil Core Collection at 367 ft bgs
	370							
							VP33	
	380							
							VP34	
	390							
							VP35	
								End of Groundwater Profiling at 397 ft bgs
	400							

Drilling Log

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BORING NO.:	MW-32D
WELL NO.:	MW-32D-305
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	2/10/2009
DATE FINISHED:	2/18/2009
DRILLER:	G. Sealey
INSPECTOR:	M. Werth, E&E, Inc.
NORTHING (ft):	219079.8242
EASTING (ft):	1109291.156
GROUND ELEVATION (ft):	141.16

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	326.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	60.9	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
141.17	0		SM	100	0	4500		Sand with silt and some gravel - medium grain, dark brown, well graded.
135.17			SM	100	0	4500		Sand with silt and some gravel - medium grain, dark brown-reddish brown, well graded.
133.17			SW					Sand with some gravel - medium grain, reddish brown, well graded.
	10							
130.17			SM					Sand with silt and little gravel - fine grain, light brown
125.17			SM	40	0	4500		Sand with silt and little gravel - fine grain, light brown-reddish brown, well graded.
	20							
			SM	40	0			Sand with silt and little gravel - fine grain, light brown-reddish brown, well graded.
	30							
105.17			SM	75	0	4500		Sand with silt and little gravel - fine grain, brown-reddish brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-32D
	Page 2 of 7	WELL NO.: MW-32D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
101.17	40		SP					Sand with trace gravel - medium grain, brown, poorly graded.
			SP	75	0			Sand with trace gravel - medium grain, brown, poorly graded.
93.17			SP					Sand - fine-medium grain, light brown, poorly graded.
	50							
85.17			SM	90	0	4500		Sand with silt - fine grain, light brown, poorly graded.
	60							
78.17			SW					Sand with trace clay - fine grain, light brown, well graded.
75.17			SM	30	0	4500	VP02	Sand with silt - fine-medium grain, dark gray, well graded.
	70							
65.17			SP	100	0	4500	VP03	Sand - medium grain, light brown, poorly graded.
61.17	80		SP					Sand with trace silt - medium grain, light brown, poorly graded.
			SP	100	0		VP04	Sand with trace silt - medium grain, light brown, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-32D
	Page 3 of 7	WELL NO.: MW-32D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
45.17			SP	100	0	4500	VP05	Sand - medium grain, light brown, poorly graded.
	100							
			SP	100	0		VP06	Sand - medium grain, light brown, poorly graded.
	110							
29.17			SP					Sand with trace gravel - medium grain, light brown, poorly graded.
25.17			SP	100	0	4500	VP07	Sand - medium grain, light brown, poorly graded.
	120							
			SP	100	0		VP08	Sand - medium grain, light brown, poorly graded.
	130							
			SP	100	0	4500	VP09	Sand - medium grain, light brown, poorly graded.
	140							
			SP	100	0		VP10	Sand - medium grain, light brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-32D
	Page 4 of 7	WELL NO.: MW-32D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
			SP	100	0	4500	VP11	Sand - medium grain, light brown, poorly graded.
	160							
			SP	100	0		VP12	Sand - medium grain, light brown, poorly graded.
	170							
			SP	100	0	4500	VP13	Sand - medium grain, light brown, poorly graded.
	180							
			SP	100	0		VP14	Sand - medium grain, light brown, poorly graded.
	190							
			SP	100	0	4500	VP15	Sand - medium grain, light brown, poorly graded.
-58.83	200		SP					Sand with trace silt - medium grain, light brown-gray, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-32D
	Page 5 of 7	WELL NO.: MW-32D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0		VP16	Sand with trace silt - medium grain, light brown-gray, poorly graded.
-66.83			SP					Sand - medium-coarse grain, reddish brown, poorly graded.
	210							
-74.83			SW	100	0	4500	VP17	Sand - medium-coarse grain, well graded.
	220							
-82.83			SW					Sand - medium grain, light brown-reddish brown, well graded.
			SW	100	0	4500	VP18	Sand - medium grain, light brown-reddish brown, well graded.
	230							
-90.83			SW					Sand - medium-coarse grain, reddish brown, well graded.
-94.83			SW	100	0	4500	VP19	Sand - medium-coarse grain, reddish brown, well graded.
-98.83	240		SP					Sand with trace gravel - coarse grain, poorly graded.
-104.83			CL	100	0		VP20	Clay with sand - fine grain, gray-reddish brown
	250							
-114.83			SW	100	0	4500	VP21	Sand with trace gravel - medium-coarse grain, reddish brown-light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-32D
	Page 6 of 7	WELL NO.: MW-32D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
-124.83			SW	100	0	4500	VP22	Sand with little gravel and clay - brown-brown/gray
	270							
-130.83			CL					Clay - brown-gray
-134.83			CL	100	0	4500	VP23	Clay - gray
	280							
-144.83			SP	100	0	4500	VP24	Sand - very fine grain, gray, poorly graded.
	290							
			SP	100	0	4500	VP25	Sand - very fine grain, gray, poorly graded.
	300							
			SP	100	0	4500	VP26	Sand - very fine grain, gray, poorly graded.
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-32D
	Page 7 of 7	WELL NO.: MW-32D-305

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-174.83	320		SM	100	0		VP27	Sand with some silt - fine grain, light brown-gray
	330						VP28	**End of Soil Core Collection and Groundwater Profiling at 326 ft bgs**

Drilling Log

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BORING NO.:	MW-33D
WELL NO.:	MW-33D-300
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	1/30/2009
DATE FINISHED:	2/10/2009
DRILLER:	G. Sealey
INSPECTOR:	M. Werth, E&E, Inc.
NORTHING (ft):	219266.0005
EASTING (ft):	1109481.168
GROUND ELEVATION (ft):	135.73

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 6	
Total Depth (ft): 310.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft): 54.96	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
135.49	0		SW	100	0	6500		Sand with some gravel - medium-coarse grain, light brown-brown, well graded.
129.49			SW	100	0	6500		Sand with some gravel - medium-coarse grain, reddish brown, well graded.
	10							
119.49			SW	100	0	6500		Sand with some gravel - medium grain, brown, well graded.
	20							
			SW	100	35	6500		Sand with some gravel - medium grain, brown, well graded.
	30							
103.49			SW					Sand with some gravel - medium-coarse grain, reddish brown, well graded.
			SW	100	0	6500	VP01	Sand with some gravel - medium-coarse grain, reddish brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-33D
	Page 2 of 6	WELL NO.: MW-33D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40						VP02	
87.49			SW					Sand with some gravel - medium grain, reddish brown, well graded.
	50							
84.49			SM					Sand with silt - medium-fine grain, reddish brown, poorly graded.
82.49			SP					Sand - medium grain, light brown, poorly graded.
79.49			SP	100	0	5500	VP03	Sand - medium grain, light brown, poorly graded.
	60							
							VP04	
69.49			SW					Sand with trace gravel - coarse grain, well graded.
	70							
59.49			SP	100	0	5500	VP05	Sand - medium-coarse grain, poorly graded.
	80							
							VP06	
			SP	100	0			Sand - medium-coarse grain, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-33D
	Page 3 of 6	WELL NO.: MW-33D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0	5500	VP07	Sand - medium-coarse grain, poorly graded.
	100							
31.49			SP				VP08	Sand - medium-coarse grain, light brown, poorly graded.
	110							
			SP	100	0	6500	VP09	Sand - medium-coarse grain, light brown, poorly graded.
15.49	120		SP					Sand - coarse grain, light brown, poorly graded.
			SP	100	0	6500	VP10	Sand - coarse grain, light brown, poorly graded.
	130							
			SP	100	0	6500	VP11	Sand - coarse grain, light brown, poorly graded.
	140							
-10.51			SM	100	0	6500	VP12	Sand with silt - medium grain, dark gray-brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-33D
	Page 4 of 6	WELL NO.: MW-33D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-16.51			SW					Sand with trace gravel - coarse grain, light brown, well graded.
			SW	100	0		VP13	Sand with trace gravel - coarse grain, light brown, well graded.
-24.51	160		SW					Sand - coarse grain, light brown, well graded.
			SW	100	0	6500	VP14	Sand - coarse grain, light brown, well graded.
-32.51			SW					Sand with trace gravel - coarse grain, light brown, well graded.
-34.51	170		SM					Sand with some silt - medium grain, brown-dark gray, poorly graded.
-37.51			SW					Sand with trace gravel - medium-coarse grain, light brown, well graded.
-40.51			SP	100	0	6500	VP15	Sand with trace silt - medium grain, light brown-gray, poorly graded.
	180							
			SP	100	0		VP16	Sand with trace silt - medium grain, light brown-gray, poorly graded.
	190							
			SP	100	0	6500	VP17	Sand with trace silt - medium grain, light brown-gray, poorly graded.
-64.51	200		SP					Sand with trace silt - medium grain, brown-gray, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-33D
	Page 5 of 6	WELL NO.: MW-33D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0		VP18	Sand with trace silt - medium grain, brown-gray, poorly graded.
	210							
-80.51			SP	100	0	6500	VP19	Sand with trace silt - medium grain, poorly graded.
	220							
-88.51			SP					Sand with trace silt - medium grain, light brown, poorly graded.
			SP	100	0	6500	VP20	Sand with trace silt - medium grain, light brown, poorly graded.
	230							
			SP	100	0		VP21	Sand with trace silt - medium grain, light brown, poorly graded.
	240							
-106.51			SP					Sand - medium grain, light brown, poorly graded.
-110.51			SW	100	0	6500	VP22	Sand with trace gravel - medium-coarse grain, reddish brown, well graded.
	250							
			SW	100	0		VP23	Sand with trace gravel - medium-coarse grain, reddish brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-33D
	Page 6 of 6	WELL NO.: MW-33D-300

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
-127.51			CL					Clay with silt - fine grain, pinkish gray
						6500	VP24	
-130.51			CL	100	0			Clay with silt - fine grain, dark brown-gray
	270							
-140.51			CL	100	0			Clay with silt - fine grain, dark gray-black
	280							
-150.51			CL	100	0	6500	VP25	Clay with silt - fine grain, gray-reddish brown
-152.51			ML					Silt with clay - fine grain, gray-reddish brown
	290							
			ML	100	0	6500	VP26	Silt with clay - fine grain, gray-reddish brown
	300							
	310							**End of Soil Core Collection and Groundwater Profiling at 310 ft bgs**

Drilling Log

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BORING NO.:	MW-34D
WELL NO.:	MW-34D-280
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	1/30/2009
DATE FINISHED:	2/4/2009
DRILLER:	M. Bond
INSPECTOR:	S. Craig, E&E, Inc.
NORTHING (ft):	219167.7468
EASTING (ft):	1109702.67
GROUND ELEVATION (ft):	136.52

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	6	
Total Depth (ft):	310.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	55.32	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
136.52	0		SP	100	0	5500		Sand with some gravel and trace silt - coarse grain, brown, poorly graded.
129.52	10		SP	100	0	5500		Sand with some gravel and trace silt - coarse grain, brown, poorly graded.
	20		SP	100	0	5500		Sand with some gravel and trace silt - coarse grain, brown, poorly graded.
	30		SP	100	0	5500		Sand with some gravel and trace silt - coarse grain, brown, poorly graded.
			SP	100	0	5000		Sand with some gravel and trace silt - coarse grain, brown, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-34D
	Page 2 of 6	WELL NO.: MW-34D-280

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			SP	70	0	5500		Sand with some gravel and trace silt - coarse grain, brown, poorly graded.
	50							
	⊠							
79.52			SP	70	0	5000	VP01	Sand with trace gravel and trace silt - coarse grain, light brown, poorly graded.
	60							
69.52			SW	70	0	5000	VP02	Sand with trace silt - medium grain, light brown-brown, well graded.
	70							
59.52			SW	60	0	5000	VP03	Sand with trace silt - medium grain, brown, well graded.
	80							
			SW	60	0	5000	VP04	Sand with trace silt - medium grain, brown, well graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-34D
	Page 3 of 6	WELL NO.: MW-34D-280

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
39.52			SW	70	0	5000	VP05	Sand with trace silt - medium grain, light brown, well graded.
	100							
29.52			SP	70	0	5000	VP06	Sand with mostly to no gravel and trace silt - medium grain, light brown, poorly graded.
	110							
19.52			SW	80	0	5000	VP07	Sand with some gravel and trace silt - medium grain, light brown, well graded.
	120							
9.52			SW	90	0	5000	VP08	Sand wth trace silt - medium grain, light brown, well graded.
	130							
-0.48			SW	90	0	5000	VP09	Sand with trace gravel and trace silt - medium grain, light brown, well graded.
	140							
-10.48			SW	90	0	5000	VP10	Sand with trace silt - medium grain, light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-34D
	Page 4 of 6	WELL NO.: MW-34D-280

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
-20.48			SW	90	0	4800	VP11	Sand with trace gravel and trace silt - coarse grain, light brown, well graded.
	160							
-30.48			SP	90	0	5000	VP12	Sand with some gravel and trace silt - coarse grain, light brown, poorly graded.
	170							
-40.48			SP	90	0	5000	VP13	Sand with mostly gravel and trace silt - coarse grain, brown, poorly graded.
	180							
			SP	90	0	5000	VP14	Sand with mostly gravel and trace silt - coarse grain, brown, poorly graded.
	190							
-60.48			SP	80	0	5000	VP15	Sand with little gravel and trace silt - coarse grain, brown-light brown, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-34D
	Page 5 of 6	WELL NO.: MW-34D-280

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-70.48	210		SW	70	0	5000	VP16	Sand with trace silt - coarse grain, brown-light brown, well graded.
-80.48	220		SW	80	0	5000	VP17	Sand with trace silt - fine-coarse grain, brown, well graded.
-90.48	230		SP	80	0	5000	VP18	Sand with trace gravel and trace silt - coarse grain, red, poorly graded.
-100.48	240		SP	100	0	5000	VP19	Sand with trace silt - coarse-very fine grain, red-gray, poorly graded.
-110.48	250		SP	90	0	5000	VP20	Sand with trace gravel and trace silt - very fine-fine grain, gray-brown, poorly graded.
			SP				VP21	Sand with trace silt - fine grain, gray, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-34D
	Page 6 of 6	WELL NO.: MW-34D-280

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-120.48	260			90	0	5000		
-130.48	270		SM	70	0	5000	VP22	Sand with silt - fine grain, gray, poorly graded.
				60	0	5000	VP23	Sand with silt - fine grain, gray, poorly graded.
-150.48	280		SM	90	0	5000	VP24	Sand with silt - fine grain, gray, poorly graded.
-160.48	290		SM	90	0	5000	VP25	Sand with silt - fine grain, gray, poorly graded.
	300		SM	100	0	5000	VP26	Sand with silt - fine grain, gray, poorly graded.
	310							**End of Soil Core Collection and Groundwater Profiling at 310 ft bgs**

Drilling Log

BORING NO.: MW-41S

WELL NO.: MW-41S-76

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 12/8/2009
DRILLING CONTRACTOR: Miller Drilling	**DATE FINISHED:** 1/4/2010
DRILLING METHOD: Rotary Sonic	**DRILLER:** J. Johnson
BOREHOLE DATA / **SAMPLES FOR CHEMICAL ANALYSIS**	**INSPECTOR:** T. Bennett, CDM
Diameter (in): 8	**NORTHING (ft):** 219576.0921
Total Depth (ft): 159.00 — Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109279.426
Disposition of Hole: Monitoring Well — Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 140.00
Depth to Water (ft): 62.48 — Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
143.56	0		SW	85	0.0	5000		Sand with little gravel - fine-medium grain, dark brown, well graded.
136.56			SW	90	0.0	5000		Sand with some gravel - fine-medium grain, dark brown, well graded.
	10							
126.56			SW	90	0.0	5000		Sand with some gravel - fine-medium grain, dark brown, well graded.
	20							
116.56			SW	100	0.0	5000		Sand with some gravel - fine-medium grain, dark brown, well graded.
	30							
106.56			SW	60	0.0	5000		Sand with some gravel - fine-medium grain, light brown-tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-41S
	Page 2 of 4	WELL NO.: MW-41S-76

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
96.56			SP	80	0.0	5000		Sand with trace gravel - medium grain, light brown-tan, poorly graded.
	50							
86.56			SP	80	0.0	5000		Sand with trace gravel - medium grain, light brown-tan, poorly graded.
	60							
76.56							VP02	**End of Soil Core Collection at 67 ft bgs**
	70							
							VP03	
	80							
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-41S
	Page 3 of 4	WELL NO.: MW-41S-76

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100						VP05	
	110						VP06	
	120						VP07	
	130						VP08	
	140						VP09	
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-41S
	Page 4 of 4	WELL NO.: MW-41S-76

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150						VP11	
	160							**End of Groundwater Profiling at 159 ft bgs**

Drilling Log

BORING NO.:	MW-42I
WELL NO.:	MW-42I-150
CLIENT:	USACE Kansas City District
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	12/16/2009
DRILLING CONTRACTOR:	Miller Drilling
DATE FINISHED:	1/14/2010
DRILLING METHOD:	Rotary Sonic
DRILLER:	C. Boyd
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	S. Britch, CDM
Diameter (in):	8
NORTHING (ft):	219570.7063
Total Depth (ft):	156.00
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109384.06
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 143.87
Depth to Water (ft):	62.59
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
143.75	0		SW	50	0.0	5000		Sand with some gravel - fine-coarse grain, dark brown, well graded.
135.75	10		SW	35	0.0	5000		Sand with some gravel - fine-coarse grain, dark brown, well graded.
125.75	20		SW	80	0.0	5000		Sand with some gravel - fine-coarse grain, dark brown, well graded.
115.75	30		SW	50	0.0	5000		Sand with some gravel - fine-coarse grain, dark brown, well graded.
			SW	58	0.0	5000		Sand with some gravel - fine-coarse grain, tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-42I
	Page 2 of 4	WELL NO.: MW-42I-150

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
105.75	40							
95.75	50		SW	80	0.0	5000		Sand with some gravel - fine-coarse grain, tan, well graded.
85.75	60		SP	70	0.0	5000		Sand - fine-medium grain, tan, poorly graded.
75.75	70		SW	60	0.0	5600	VP02	Sand with some gravel - fine-coarse grain, tan, well graded.
							VP03	
65.75	80		GP	50	0.0	5400		Gravel and sand - fine grain, tan, poorly graded.
							VP04	
55.75	90		SW	30	0.0	5000		Sand and gravel - fine-coarse grain, tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-42I
	Page 3 of 4	WELL NO.: MW-42I-150

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
45.75			SW	60	0.0	5400		Sand with trace gravel - fine-coarse grain, tan, well graded.
	100							
40.75			SW					Sand with some gravel - fine-coarse grain, tan, well graded.
							VP06	
35.75			SW	60	0.0	5600		Sand - fine-coarse grain, tan-light gray, well graded.
	110							
							VP07	
25.75			SW	60	0.0	4900		Sand - fine-coarse grain, tan, well graded.
	120							
15.75			NR	0				No Recovery.
	130							
							VP09	
5.75			SW	70	0.0	5700		Sand with some gravel - fine-coarse grain, tan-light gray, well graded.
	140							
0.75			SW					Sand with little gravel - fine-coarse grain, tan-light gray, well graded.
							VP10	**End of Soil Core Collection at 148 ft bgs**

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-42I
	Page 4 of 4	WELL NO.: MW-42I-150

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
-4.25	150							
							VP11	**End of Groundwater Profiling at 156 ft bgs**
	160							

Drilling Log

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BORING NO.:	MW-43S
WELL NO.:	MW-43S-73
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Miller Drilling
DRILLING METHOD:	Rotary Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	12/15/2009
DATE FINISHED:	1/6/2010
DRILLER:	J. Johnson
INSPECTOR:	S. Britch, CDM
NORTHING (ft):	219515.3656
EASTING (ft):	1109327.754
GROUND ELEVATION (ft):	143.97

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	8	
Total Depth (ft):	157.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	62.91	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
143.97	0		SP	75	0.0	5000		Sand with some gravel - light tan, poorly graded.
135.97	10		SP	60	0.0	5000		Sand with some gravel - light tan, poorly graded.
125.97	20		SP	60	0.0	5000		Sand with some gravel - light tan, poorly graded.
115.97	30		SW	55	0.0	5000		Sand with some gravel - fine-coarse grain, light brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-43S
	Page 2 of 4	WELL NO.: MW-43S-73

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
105.97			SW	50	0.0	5000		Sand with some gravel - fine-coarse grain, light brown, well graded.
	40							
95.97			SW	80	0.0	5000		Sand with some gravel - fine-coarse grain, light brown, well graded.
	50							
85.97			SW	60	0.0	5000		Sand with some gravel - fine-coarse grain, light brown, well graded.
83.97	60		SP					Sand with few gravel - fine-medium grain, pale yellow-orange, poorly graded.
							VP02	
75.97			SW	50	0.0	5000		Sand with some gravel - fine-coarse grain, light brown, well graded.
	70							
71.97								**End of Soil Core Collection at 72 ft bgs**
							VP03	
	80							
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-43S
	Page 3 of 4	WELL NO.: MW-43S-73

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
							VP07	
	120							
							VP08	
	130							
							VP09	
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-43S
	Page 4 of 4	WELL NO.: MW-43S-73

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
							VP11	**End of Groundwater Profiling at 157 ft bgs**
	160							

Drilling Log

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BORING NO.:	MW-44S
WELL NO.:	MW-44S-75
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Miller Drilling
DRILLING METHOD:	Rotary Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	1/20/2010
DATE FINISHED:	1/26/2010
DRILLER:	J. Johnson
INSPECTOR:	T. Bennett, CDM
NORTHING (ft):	219302.7537
EASTING (ft):	1108970.55
GROUND ELEVATION (ft):	143.09

BOREHOLE DATA	
Diameter (in):	8
Total Depth (ft):	157.00
Disposition of Hole:	Monitoring Well
Depth to Water (ft):	61.81

SAMPLES FOR CHEMICAL ANALYSIS

- Volatile Organic Compounds (SW8260B)
- Total Nickel (SW6010B)
- Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
142.79	0		SP	100	0.0	5000		Sand with trace gravel - medium grain, light brown, poorly graded, overlain by 0.5 feet of Asphalt and Gravel.
134.79	10		SP	100	0.0	5000		Sand with trace gravel - medium grain, light brown, poorly graded.
124.79	20		SP	100	0.0	5000		Sand with trace gravel - medium grain, light brown, poorly graded.
114.79	30		SP	80	0.0	5000		Sand with trace gravel - medium grain, light brown, poorly graded.
106.79								

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-44S
	Page 2 of 4	WELL NO.: MW-44S-75

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
104.79	40		SP	100	0.0	5000		Sand with trace gravel - medium grain, light brown, poorly graded.
94.79	50		SP	100	0.0	5000		Sand with trace gravel - medium grain, light brown, poorly graded.
84.79	60							**End of Soil Core Collection at 58 ft bgs**
	70						VP02	
	80						VP03	
	90						VP04	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-44S
	Page 3 of 4	WELL NO.: MW-44S-75

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
							VP07	
	120							
							VP08	
	130							
							VP09	
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-44S
	Page 4 of 4	WELL NO.: MW-44S-75

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
							VP11	**End of Groundwater Profiling at 157 ft bgs**
	160							

Drilling Log

Page 1 of 3

BORING NO.:	MW-49S
WELL NO.:	MW-49S-110
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Miller Drilling
DRILLING METHOD:	Rotary Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	2/22/2010
DATE FINISHED:	3/2/2010
DRILLER:	J. Johnson
INSPECTOR:	T. Bennett, CDM
NORTHING (ft):	219338.6895
EASTING (ft):	1108812.758
GROUND ELEVATION (ft):	143.91

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 8	
Total Depth (ft): 137.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft): 62.95	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
143.91	0		NR	NS	NS	NS		No Recovery.
135.91	10		SM	90	0.0	5000		Sand with few to some gravel and silt with few to some gravel - tan-brown, well graded.
125.91	20		SM	70	0.0	5000		Sand with few to some gravel and silt with few to some gravel - tan-brown, well graded.
115.91	30		SW	90	0.0	5000		Sand with few to some gravel - fine-medium grain, tan-brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-49S
	Page 2 of 3	WELL NO.: MW-49S-110

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
105.91	40		SP	90	0.0	5000		Sand with few silt and trace gravel - fine-medium with trace corase grain, tan-brown, poorly graded.
95.91	50		SP	100	0.0	5000		Sand - tan, poorly graded.
91.91			SW					Sand with little silt and few gravel - very fine-coarse grain, tan-brown, well graded.
85.91	60							**End of Soil Core Collection at 58 ft bgs**
							VP02	
	70						VP03	
	80						VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-49S
	Page 3 of 3	WELL NO.: MW-49S-110

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
							VP07	
	120							
							VP08	
	130							
							VP09	**End of Groundwater Profiling at 137 ft bgs**
	140							

Drilling Log

BORING NO.:	MW-50I
WELL NO.:	MW-50I-130
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Miller Drilling
DRILLING METHOD:	Rotary Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	2/4/2010
DATE FINISHED:	2/17/2010
DRILLER:	C. Boyd
INSPECTOR:	C. Buerkle, CDM
NORTHING (ft):	219197.5307
EASTING (ft):	1108903.893
GROUND ELEVATION (ft):	141.98

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 8	
Total Depth (ft): 159.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft): 60.75	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
141.64	0		GW	50	0.0	4700		Gravel with some sand - fine-coarse grain, tan-gray, well graded, overlain by 0.4 feet of Asphalt.
133.64			GW	70	0.0	5000		Gravel with some sand and little silt - fine-coarse grain, gray-brown, well graded.
131.64	10		GW					Gravel with some sand - fine-coarse grain, tan, well graded.
123.64			GP	50	0.0	5300		Gravel and sand - fine grain, tan, poorly graded.
	20							
113.64			SP	20	0.0	3900		Sand with some gravel - fine-medium grain, tan, poorly graded.
	30							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-50I
	Page 2 of 4	WELL NO.: MW-50I-130

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
103.64	40		SP	50	0.0	5400		Sand with some gravel - fine-medium grain, tan, poorly graded.
93.64	50		GP	70	0.0	5900		Gravel and sand - fine grain, tan, poorly graded.
83.64	60		GP	100	0.0	5400	VP02	Gravel and sand - fine grain, poorly graded.
73.64	70		GP	80	0.0	4600	VP03	Gravel with some sand and trace silt - fine grain, tan, poorly graded.
63.64	80		GP	40	0.0	4900	VP04	Gravel and sand with trace silt - fine grain, tan, poorly graded.
53.64	90		GP	60	0.0	4400		Gravel and sand with trace silt - fine grain, tan, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-50I
	Page 3 of 4	WELL NO.: MW-50I-130

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
43.64			GP	40	0.0	4700		Gravel and sand with trace silt - fine grain, tan, poorly graded.
	100							
							VP06	
33.64			GP	50	0.0	5300		Gravel and sand - fine grain, tan, poorly graded.
	110							
							VP07	
23.64								**End of Soil Core Collection at 118 ft bgs**
	120							
							VP08	
	130							
							VP09	
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-50I
	Page 4 of 4	WELL NO.: MW-50I-130

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
							VP11	**End of Groundwater Profiling at 157 ft bgs**
	160							

Drilling Log

BORING NO.:	MW-51I
WELL NO.:	MW-51I-140
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Miller Drilling
DRILLING METHOD:	Rotary Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	2/1/2010
DATE FINISHED:	2/8/2010
DRILLER:	G. Pech
INSPECTOR:	P. Connelly, CDM
NORTHING (ft):	219015.3736
EASTING (ft):	1109095.058
GROUND ELEVATION (ft):	140.40

BOREHOLE DATA	
Diameter (in):	8
Total Depth (ft):	204.00
Disposition of Hole:	Monitoring Well
Depth to Water (ft):	59.65

SAMPLES FOR CHEMICAL ANALYSIS

- Volatile Organic Compounds (SW8260B)
- Total Nickel (SW6010B)
- Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
140.45	0		GM	100	0.0	6000		Gravel and sand with some silt - brown
135.45			GM					Gravel and sand with some silt - brown
	10							
129.45			SP					Sand with little gravel - fine-medium grain, orange/brown, poorly graded.
125.45			SW	50	0.0	5000		Sand with trace gravel - fine-coarse grain, orange/brown, well graded.
120.45	20							
115.45			SW	50	0.0	5000		Sand with trace gravel - fine-coarse grain, orange/brown, well graded.
110.45	30							
105.45			SW	50	0.0	5000		Sand with trace gravel - fine-coarse grain, orange/brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-51I
	Page 2 of 4	WELL NO.: MW-51I-140

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
100.45	40							
95.45			SW	100	0.0	5000		Sand with trace gravel - very fine-coarse grain, orange, well graded.
	50							
85.45			SW	50	0.0	5000		Sand and gravel - fine-coarse grain, light tan, well graded.
80.45	60 ⊠							
75.45			SP	100	0.0	5000	VP02	Sand with some gravel - fine-medium grain, gray-dark gray, poorly graded.
	70						VP03	
60.45	80		SP	100	0.0	5000	VP04	Sand - medium grain, gray, poorly graded.
	90						VP05	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-51I
	Page 3 of 4	WELL NO.: MW-51I-140

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
45.45								**End of Soil Core Collection at 95 ft bgs**
	100						VP06	
	110						VP07	
	120						VP08	
	130						VP09	
	140						VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-51I
	Page 4 of 4	WELL NO.: MW-51I-140

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150						VP11	
	160						VP12	
	170						VP13	
	180						VP14	
	190						VP15	
	200						VP16	**End of Groundwater Profiling at 202 ft bgs**

Drilling Log

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BORING NO.:	MW-52D
WELL NO.:	MW-52D-285
CLIENT:	USACE Kansas City District
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	2/16/2010
DRILLING CONTRACTOR:	Miller Drilling
DATE FINISHED:	2/24/2010
DRILLING METHOD:	Rotary Sonic
DRILLER:	G. Pech
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	P. Connelly, CDM
Diameter (in):	8
NORTHING (ft):	219148.6087
Total Depth (ft):	309.00
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109567.239
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 137.39
Depth to Water (ft):	56.62
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
137.00	0		SW	66	0.0	6000		Sand with little gravel - fine-coarse grain, tan-brown, well graded.
132.00								
	10							
122.00			SW	100	0.0	5000		Sand with little gravel - fine-coarse grain, tan-brown, well graded.
	20							
	30							
102.00			SW	100	0.0	5000		Sand with little gravel - fine-coarse grain, orange, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-52D
	Page 2 of 6	WELL NO.: MW-52D-285

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
92.00			SM	100	0.0	5000		Sand and silt with trace gravel - very fine grain, orange-brown, poorly graded.
	50							
82.00			SP	100	0.0	5000		Sand - fine grain, orange-black mottled, poorly graded.
	60							
72.00			SP	100	0.0	5000	VP02	Sand with trace gravel - fine-medium grain, tan, poorly graded.
	70						VP03	
	80						VP04	
52.00			NR	0				No Recovery
	90						VP05	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-52D
	Page 3 of 6	WELL NO.: MW-52D-285

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
42.00								
			SP	50	0.0	5000		Sand with trace gravel - fine-medium grain, tan, poorly graded.
37.00	100						VP06	
			NR	0				No Recovery
	110						VP07	
	120		NR	0			VP08	No Recovery
	130						VP09	
			NR	0				No Recovery
	140						VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-52D
	Page 4 of 6	WELL NO.: MW-52D-285

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150						VP11	
-18.00			NR	0				No Recovery
	160						VP12	
	170		NR	0			VP13	No Recovery
	180						VP14	
	190						VP15	
			NR	0				No Recovery
	200						VP16	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-52D
	Page 5 of 6	WELL NO.: MW-52D-285

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	210		NR	0			VP17	No Recovery
	220						VP18	
			NR	0				No Recovery
	230							
	240		NR	0			VP20	No Recovery
	250						VP21	
			NR	0				No Recovery

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-52D
	Page 6 of 6	WELL NO.: MW-52D-285

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260						VP22	
-128.00			SW	100	0.0	5000		Sand with some gravel - fine-coarse grain, tan, well graded.
-131.00			ML					Silt - light gray-orange mottled
	270						VP23	
	280						VP24	
-148.00			SP	100	0.0	5000		Sand - very fine grain, dark tan, poorly graded.
	290							
-158.00								**End of Soil Core Collection at 295 ft bgs**
	300							
							VP26	**End of Groundwater Profiling at 307 ft bgs**
	310							

Drilling Log

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BORING NO.:	MW-53S
WELL NO.:	MW-53S-80
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Miller Drilling
DRILLING METHOD:	Rotary Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	3/2/2010
DATE FINISHED:	3/9/2010
DRILLER:	G. Pech
INSPECTOR:	P. Connelly, CDM
NORTHING (ft):	219129.6197
EASTING (ft):	1109462.386
GROUND ELEVATION (ft):	137.55

BOREHOLE DATA	
Diameter (in):	8
Total Depth (ft):	119.00
Disposition of Hole:	Monitoring Well
Depth to Water (ft):	56.04

SAMPLES FOR CHEMICAL ANALYSIS
Volatile Organic Compounds (SW8260B)
Total Nickel (SW6010B)
Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
137.14	0		SW	100	0.0	5000		Sand with little gravel - fine-coarse grain, orange/brown, well graded.
	10							
122.14			SW	50	0.0	5000		Sand with little gravel - fine-coarse grain, orange/brown, well graded.
119.14			SW					Sand with little gravel - fine-coarse grain, orange/brown, well graded.
117.14	20							
112.14			SW	50	0.0	5000		Sand with little gravel - fine-coarse grain, orange/brown, well graded.
107.14	30							
102.14			SW	50	0.0	5000		Sand with some gravel - fine-coarse grain, orange/brown, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-53S
	Page 2 of 3	WELL NO.: MW-53S-80

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
97.14	40							
92.14			SP					Sand with trace gravel - fine with trace coarse grain, light tan, poorly graded.
	50							
84.14			SP	100	0.0	5000		Sand - very fine grain, light tan, poorly graded.
	▽							
77.14	60		SP				VP02	Sand - fine with trace coarse grain, light gray, poorly graded.
			SP	100	0.0			Sand - fine with trace coarse grain, light gray, poorly graded.
	70						VP03	
			SP	100	0.0			Sand - fine with trace coarse grain, light gray, poorly graded.
57.14	80						VP04	
								End of Soil Core Collection at 85 ft bgs
	90						VP05	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-53S
	Page 3 of 3	WELL NO.: MW-53S-80

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100						VP06	
	110							
							VP07	**End of Groundwater Profiling at 117 ft bgs**
	120							

Drilling Log

BORING NO.: MW-55S

WELL NO.: MW-55S-95

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 3/9/2010
DRILLING CONTRACTOR: Miller Drilling	**DATE FINISHED:** 4/1/2010
DRILLING METHOD: Rotary Sonic	**DRILLER:** P. Mazurek
BOREHOLE DATA / **SAMPLES FOR CHEMICAL ANALYSIS**	**INSPECTOR:** C. Buerkle, CDM
Diameter (in): 8	**NORTHING (ft):** 219559.7505
Total Depth (ft): 229.00 — Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109452.565
Disposition of Hole: Monitoring Well — Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 136.90
Depth to Water (ft): 55.35 — Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
136.58	0		SW	63	0.0	7500		Sand with some gravel - fine-coarse grain, tan, well graded, overlain by 1 foot of sand with some gravel and some silt and trace clay - fine-coarse grain, dark brown, well graded.
135.58			GW					
128.58	10		GW	70	0.0	7900		Gravel and sand - fine-coarse grain, tan, well graded.
118.58	20		GW	60	0.0	7900		Gravel and sand with little silt - fine-coarse grain, dark brown, well graded.
110.58			GW					Gravel and sand - fine-coarse grain, tan, well graded.
108.58	30		SW	60	0.0	8000		Sand and gravel with trace silt - fine-coarse grain, tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-55S
	Page 2 of 5	WELL NO.: MW-55S-95

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
98.58	40		SW	100	0.0	8100		Sand with some gravel and trace silt - fine-coarse grain, tan, well graded.
88.58	50		SP	100	0.0	8100		Sand with some gravel - fine-medium grain, tan, poorly graded.
78.58	60		SW	100	0.0	7600	VP02	Sand with little gravel - fine-coarse grain, tan, well graded.
	70						VP03	**End of Soil Core Collection at 68 ft bgs**
	80						VP04	
	90							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-55S
	Page 3 of 5	**WELL NO.:** MW-55S-95

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
							VP07	
	120							
							VP08	
	130							
							VP09	
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-55S
	Page 4 of 5	WELL NO.: MW-55S-95

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150						VP11	
	160						VP12	
	170						VP13	
	180						VP14	
	190						VP15	
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-55S
	Page 5 of 5	WELL NO.: MW-55S-95

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP16	
	210							
							VP17	
	220							
							VP18	**End of Groundwater Profiling at 225 ft bgs**
	230							

Drilling Log

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BORING NO.:	MW-58S
WELL NO.:	MW-58-75
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Cascade
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	9/29/2014
DATE FINISHED:	10/2/2014
DRILLER:	L. Hunsberger
INSPECTOR:	J. Ganz, Louis Berger
NORTHING (ft):	219108.27
EASTING (ft):	1108737.26
GROUND ELEVATION (ft):	142.20

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 7	
Total Depth (ft): 111	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft): N/A	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SM	100	0.0	8000		Sand with some silt and little gravel - coarse-fine grain, moderate brown to grayish brown, medium dense, well graded,
			SP	80	60.0	8000		Sand with few silt and little gravel - medium-fine grain, moderate brown , medium dense, poorly graded.
			SP					Sand with some gravel and few silt - coarse-fine grain, moderate brown, loose, poorly graded.
	10		SP	70	0.0	8000		Sand with few silt and little gravel - medium-fine grain, grayish brown, medium dense, poorly graded.
			SP	60	0.0	5000		Sand with few silt and little gravel - medium-fine grain, grayish brown to moderate brown, loose, poorly graded.
			SP					Sand with few silt and gravel - medium-fine grain, moderate brown, medium dense, poorly graded.
	20		SP	100	1.0	5000		Sand with few silt and little gravel - coarse-fine grain, moderate brown, loose, poorly graded.
			SP	100	0.0	5000		Sand with some gravel and few silt - coarse-fine grain, moderate brown, loose, poorly graded.
	30		SP	100	0.0	5000		Sand with few silt and little gravel - coarse-fine grain, light brown, loose, poorly graded.
			SP	100	0.0	5000		Sand with little gravel - coarse-fine grain, light brown to moderate brown, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-58S
	Page 2 of 3	WELL NO.: MW-58-75

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SP	100	0.0	5000		Sand - medium-fine grain, light brown, loose, poorly graded.
			SP	100	0.0	5000		Sand with few silt - medium-fine grain, light brown to pale yellowish brown, loose, poorly graded, overlain by 1 foot of Clay with mostly silt and few sand - medium-fine grain, dark yellowish orange, very stiff, poorly graded.
	50		SP	100	0.0	5000		Sand with little silt - medium-fine grain, light brown to pale yellowish brown, loose, poorly graded, overlain by 0.5 foot of Silt with mostly clay and few sand - pale yellowish brown, medium stiff.
			SP					Sand - medium grain, dark yellowish orange, loose, poorly graded.
			SP					Sand - medium grain, very pale orange, loose, poorly graded.
			ML	100	0.0	5000		Silt with mostly clay and some sand - moderate brown, very stiff, poorly graded.
			SP					Sand - medium-fine grain, pale yellowish brown, loose, poorly graded.
			SM					Sand with some silt and clay - medium-fine grain, pale yellowish brown, loose, poorly graded.
	60		SP	100	0.0	6000		Sand with few silt - medium-fine grain, pale yellowish brown, loose, poorly graded.
			SP	100	0.0	6000		Sand - medium grain, pale yellowish brown, loose, poorly graded.
	70		SP	100	0.0	6000	VP03	Sand - medium grain, pale yellowish brown, loose, poorly graded.
			SP	100	0.0	6000		Sand - medium-fine grain, pale yellowish brown, loose, poorly graded.
	80			100	0.0	6000	VP04	
	90			20	0.0	6000	VP05	
			NR					No Recovery

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-58S
	Page 3 of 3	WELL NO.: MW-58-75

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100		NR			--	VP06	No Recovery
								End of Soil Core Collection at 105 ft bgs
	110						VP07	**End of Groundwater Profiling at 111 ft bgs**

Drilling Log

BORING NO.: MW-59S

WELL NO.: MW-59-75

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 11/4/2014
DRILLING CONTRACTOR: Cascade	**DATE FINISHED:** 11/5/2014
DRILLING METHOD: Sonic	**DRILLER:** D. Roberts
BOREHOLE DATA	**INSPECTOR:** T. Dillon, E&E, Inc.
Diameter (in): 7	**NORTHING (ft):** 218980.75
Total Depth (ft): 105	**EASTING (ft):** 1108928.38
Disposition of Hole: Monitoring Well	**GROUND ELEVATION (ft):** 141.05
Depth to Water (ft): N/A	

SAMPLES FOR CHEMICAL ANALYSIS

Volatile Organic Compounds (SW8260B)

Total Nickel (SW6010B)

Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	100	0.0	4000		Sand with some gravel - fine-coarse grain, dark yellowish orange to moderate yellowish brown, loose, well graded, overlain by 0.5 feet of Asphalt.
	10		SW	100	10.0	4000		Sand with some gravel - fine-coarse grain, moderate yellowish brown to dark yellowish orange, loose, well graded.
	20		ML	100	55.0	4500		Silt with some gravel and little sand - dusky yellowish brown to brownish black, soft, overlain by 1.5 feet of Sand with some gravel - medium-coarse grain, moderate yellowish brown , loose, well graded.
	30		SP					Sand with some gravel - medium-coarse grain, pale yellowish brown to dark yellowish orange, loose, poorly graded.
			SP	70	0.0	4000		Sand with some gravel - medium-coarse grain, dark yellowish orange , loose, poorly graded.
								Sand with little to some gravel - medium-coarse grain, moderate yellowish brown,

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-59S
	Page 2 of 3	WELL NO.: MW-59-75

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					loose, poorly graded.
	40							
			SP	100	0.0	4000		Sand with some gravel - fine-coarse grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
			ML					Silt with little sand and trace clay - dark yellowish orange, medium stiff.
	50							
			SP					Sand with some gravel, little silt and trace clay - medium grain, dark yellowish orange, loose to medium dense, poorly graded.
			SP	100	250.0	5000		Sand with little gravel and little silt - fine-medium grain, dark yellowish orange, loose to medium dense, poorly graded.
			CL					Clay with little to some sand - dark yellowish orange, medium stiff to soft.
	60		ML					Silt with little sand - dark yellowish orange, medium stiff.
			SP					Sand with few gravel - medium-fine grain, dark yellowish orange, loose, poorly graded.
			SW	100	0.0	4000		Sand with some to little gravel - fine-coarse grain, moderate reddish brown to dark yellowish orange, loose, well graded.
							VP02	
	70							
							VP03	
	80		SP					Sand - medium-fine grain, dark yellowish orange to pale yellowish brown, loose, poorly graded.
			SP	100	0.0	4000	VP04	Sand - medium-fine grain, dark yellowish orange to pale yellowish brown, loose, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-59S
	Page 3 of 3	WELL NO.: MW-59-75

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100		SW					Sand with some gravel - fine-coarse grain, moderate yellowish brown, loose, well graded.
			SP					Sand - fine grain, moderate yellowish brown to pale yellowish brown, medium dense to loose, poorly graded.
							VP06	**End of Soil Core Collection and Groundwater Profiling at 105 ft bgs**

Drilling Log

BORING NO.:	RI-P-35S
WELL NO.:	N/A
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	1/28/2009
DATE FINISHED:	1/29/2009
DRILLER:	G. Sealey
INSPECTOR:	Marcy Werth, E&E, Inc.
NORTHING (ft):	219440.7361
EASTING (ft):	1109475.85
GROUND ELEVATION (ft):	N/A

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 6	
Total Depth (ft): 110.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Portland Cement	Total Nickel (SW6010B)
Depth to Water (ft): 54.0	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	100	0.0	6500		Sand with some gravel - coarse grain, red brown, well graded.
			SW	100	0.0	6500		Sand with some gravel - medium-coarse grain, redbrown, well graded.
			SW					Sand with some gravel - medium-coarse grain, redbrown, well graded.
	10							
			SM	100	0.0	6500		Sand with some silt and some gravel - fine grain, brown, well graded.
	20							
			SW	80	0.0	6500		Sand with some gravel - coarse grain, brown, well graded.
	30							
			SW					Sand with some gravel - coarse grain, redbrown, well graded.
			SW	100	0.0	6500		Sand with some gravel - coarse grain, redbrown, well graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-35S
	Page 2 of 3	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SM					Sand with some silt and little gravel - fine grain, redbrown, well graded.
			CL					Clay with some silt - fine grain, redbrown
			CL	100	0.0	6500		Clay with some silt - fine grain, dark brown-redbrown
			SM					Sand with some silt and little gravel - redbrown-dark brown, well graded.
	50		SW					Sand with little gravel and trace silt/clay - medium grain, well graded.
			SP					Sand with few gravel - medium grain, redbrown-brown, poorly graded.
			SP	100	0.0	6000		Sand with few gravel - medium grain, redbrown-brown, poorly graded.
	60							
							VP02	
	70							
			SP	100	0.0	6000	VP03	Sand with trace gravel - medium grain, light brown, poorly graded.
	80							
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-35S
	Page 3 of 3	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0.0	6000	VP05	Sand - medium grain, brown-redbrown, poorly graded.
	100		SP				VP06	Sand - medium grain, redbrown-light brown, poorly graded.
	110							**End of Soil Core Collection and Groundwater Profiling at 110 ft bgs**

Drilling Log

Page 1 of 3

BORING NO.:	RI-P-36S
WELL NO.:	N/A
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	1/28/2009
DATE FINISHED:	1/28/2009
DRILLER:	Mike Bond
INSPECTOR:	Sarah Craig, E&E, Inc.
NORTHING (ft):	219451.7789
EASTING (ft):	1109605.759
GROUND ELEVATION (ft):	N/A

BOREHOLE DATA

Diameter (in):	6
Total Depth (ft):	110.00
Disposition of Hole:	Portland Cement
Depth to Water (ft):	54.0

SAMPLES FOR CHEMICAL ANALYSIS

Volatile Organic Compounds (SW8260B)
Total Nickel (SW6010B)
Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	100	0.0	6500		Sand with little gravel and trace silt/clay - red-tan, well graded.
			SW	90	0.0	6500		Sand with trace gravel and trace silt/clay - medium grain, red-tan, well graded.
	10							
								Sand with few gravel and trace silt/clay - medium grain, red-tan, well graded.
			SW	90	0.0	6500		Sand with few gravel and trace silt/clay - medium grain, red-tan, well graded.
	20							
			SW	80	0.0			Sand with few gravel and trace silt/clay - medium grain, red-tan, well graded.
	30							
			SW	80	0.0			Sand with few gravel and trace silt/clay - medium grain, red-tan, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-36S
	Page 2 of 3	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SW	90	0.0	6500		Sand with few gravel and trace silt/clay - medium grain, red-tan, well graded.
	50		SW	100	0.0	6700		Sand with few gravel and trace silt/clay - medium grain, red-tan, well graded.
	60		SW	70	0.0	6500	VP02	Sand with trace silt/clay - fine-medium grain, tan-gray, well graded.
	70		SW	80	0.0	6600	VP03	Sand with trace silt/clay - fine-medium grain, tan-gray, well graded.
	80		SW	80	0.0	6500	VP04	Sand with trace silt/clay - fine-medium grain, tan-gray, well graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-36S
	Page 3 of 3	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100		SW	80	0.0	6400	VP05	Sand with trace silt/clay - fine-medium grain, tan-gray, well graded.
	110						VP06	**End of Soil Core Collection and Groundwater Profiling at 107 ft bgs**

Drilling Log

BORING NO.: RI-P-37S

WELL NO.: N/A

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 1/29/2009
DRILLING CONTRACTOR: Boart Longyear	**DATE FINISHED:** 1/30/2009
DRILLING METHOD: Sonic	**DRILLER:** G. Sealey
BOREHOLE DATA	**INSPECTOR:** Marcy Werth, E&E, Inc.
Diameter (in): 6	**NORTHING (ft):** 219357.4776
Total Depth (ft): 116.00	**EASTING (ft):** 1109564.865
Disposition of Hole: Portland Cement	**GROUND ELEVATION (ft):** N/A
Depth to Water (ft): 54.0	

SAMPLES FOR CHEMICAL ANALYSIS

Volatile Organic Compounds (SW8260B)

Total Nickel (SW6010B)

Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	100	0.0	6000		Sand with some gravel - coarse grain, dark brown-brown, well graded.
			SW	100	0.0	6000		Sand with some gravel - coarse grain, dark brown-brown, well graded.
			SW					Sand with some gravel - coarse grain, redbrown, well graded.
	10							
			SW	100	0.0	6000		Sand with some gravel - fine-medium grain, brown-redbrown, well graded.
	20							
			SW	100	0.0	6000		Sand with some gravel - medium-coarse grain, dark brown-brown, well graded.
	30							
			SW					Sand with some gravel - medium-coarse grain, brown-dark brown, well graded.
			SW	100	0.0	6000		Sand with some gravel - medium-coarse grain, brown-dark brown, well graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-37S
	Page 2 of 3	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			SM					Sand with some silt and little gravel - fine grain, redbrown-brown, poorly graded.
			SM	100	0.0	5500		Sand with some silt and little gravel - fine grain, redbrown-brown, poorly graded.
	50		SW					Sand with some gravel - medium-coarse grain, redbrown-brown, well graded.
			SP	100	0.0	6000		Sand with trace gravel - medium grain, light brown, poorly graded.
	60						VP01	
			CL					Clay with some silt - light brown
			SP	100	0.0	6000	VP02	Sand - medium grain, light brown-brown, poorly graded.
	70							
			SP	100	0.0	6000	VP03	Sand with few gravel - coarse grain, light brown, poorly graded.
	80		SP					Sand - medium grain, light brown, poorly graded.
			SP	100	0.0	6000	VP04	Sand - medium grain, light brown, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-37S
	Page 3 of 3	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100		SP	100	0.0	6000	VP05	Sand - medium-coarse grain, light brown, poorly graded.
	110		SW				VP06	Sand - medium-coarse grain, light brown, well graded.
	120							**End of Soil Core Collection and Groundwater Profiling at 116 ft bgs**

Drilling Log

BORING NO.: RI-P-38S

WELL NO.: N/A

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 1/29/2009
DRILLING CONTRACTOR: Boart Longyear	**DATE FINISHED:** 1/29/2009
DRILLING METHOD: Sonic	**DRILLER:** Mike Bond
BOREHOLE DATA	**INSPECTOR:** Sarah Craig, E&E, Inc.
Diameter (in): 6	**NORTHING (ft):** 219360.9874
Total Depth (ft): 137.00	**EASTING (ft):** 1109687.408
Disposition of Hole: Portland Cement	**GROUND ELEVATION (ft):** N/A
Depth to Water (ft): 54.0	

SAMPLES FOR CHEMICAL ANALYSIS

Volatile Organic Compounds (SW8260B)

Total Nickel (SW6010B)

Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	80	0.0	5500		Sand with some gravel and little silt - brown, well graded.
			SW	90	0.0	5500		Sand with some gravel and little silt - brown, well graded.
	10							
			SW	70	0.0	5700		Sand with little silt and trace gravel - fine-coarse grain, brown, well graded.
	20							
			SW	70	0.0	5700		Sand with some gravel and few silt - fine-coarse grain, light brown-dark brown, well graded.
	30							
			SW	80	0.0	5700		Sand with some gravel - fine-coarse grain, gray/brown/orange, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-38S
	Page 2 of 3	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			CL	70	0.0	5600		Clay - brown
	50		SP					Sand with some gravel - fine-medium grain, light brown-brown, poorly graded.
			SW	65	0.0	5500	VP01	Sand with little gravel - fine-coarse grain, light brown, well graded.
	60							
			SP	75	0.0	5700	VP02	Sand with little gravel - medium grain, dark brown, poorly graded.
	70							
			SP	80	0.0	5500	VP03	Sand with trace gravel - medium grain, dark brown, poorly graded.
	80							
			SW	80	0.0	5500	VP04	Sand with little gravel - fine-coarse grain, light brown, well graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-38S
	Page 3 of 3	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100		SW	70	0.0	5500	VP05	
			SP	80	0.0	5500	VP06	Sand with few gravel - medium grain, poorly graded.
	110		SW	70	0.0	5600	VP07	Sand with some gravel and trace silt - fine-coarse grain, well graded.
	120		SP					Sand with trace gravel and trace silt - medium grain, poorly graded.
			SP	70	0.0	5600	VP08	Sand with trace gravel and trace silt - medium grain, poorly graded.
	130						VP09	**End of Soil Core Collection and Groundwater Profiling at 137 ft bgs**
	140							

Drilling Log

Page 1 of 3

BORING NO.: RI-P-39S

WELL NO.: MW-33S

CLIENT: USACE Kansas City District

PROJECT: Sylvania Corning FUSRAP

DRILLING CONTRACTOR: Boart Longyear

DRILLING METHOD: Sonic

PROJECT NO: 2001764.012.05

DATE STARTED: 12/1/2008

DATE FINISHED: 12/22/2008

DRILLER: M. Mclean

INSPECTOR: S. Craig, E&E, Inc.

NORTHING (ft): 219259.57

EASTING (ft): 1109471.71

GROUND ELEVATION (ft): 136.05

BOREHOLE DATA

Diameter (in): 6

Total Depth (ft): 126.00

Disposition of Hole: Monitoring Well

Depth to Water (ft): N/A

SAMPLES FOR CHEMICAL ANALYSIS

Volatile Organic Compounds (SW8260B)

Total Nickel (SW6010B)

Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	75	0.0	4800		Sand with some gravel and little silt - brown, well graded.
			SW	75	0.0	4800		Sand with some gravel and little silt - brown, well graded.
	10							
			SW	80	0.0	4800		Sand with little silt and trace gravel - fine-coarse grain, brown, well graded.
	20							
			SW	80	0.0	4800		Sand with some gravel and few silt - fine-coarse grain, light brown-dark brown, well graded.
	30							
			SW	90	0.0	4800		Sand with some gravel - fine-coarse grain, gray/brown/orange, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-39S
	Page 2 of 3	WELL NO.: MW-33S

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			CL	85	0.0	4200		Clay - brown
	50		SP					Sand with some gravel - fine-medium grain, light brown-brown, poorly graded.
			SW	60	0.0	6300		Sand with little gravel - fine-coarse grain, light brown, well graded.
	60						VP02	
			SP	80	0.0	4800		Sand with little gravel - medium grain, dark brown, poorly graded.
	70							
			SP	80	0.0	4800	VP03	Sand with trace gravel - medium grain, dark brown, poorly graded.
	80							
			SW	75	0.0	5000	VP04	Sand with little gravel - fine-coarse grain, light brown, well graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-39S
	Page 3 of 3	WELL NO.: MW-33S

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100						VP05	
			SP	75	0.0	5000	VP06	Sand with few gravel - medium grain, poorly graded.
	110							
			SW	75	0.0	5000	VP07	Sand with some gravel and trace silt - fine-coarse grain, well graded.
	120		SP					Sand with trace gravel and trace silt - medium grain, poorly graded.
							VP08	**End of Soil Core Collection and Groundwater Profiling at 126 ft bgs**
	130							

Drilling Log

BORING NO.: RI-P-40I

WELL NO.: N/A

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 1/15/2010
DRILLING CONTRACTOR: Miller Drilling	**DATE FINISHED:** 1/27/2010
DRILLING METHOD: Rotary Sonic	**DRILLER:** C. Boyd
BOREHOLE DATA	**INSPECTOR:** C. Buerkle, CDM
Diameter (in): 6	**NORTHING (ft):** 219701.1551
Total Depth (ft): 95.5	**EASTING (ft):** 1109335.623
Disposition of Hole: Portland Cement	**GROUND ELEVATION (ft):** N/A
Depth to Water (ft): N/A	

SAMPLES FOR CHEMICAL ANALYSIS

- Volatile Organic Compounds (SW8260B)
- Total Nickel (SW6010B)
- Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SP	63	0.0			Sand with little gravel and little silt - fine-medium grain, brown, poorly graded.
			SP					Sand - fine-medium grain, tan, poorly graded.
			SP	50	1.6	5000		Sand with trace gravel - fine-medium grain, tan, poorly graded.
	10							
			SP	60	0.0	5000		Sand with some gravel - fine-medium grain, tan-brown, poorly graded.
	20							
			GP	30	8.0	5000		Gravel and sand with little silt - fine grain, tan-brown, poorly graded.
	30							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-40I
	Page 2 of 4	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		GP	50	1.7	5000		Gravel and sand with little silt - fine grain, tan, poorly graded.
	50		SP	60	0.0	5000		Sand - fine-medium grain, tan, poorly graded.
	60		SP	50	0.0	5000	VP02	Sand - fine-medium grain, tan, poorly graded.
	70						VP03	**End of Soil Core Collection at 68 ft bgs**
	80						VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-40I
	Page 3 of 4	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
							VP07	
	120							
							VP08	
	130							
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-40I
	Page 4 of 4	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
							VP11	**End of Groundwater Profiling at 157 ft bgs**
	160							

Drilling Log

BORING NO.:	RI-P-45DD
WELL NO.:	N/A
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Miller Drilling
DRILLING METHOD:	Rotary Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	3/4/2010
DATE FINISHED:	3/19/2010
DRILLER:	G. Pech
INSPECTOR:	P. Connelly, CDM
NORTHING (ft):	219559.76
EASTING (ft):	1109059.89
GROUND ELEVATION (ft):	N/A

BOREHOLE DATA	
Diameter (in):	6
Total Depth (ft):	345.00
Disposition of Hole:	Monitoring Well
Depth to Water (ft):	N/A

SAMPLES FOR CHEMICAL ANALYSIS
Volatile Organic Compounds (SW8260B)
Total Nickel (SW6010B)
Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	100	0.0	5000		Sand with some gravel - medium grain, orange/brown, well graded.
	10							
			SW	100	0.0	5000		Sand with some gravel - fine-coarse grain, light orange-dark orange, well graded.
	20							
	30							
			SW	100	0.0	5000		Sand with some gravel - fine-coarse grain, light orange-dark orange, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-45DD
	Page 2 of 8	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			SP	100	0.0	5000		Sand with trace gravel - fine grain, orange , poorly graded.
	50							
			SW					Sand and gravel - orange, well graded.
			CL					Clay - light brown
			CL	100	0.0	5000		Clay - light brown
			SP					Sand - fine grain, orange, poorly graded.
	60		SP	100	0.0	5000		Sand - fine grain, orange, poorly graded.
			SP	100	0.0	5000		Sand - fine grain, orange, poorly graded.
			SP				VP02	Sand - fine grain, orange, poorly graded.
	70							
			SW				VP03	Sand - medium-coarse grain, gray/brown, well graded.
			SP	100	0.0	5000		Sand - fine-medium grain, gray/brown, poorly graded.
	80						VP04	
	90						VP05	

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-45DD
	Page 3 of 8	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			NA					No soil core collected from 95 to 245 ft bgs
	100						VP06	
	110						VP07	
	120							
	130						VP09	
	140						VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-45DD
	Page 4 of 8	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
	160						VP12	
	170						VP13	
	180						VP14	
	190						VP15	
	200						VP16	

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-45DD
	Page 5 of 8	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	210						VP17	
	220						VP18	
	230						VP19	
	240						VP20	
	250		SP	100	0.0	5000	VP21	Sand with little gravel - medium-coarse grain, gray/tan, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-45DD
	Page 6 of 8	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260						VP22	
			SP	100	0.0	5000		Sand with trace gravel - fine grain, gray/tan, poorly graded.
	270							
	280							
			NR	0	--	--		No Recovery.
	290						VP25	
	300						VP26	
			SP	100	0.0	5000		Sand - very fine grain, gray, poorly graded.
	310		CL					Clay - dark gray

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-45DD
	Page 7 of 8	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP27	
	320							
			CL	100	0.0	5000		Clay - gray
			SP					Sand - fine grain, gray, poorly graded.
	330						VP29	
	340						VP30	
								End of Soil Core Collection at 345 ft bgs
	350						VP31	
	360						VP32	

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-45DD
	Page 8 of 8	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	370						VP33	
	380						VP34	
	390						VP35	**End of Groundwater Profiling at 392 ft bgs**

Drilling Log

BORING NO.: RI-P-47I	
WELL NO.: N/A	
CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 2/17/2010
DRILLING CONTRACTOR: Miller Drilling	**DATE FINISHED:** 2/21/2010
DRILLING METHOD: Rotary Sonic	**DRILLER:** C. Boyd
BOREHOLE DATA	**INSPECTOR:** C. Buerkle, CDM
Diameter (in): 6	**NORTHING (ft):** 219280.8964
Total Depth (ft): 137.00	**EASTING (ft):** 1109043.741
Disposition of Hole: Portland Cement	**GROUND ELEVATION (ft):** N/A
Depth to Water (ft): N/A	

SAMPLES FOR CHEMICAL ANALYSIS

- Volatile Organic Compounds (SW8260B)
- Total Nickel (SW6010B)
- Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SM	63	0.0	5000		Sand with some silt and some gravel - brown
			SM	80	0.0	5000		Sand with some silt and some gravel - brown
	10		SW					Sand with little silt and little to some gravel - tan-brown, well graded.
			GW	70	0.0	5000		Gravel and sand - fine-coarse grain, tan, well graded.
	20							
			SW	50	0.0	4500		Sand with some gravel - fine-coarse grain, brown, well graded.
	30							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-47I
	Page 2 of 3	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SW	60	0.0	4200		Sand with some gravel - fine-coarse grain, tan, well graded.
	50		SP	80	0.0	5200		Sand with trace silt - fine-medium grain, tan, poorly graded.
	60		SP	70	0.0	4900	VP02	Sand with trace gravel and trace silt - fine-medium grain, tan, poorly graded.
	70			NS	NS	NS	VP03	**End of Soil Core Collection at 68 ft bgs**
	80						VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-47I
	Page 3 of 3	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100						VP05	
	110						VP06	
	120						VP07	
	130						VP08	
	140						VP09	**End of Groundwater Profiling at 137 ft bgs**

Drilling Log

BORING NO.: RI-P-48I	**WELL NO.:** N/A
CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 2/17/2010
DRILLING CONTRACTOR: Miller Drilling	**DATE FINISHED:** 2/21/2010
DRILLING METHOD: Rotary Sonic	**DRILLER:** C. Boyd
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**	**INSPECTOR:** C. Buerkle, CDM
Diameter (in): 6		**NORTHING (ft):** 219266.9804
Total Depth (ft): 147.00	Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109142.296
Disposition of Hole: Portland Cement	Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** N/A
Depth to Water (ft): N/A	Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		GW	50	0.0	6300		Gravel and sand with trace silt - fine-coarse grain, light brown, well graded.
	10		GW	70	0.0	5400		Gravel and sand with trace silt - fine-coarse grain, light brown, well graded.
			GP					Gravel and sand - fine grain, tan, poorly graded.
	20		GW	60	0.0	5300		Gravel and sand - fine-coarse grain, tan, well graded.
	30		SW	50	0.0	4800		Sand and gravel - fine-coarse grain, tan, well graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-48I
	Page 2 of 3	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SW	50	0.0	5300		Gravel - fine-coarse grain, tan, well graded.
	50		SP	80	0.0	5700		Sand - fine-medium grain, tan, poorly graded.
	60		SP	50	0.0	5300	VP02	Sand - fine-medium grain, tan, poorly graded.
	70						VP03	**End of Soil Core Collection at 68 ft bgs**
	80							
	90						VP04	

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-48I
	Page 3 of 3	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
	120							
							VP08	
	130							
							VP10	
	140							
							VP11	**End of Groundwater Profiling at 147 ft bgs**

Drilling Log

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BORING NO.: RI-P-54I

WELL NO.: N/A

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 1/28/2010
DRILLING CONTRACTOR: Miller Drilling	**DATE FINISHED:** 2/3/2010
DRILLING METHOD: Rotary Sonic	**DRILLER:** C. Boyd
BOREHOLE DATA / **SAMPLES FOR CHEMICAL ANALYSIS**	**INSPECTOR:** C. Buerkle, CDM
Diameter (in): 6	**NORTHING (ft):** 219189.8611
Total Depth (ft): 157.00 — Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1108814.766
Disposition of Hole: Portland Cement — Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** N/A
Depth to Water (ft): N/A — Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		GW	63	0.0	5100		Gravel and sand with little silt - fine-coarse grain, tan-dark gray, well graded, overlain by 0.5 feet of Asphalt.
			GW					Gravel and sand with little silt - fine-coarse grain, red/tan, well graded.
			GW	70	0.0	5000		Gravel and sand - fine-coarse grain, tan, well graded.
	10							
			GP	20	0.0	4300		Gravel and sand with little silt - fine grain, tan, poorly graded.
	20							
			SW	50	0.0	5200		Sand with some gravel and some silt - fine-coarse grain, orange/tan-brown, well graded.
	30							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-54I
	Page 2 of 4	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		GW	60	0.0	4800		Gravel and sand with little silt - fine-coarse grain, tan, well graded.
	50		SP	60	0.0	5000		Sand with little silt - fine-medium grain, tan, poorly graded.
	60		SP	40	0.0	4800		Sand with trace silt - fine-medium grain, poorly graded.
	70							**End of Soil Core Collection at 68 ft bgs**
							VP03	
	80							
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-54I
	Page 3 of 4	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
							VP07	
	120							
							VP08	
	130							
							VP09	
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-54I
	Page 4 of 4	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150						VP11	**End of Groundwater Profiling at 157 ft bgs**

Drilling Log

BORING NO.: RI-P-56I

WELL NO.: N/A

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 3/19/2010
DRILLING CONTRACTOR: Miller Drilling	**DATE FINISHED:** 3/24/2010
DRILLING METHOD: Rotary Sonic	**DRILLER:** P. Mazurek
BOREHOLE DATA / **SAMPLES FOR CHEMICAL ANALYSIS**	**INSPECTOR:** C. Buerkle, CDM
Diameter (in): 6	**NORTHING (ft):** 219412.5942
Total Depth (ft): 247.00 — Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1109436.542
Disposition of Hole: Portland Cement — Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** N/A
Depth to Water (ft): N/A — Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		GW	75	0.0	8600		Gravel and sand with some silt - fine-coarse grain, dark brown, well graded.
			GW					Gravel and sand - fine-coarse grain, tan, well graded.
			GW	60	0.0	8100		Gravel and sand - fine-coarse grain, tan, well graded.
	10							
			GW	50	0.0	8500		Gravel and sand - fine-coarse grain, tan, well graded.
	20							
			SW	50	0.0	7900		Sand with some gravel - fine-coarse grain, tan, well graded.
	30							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-56I
	Page 2 of 5	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SP	70	0.0	8000		Sand with gravel - fine-medium grain, tan, poorly graded.
	50		SP	80	0.0	8100		Sand - fine-medium grain, tan, poorly graded.
	60						VP02	**End of Soil Core Collection at 58 ft bgs**
	70						VP03	
	80						VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-56I
	Page 3 of 5	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP05	
	100							
							VP06	
	110							
							VP07	
	120							
							VP08	
	130							
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: RI-P-56I
	Page 4 of 5	WELL NO.: N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
							VP11	
	160							
							VP12	
	170							
							VP13	
	180							
							VP14	
	190							
							VP15	
	200							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-56I
	Page 5 of 5	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	210						VP16	
	220						VP17	
	230						VP18	
	240						VP19	
	250						VP20	**End of Groundwater Profiling at 247 ft bgs**

Drilling Log

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BORING NO.:	RI-P-57
WELL NO.:	N/A
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Boart Longyear
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	10/5/2011
DATE FINISHED:	10/7/2011
DRILLER:	R. Kotulan
INSPECTOR:	V. Gatallin, Louis Berger
NORTHING (ft):	219312.69
EASTING (ft):	1108770.69
GROUND ELEVATION (ft):	144

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	8	
Total Depth (ft):	196.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Portland Cement	Total Nickel (SW6010B)
Depth to Water (ft):	62	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		ASPHAL	100	<1	120		Asphalt
			SW	100	<1			Sand, some fine to coarse gravel - fine to coarse grain, light yellow brown, loose, well graded.
			SW	100	<1	100		Sand, some fine to coarse gravel - fine to coarse grain, light yellow brown, loose, well graded.
	10							
			SW	90	<1	140		Sand, some fine to coarse gravel - fine to coarse grain, light yellow brown, loose, well graded.
	20							
			SW	90	<1	80		Sand, some fine to coarse gravel - fine to coarse grain, light yellow brown, loose, well graded.
	30				1.6			
					<1			
			SW	60	<1	100		Sand, some fine to coarse gravel - fine to coarse grain, light yellow brown, loose, well graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-57
	Page 2 of 4	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			SP					Sand, trace fine gravel - fine to medium grain, light yellow brown, loose, poorly graded.
			SP	90	<1 5.0 <1	120		Sand, trace fine gravel - fine to medium grain, light yellow brown, loose, poorly graded.
	50							
			SP					Sand - fine to medium grain, light yellow brown, loose, poorly graded.
			SP	70	<1	80		Sand - fine to medium grain, light yellow brown, loose, poorly graded.
	60							
	∇						VP02	
	70							
			SP	100	<1	100	VP03	Sand - fine to medium grain, light yellow brown, loose, poorly graded.
	80							
			SW					Sand - fine to medium grain, light yellow brown, loose, well graded.
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-57
	Page 3 of 4	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			NR	0			VP05	No Recovery
	100							
							VP06	
	110							
			SW	30	<1	100	VP07	Sand, little to some fine gravel - medium grain, light yellow brown to lighty gray, loose, well graded.
	120							
							VP08	
	130							
			NR	0			VP09	No Recovery
	140							
			SP	70	<1	80	VP10	Sand, little to some fine gravel - medium grain, light yellow brown, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** RI-P-57
	Page 4 of 4	**WELL NO.:** N/A

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
			SW	60	<1	120	VP11	Sand, little to some fine gravel - medium grain, light yellow brown, loose, well graded.
	160							
			NR	0			VP12	No Recovery
	170							
			NR	0			VP13	No Recovery
	180							
			NR	0			VP14	No Recovery
	190							
							VP15	**End of Soil Core Collection and Groundwater Profiling at 196 ft bgs**
	200							

Drilling Log

BORING NO.:	MW-215 Deep
WELL NO.:	MW-215-395
CLIENT:	USACE Kansas City District
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	9/3/2014
DRILLING CONTRACTOR:	Cascade
DATE FINISHED:	9/24/2014
DRILLING METHOD:	Sonic
DRILLER:	D. Roberts
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	T. Dillon, E&E, Inc.
Diameter (in):	7
NORTHING (ft):	208319.64
Total Depth (ft):	626
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 110955.05
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 100.03
Depth to Water (ft):	N/A
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SP	100	0.0			Sand with few gravel - fine grain, light brown to brown, loose, poorly graded.
			SP	100	0.0			Sand with little gravel - medium grain, light brown to orange, loose, poorly graded.
	10		SP	100	0.0			Sand with some gravel - coarse-medium grain, light brown to orange, poorly graded.
	20		SP	100	0.0			Sand with some gravel - coarse-medium grain, light brown to orange white, loose, poorly graded.
	30		SP	95	2.5			Sand with some gravel - medium-coarse grain, light brownish yellow to dark brown, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-215 Deep
	Page 2 of 12	**WELL NO.:** MW-215-395

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			SW	50	0.0			Sand with some gravel - medium-coarse grain, light brown to yellow, loose, well graded.
	50							
			SP	100	0.0			Sand with little gravel - medium-coarse grain, light brown to yellow, loose, poorly graded.
	60							
			CL					Clay with some sand and trace gravel - light brown, stiff, poorly graded.
			SP	100	3.0			Sand - medium grain, light brown, loose, poorly graded.
	70							
			SP					Sand - medium grain, light brown to gray/black, poorly graded.
			SP	100	0.0			Sand - medium grain, light brown to orange, poorly graded.
	80							
			CL					Clay with few sand - light brown to dark brown to white, medium soft to soft, poorly graded.
			SP	100	0.0			Sand with few clay - medium grain, light brown/orange to gray-white, loose, poorly graded.
	90							

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0.0			Sand - medium grain, light brown to white, loose, poorly graded.
	100							
			SP	100	0.0			Sand - medium grain, light brown to orange, loose, poorly graded.
			SP					Sand - medium grain, light brown to white, loose, poorly graded.
	110							
			SP	70	0.0			Sand - medium grain, light brown, loose, poorly graded.
	120							
			SP	100	0.0			Sand - medium grain, light brown to white, loose to medium dense, poorly graded.
			ML					Silt with some sand and few clay - yellowish orange, soft to medium soft, poorly graded.
	130							
			ML	100	0.0			Silt with some sand - light brown to gray, soft to medium soft, poorly graded.
	140							
			SP					Sand with trace clay - medium-fine grain, light brown to orange, poorly graded.
			SP	100	0.0			Sand - medium grain, yellowish orange, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-215 Deep
	Page 4 of 12	**WELL NO.:** MW-215-395

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150		SP					Sand with some clay and little gravel - medium grain, light brown to reddish brown, loose, poorly graded.
			SP					Sand - medium grain, light brown to orange, loose, poorly graded.
			SP	100	0.0			Sand with few gravel - medium grain, light brown to orange, loose, poorly graded.
			CL					Clay with few sand - black to dark gray, very stiff to stiff, poorly graded.
	160							
			SP					Sand - medium grain, light brown to orange, loose, poorly graded.
			CL					Clay with trace sand - black to dark gray, stiff.
			SW	80	0.0			Sand with few clay and trace silt - medium-fine grain, light brown to white, loose, well graded.
	170							
			SW	100	0.0			Sand with few silt - medium-fine grain, light brown to orange/white, loose, well graded.
	180		SW					Sand with trace clay - medium-fine grain, dark gray, loose, well graded.
			SW	90	0.0			Sand with some clay - medium-fine grain, dark gray to white, well graded.
	190							
			SP	100	0.0			Sand - medium grain, light brown to orange, loose, poorly graded.
	200		CL					Clay with some sand - dark gray, stiff, poorly graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-215 Deep
	Page 5 of 12	**WELL NO.:** MW-215-395

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			CH	100	0.0			Clay - dark gray, very stiff.
	210		SM				VP17	Sand with some silt and trace clay - light gray, medium dense, well graded.
			NR					No recovery
	220							
			SP	100	0.0			Sand - medium grain, light brown to gray, medium dense to loose, poorly graded.
	230		CL					Clay - dark gray to black, stiff to very stiff.
			SP	100	0.0			Sand - medium grain, dark yellowish orange to moderate yellowish orange, loose, poorly graded.
	240						VP20	
			SP	90	0.0			Sand - medium grain, moderate yellowish orange to dark yellowish orange, loose, poorly graded.
	250							
			SW	85	0.0			Sand - medium-fine grain, dark yellowish brown, loose, well graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-215 Deep
	Page 6 of 12	**WELL NO.:** MW-215-395

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							
			SW	90	11.2		VP22	
	270		SP					Sand - medium-fine grain, dark yellowish orange, loose, poorly graded.
			SW	100	0.0			Sand - medium-fine grain, moderate yellowish brown to pale yellowish brown, loose, well graded.
	280							
			SW	95	0.0		VP24	Sand - medium-fine grain, pale yellowish brown, loose, well graded.
	290							
			SP					Sand - medium grain, dark yellowish orange, loose, poorly graded.
			SP	100	15.4			Sand - medium grain, dark yellowish brown to moderate yellowish brown, loose, poorly graded.
	300							
			SP	90	0.0		VP26	Sand with trace gravel - coarse grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
	310		SM					Sand with some silt and few clay - fine grain, pale yellowish brown to dark yellowish orange, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-215 Deep
	Page 7 of 12	WELL NO.: MW-215-395

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SM	100	0.0			Sand with some silt - fine grain, yellowish brown, loose, poorly graded.
	320							
			SM	100	0.0		VP28	Sand with some silt - fine grain, light gray to moderate yellow, loose, poorly graded.
	330							
			SP	90	1.0			Sand with few silt - medium grain, yellowish gray to dark yellowish orange, loose, poorly graded.
	340		ML					Silt with some clay and sand - dark gray to medium gray, medium soft to stiff.
			CL					Clay with some silt - black to medium dark gray, medium soft.
			CL					Clay - dark gray, very stiff.
			CL	100	0.0			Clay with some silt - black to medium dark gray, medium soft to stiff.
	350							
			SP	100	0.0			Sand with few silt - medium grain, pale yellowish brown to dark yellowish orange, loose, poorly graded.
	360							
			SP	100	0.0		VP32	Sand - medium grain, light greenish gray to moderate yellowish brown, loose,

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-215 Deep
	Page 8 of 12	WELL NO.: MW-215-395

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
								poorly graded.
	370							
			NR	NS	NS			No recovery
	380							
			SP	100	0.0			Sand - medium grain, moderate yellowish brown, loose, poorly graded.
	390						VP35	
			SP	100	0.0			Sand - coarse-medium grain, moderate yellowish brown, loose, poorly graded.
	400							
			SW					Sand - medium-fine grain, moderate yellowish brown, loose, well graded.
			SW	100	0.0		VP36	Sand with few clay - coarse-fine grain, pale yellowish brown to yellowish gray an dark yellowish orange, loose, well graded.
	410							
			SP	90	0.0			Sand - medium-fine grain, pale yellowish brown, loose to medium dense, poorly graded.
	420						VP38	

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0.0			Sand with trace gravel - medium grain, yellowish gray, loose, poorly graded.
	430							
			SP	100	0.0			Sand - medium grain, moderate yellowish brown, loose to medium dense, poorly graded.
	440							
			SP	100	0.0		VP40	Sand - medium-fine grain, yellowish gray to pale yellowish brown, medium dense, poorly graded.
	450		ML					Silt with some sand and trace clay - moderate yellowish brown to dark yellowish orange, medium dense, overlain by 0.5 feet of Sand with trace silt - medium-fine grain, moderate yellowish brown, loose to medium dense, poorly graded.
			SP	100	0.0			Sand - medium-fine grain, pale yellowish brown to moderate yellowish brown, loose, poorly graded.
	460							
			SP	100	0.0		VP42	Sand with some clay and little silt - medium-fine grain, dark yellowish orange to moderate yellowish brown, medium dense to loose, poorly graded.
	470							
			CH					Clay - dark gray to grayish black, very stiff.
				100	0.0			

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			CL					Clay with some silt - dark gray, medium stiff.
	480							
			SP					Sand with little silt - medium-fine grain, moderate yellowish brown to dark yellowish orange, medium dense to loose, poorly graded.
			SP	100	0.0			Sand with some silt and little clay - medium-fine grain, moderate yellowish brown, medium dense, poorly graded.
	490							
			SP	100	0.0			Sand - medium grain, moderate yellowish brown, loose, poorly graded.
	500							
			SP	100	0.0			Sand with little silt - medium-fine grain, moderate yellowish brown to pale yellowish brown, loose to dense, poorly graded.
	510							
			SP					Sand - medium-fine grain, pale yellowish brown, loose, poorly graded.
			SW	100	0.0		VP47	Sand - fine-coarse grain, moderate yellowish brown to pale yellowish brown, loose, well graded.
	520							
			SW	100	0.0			Sand - medium-coarse grain, moderate yellowish brown to dark yellowish orange, loose, well graded.
	530							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-215 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SW	100	1.0			Sand - medium-coarse grain, moderate yellowish brown, loose, well graded.
	540						VP50	
			SW	100	10.0			Sand with some gravel - medium-coarse grain, moderate yellowish brown, loose to medium dense, well graded.
	550							
			SW	100	0.0		VP51	Sand with little gravel - medium-coarse grain, moderate yellowish brown, loose, well graded.
	560							
			SW	100	0.0		VP52	Sand with some gravel - medium-coarse grain, moderate yellowish brown, loose to medium dense, well graded.
	570							
			SW	100	0.0			Sand with little gravel - medium-coarse grain, moderate yellowish brown, loose, well graded.
			GW					Gravel - fine-coarse grain, moderate yellowish brown to pale yellowish brown, loose, well graded.
	580							
			SW					Sand with some gravel and trace silt - fine-coarse grain, moderate yellowish brown, loose, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-215 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SW	100	0.0			Sand with some gravel and trace silt - fine-coarse grain, moderate yellowish brown, loose, well graded.
			ML					Silt with little clay and few gravel - pale yellowish brown, soft.
	590		SP				VP55	Sand with some gravel and little silt - medium-coarse grain, pale yellowish brown, medium dense to dense, poorly graded.
			SP	100	0.0			Sand with some gravel - medium-coarse grain, pale yellowish brown, loose, poorly graded.
	600							
			CL	100	0.0		VP56	Clay with trace silt - pale yellowish brown, soft to medium stiff.
	610		CH					Clay with trace silt - pale yellowish brown, stiff to very stiff.
			ML					Silt with little sand and few clay - pale yellowish brown to moderate yellowish brown, loose to medium dense.
			SW	100	0.0			Sand with some silt and few gravel - pale yellowish brown, loose, well graded.
			ML					Silt with little sand - pale yellowish brown, medium dense to dense.
	620							
			ML					Silt with some sand - pale yellowish brown, very dense.
	630							**End of Soil Core Collection and Groundwater Profiling at 626 ft bgs**

Drilling Log

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BORING NO.: MW-216 Deep

WELL NO.: MW-216-510

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 9/8/2014
DRILLING CONTRACTOR: Cascade	**DATE FINISHED:** 10/2/2014
DRILLING METHOD: Sonic	**DRILLER:** J. Sigler
BOREHOLE DATA	**INSPECTOR:** E. Lynch, E&E, Inc.
Diameter (in): 7	**NORTHING (ft):** 209727.04
Total Depth (ft): 616	**EASTING (ft):** 1108145.67
Disposition of Hole: Monitoring Well	**GROUND ELEVATION (ft):** 015.78
Depth to Water (ft): N/A	

SAMPLES FOR CHEMICAL ANALYSIS

Volatile Organic Compounds (SW8260B)

Total Nickel (SW6010B)

Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	100	0.0			Sand - fine-coarse grain, yellow, loose, well graded.
			SW	100	0.0			Sand with gravel - fine-coarse grain, yellowish brown, loose, well graded.
	10							
			SW	80	0.0			Sand with some gravel - fine-coarse grain, brown gray, loose, well graded.
	20		SW					Sand with some gravel - fine-coarse grain, reddish brown, loose, well graded.
			SW	80	0.0			Sand with some gravel - fine-coarse grain, yellowish brown, loose, well graded.
			SW					Sand with some gravel - fine-coarse grain, brown , loose, well graded.
	30							
			SW	80	0.0			Sand with some gravel - fine-coarse grain, brown , loose, well graded.

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SW	100	0.0			Sand with some gravel - fine-coarse grain, brown , loose, well graded.
	50		ML					Silt - grain, light brown, medium soft, poorly graded.
			SW					Sand with some gravel - fine-coarse grain, brown, loose, well graded.
			SW	100	0.0			
	60		SP					Sand - fine grain, light gray brown, medium dense, poorly graded.
			SP	90	0.0			Sand - fine-medium grain, yellowish gray to reddish brown, loose, poorly graded.
	70		SW					Sand with little gravel and trace clay - grain, light brown to gray to red, dense, well graded.
			SP	100	0.0			Sand - fine-medium grain, light gray to brown, loose, poorly graded.
	80		SP					Sand with trace clay - fine-medium grain, light gray to brown to reddish brown, medium dense, poorly graded.
			SP	80	0.0			Sand - fine-medium grain, gray, medium dense, poorly graded.
			CL					Clay - light brown to gray, dense, poorly graded.
			SP					Sand - fine-medium grain, light gray brown to red-reddish brown, medium dense, poorly graded.
	90							

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
				80	0.0			
			SP					Sand - fine-medium grain, light gray brown to red to black to reddish brown, medium dense, poorly graded, overlain by 1 foot of Sand with trace clay - fine-medium grain, light gray brown, medium dense, poorly graded.
	100							
			SP	100	0.0			Sand - fine-medium grain, light gray brown, medium dense, poorly graded.
	110							
								Sand - fine-medium grain, light gray brown, medium dense, poorly graded, underlain with 0.5 feet of Sand with trace gravel - yellowish brown, medium dense, poorly graded
			SP	80	1.3			Sand - fine-medium grain, light gray brown, medium dense, poorly graded.
	120							
			SP	100	0.0			Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.
			CL					Clay - yellowish brown, very stiff, poorly graded.
	130		SP					Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.
			CL					Clay - yellowish brown, very stiff.
			SP					Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.
			CL					Clay - yellowish brown, very stiff.
			SP	90	0.0			Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.
	140							
			SP					Sand with trace clay - fine-medium grain, yellowish brown, medium dense, poorly graded.
			SP					Sand with some gravel - fine-medium grain, yellowish brown to reddish brown, medium dense, poorly graded.
			SP	80	0.0			Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.

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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150		SP					Sand with trace clay - fine-medium grain, yellowish brown, medium dense, poorly graded.
			NR	0				No recovery
	160							
			SP	100	8.0			Sand with few clay - fine-medium grain, yellowish brown, medium dense, poorly graded.
	170		SP					Sand with trace clay - fine-medium grain, yellowish brown, medium dense, poorly graded, underlain by 0.5 feet of Sand - fine-medium grain, gray to yellowish brown, medium dense, poorly graded.
			SP	100	0.0			Sand - fine-medium grain, light brown, medium dense, poorly graded.
	180							
				100	0.0			
	190		SP					Sand with few clay - fine-medium grain, orange brown, dense, poorly graded.
			SP					Sand - fine-medium grain, yellowish orange, medium dense, poorly graded.
			SP	80	0.0			Sand - fine-medium grain, light brown, medium dense, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-216 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	210			20	0.0		VP16	
				100	0.0			
	220		CL	90	0.0		VP18	Clay with little silt - gray, very stiff, poorly graded.
	230		SP	80	0.0			Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.
	240		SP	100	0.0			Sand with trace gravel - fine-medium grain, light brown, medium dense, poorly graded.
	250			100	0.0		VP21	

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-216 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260		SP					Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.
			SP					Sand - fine-medium grain, light gray, medium dense, poorly graded.
			SP	80	0.0			Sand - fine-medium grain, light gray, medium dense, poorly graded.
	270							
				90	0.0		VP23	
	280							
			SP	90	0.0			Sand - fine-medium grain, light gray, medium dense, poorly graded.
	290		SP					Sand - fine-medium grain, greenish gray, medium dense, poorly graded.
			SP	100	0.0		VP25	Sand - fine-medium grain, greenish gray, medium dense, poorly graded.
			CL					Clay with sand - gray to black, stiff.
			SP					Sand - fine-medium grain, light yellowish brown, medium dense, poorly graded.
	300							
			SP	100	0.0			Sand with trace gravel - fine-medium grain, light gray, loose, poorly graded.
	310							

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					Sand with trace gravel and silt/clay - fine-medium grain, yellowish orange, loose, poorly graded.
			CL					Clay with little silt and sand - light gray, medium soft, poorly graded.
			SP	90	0.0		VP27	Sand with trace gravel - fine-medium grain, loose, poorly graded.
	320							
			CL	90	0.0		VP28	Clay with trace sand - light gray, medium soft, poorly graded.
			SP					Sand - fine-medium grain, light gray, medium dense, poorly graded.
	330							
			CL	100	0.0			Clay with few silt and sand - light gray to tan, stiff, poorly graded.
	340							
			SP					Sand - fine-medium grain, yellowish orange to light gray, medium dense, poorly graded.
			SP	100	0.0		VP30	Sand - fine-medium grain, yellowish orange to light gray, medium dense, poorly graded.
	350							
			CL					Clay with few silt and sand - light gray to tan, medium soft, poorly graded.
			SP					Sand with trace gravel - fine-medium grain, medium dense, poorly graded.
			SP	100	0.0			Sand - fine-medium grain, light gray, loose, poorly graded.
	360							
			SP	100	0.0		VP32	Sand with few clay - fine-medium grain, gray to yellowish orange, loose, poorly

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-216 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
								graded.
			CL					Clay with few silt and sand - light gray to black, medium soft, poorly graded.
	370		SP					Sand - fine-medium grain, light gray, loose, poorly graded.
			SP					Sand with few clay - fine-medium grain, loose, poorly graded, underlain by 0.5 feet of Clay with few silt and sand - light gray to black.
			SP	100	0.0			Sand - fine-medium grain, light gray, loose, poorly graded.
	380							
				80	0.0		VP34	
			SP					Sand with trace clay - medium grain, yellowish orange, loose, poorly graded.
	390							
			CL					Clay with few silt and sand - light gray, very stiff, poorly graded.
			SP	100	0.0			Sand - fine-medium grain, light gray, loose, poorly graded.
	400							
			SP	50	0.0		VP36	Sand - fine-medium grain, light gray, loose, poorly graded.
	410							
			SP	100	1.4			Sand - fine-medium grain, light gray, loose, poorly graded.
	420							

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0.0		VP38	Sand - fine-medium grain, light gray, loose, poorly graded.
	430							
			SP	100	1.6			Sand - fine-medium grain, light gray, medium dense, poorly graded.
	440							
			SP					Sand - fine-coarse grain, light gray, loose, poorly graded.
			SP	30	1.2		VP40	Sand with trace silt - fine-medium grain, light gray to light brown, medium dense, poorly graded.
	450							
			SP	100	0.0			Sand with trace silt - fine-medium grain, light gray to light brown, medium dense, poorly graded.
	460		SP					Sand - fine-coarse grain, light tan to gray, loose, poorly graded.
			SP					Sand - fine-medium grain, light tan to gray, dense, poorly graded.
			SP	100	0.0		VP42	Sand - fine grain, light tan to gray, dense, poorly graded.
	470							
			SP					Sand - fine-medium grain, light gray, dense, poorly graded.
				100	1.7			

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					Sand - fine-medium grain, light gray, loose, poorly graded.
			SP					Sand - fine-coarse grain, light gray, loose, poorly graded.
	480		SP					Sand - fine-medium grain, light gray, loose, poorly graded, overlain by 0.5 feet of Sand with some gravel - fine-coarse grain, light gray, loose, well graded.
			SP	100	1.1		VP44	Sand - fine-medium grain, light gray, loose, poorly graded
	490		SP					Sand - fine-medium grain, medium dense, poorly graded.
			SP	90	1.8			Sand - medium grain, light tan to gray, loose, poorly graded.
	500		SP					Sand with little gravel and trace silt/clay - medium-coarse grain, , dense, poorly graded.
			SP	100	1.6			Sand with little gravel and trace silt - medium grain, light gray, loose, poorly graded.
	510		SP	100	0.0			Sand with little gravel - medium-coarse grain, light brown, loose, poorly graded.
	520		SP	100	0.0		VP48	Sand with little gravel - medium-coarse grain, light brown, loose, poorly graded.
	530		MH					Clay with trace silt - light gray, very stiff.

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					Sand with little silt - fine-medium grain, light brownish gray, loose, poorly graded.
			SP	75	0.0			Sand with little silt - fine-medium grain, light brownish gray, loose, poorly graded.
	540							
			SP	100	0.0		VP50	Sand with little silt - fine-medium grain, light brownish gray, loose, poorly graded.
	550		SP					Sand with little silt - medium-coarse grain, pale yellowish orange, loose, poorly graded overlain by 1 foot of Silt with some gravel - grain, very light gray to dark yellowish orange, stiff, poorly graded.
			SP					Sand with little silt - fine-medium grain, very pale orange, medium dense, poorly graded.
			SP	100	1.5			Sand with some gravel - medium-coarse grain, pinkish gray, loose, poorly graded.
	560		ML					Silt with some sand and little gravel - fine-coarse grain, pinkish gray to grayish red, medium stiff, poorly graded.
			SP					Sand with little gravel and trace silt - fine-coarse grain, very light gray to dark yellowish orange, loose, poorly graded.
			SP	100	1.4			
	570							
			SC					Sand with some clay and few gravel - fine-coarse grain, pinkish gray to grayish red, medium dense, poorly graded.
			SM	100	3.4		VP53	Sand with little silt - fine-medium grain, grayish orange pink, loose, well graded.
	580							
			SP					Sand little gravel - fine-coarse grain, grayish orange pink, loose, poorly graded.
			SM					

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-216 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	590		SM	100	3.0		VP54	Sand with few silt - fine-medium grain, very pale orange , loose, well graded, overlain by 1 foot of Sand with some silt and few gravel - fine-coarse grain, grayish orange pink, dense, poorly graded.
			SP	100	1.0			Sand with some clay, little gravel and trace silt - fine-coarse grain, medium light gray, medium dense, poorly graded.
	600		SW					Sand and some clay with trace silt - fine-coarse grain, grayish orange pink, dense, well graded.
			CL					Clay with trace sand - light olive gray to pale yellowish brown, very dense, well graded.
			CL	90	0.0			Clay with trace silt - light gray, dense, well graded.
			SW					Sand with trace silt - coarse-fine grain, very pale orange, medium dense, well graded.
	610							**End of Soil Core Collection and Groundwater Profling at 616 ft bgs**
	620							

Drilling Log

BORING NO.: MW-217 Deep

WELL NO.: MW-217-490

CLIENT: USACE Kansas City District	**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP	**DATE STARTED:** 9/25/2014
DRILLING CONTRACTOR: Cascade	**DATE FINISHED:** 10/15/2014
DRILLING METHOD: Sonic	**DRILLER:** D. Roberts
BOREHOLE DATA	**INSPECTOR:** J. Ryne, E&E, Inc.
Diameter (in): 7	**NORTHING (ft):** 208474.05
Total Depth (ft): 586	**EASTING (ft):** 111181.16
Disposition of Hole: Monitoring Well	**GROUND ELEVATION (ft):** 105.33
Depth to Water (ft): N/A	

SAMPLES FOR CHEMICAL ANALYSIS

- Volatile Organic Compounds (SW8260B)
- Total Nickel (SW6010B)
- Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	100	0.0			Sand with few silt - fine-coarse grain, moderate yellowish brown to pale yellowish brown to dark yellowish orange to very pale orange, loose, poorly graded.
			SW	100	2.5			Sand with some silt - fine grain, grayish orange to grayish orange pink to dark yellowish orange and grayish red, dense, poorly graded.
	10							
			SP	70	0.0			Sand with little silt - fine-coarse grain, pale yellowish brown to dark yellowish brown to very pale orange, loose, poorly graded.
	20							
			SP	100	2.0			Silt with little sand and little clay - medium gray, very stiff, poorly graded.
	30							
			SP	100	2.0			Silt with little sand and little clay - medium gray, very stiff, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-217 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			SP	100	2.0			Silt with little sand and little clay - medium gray, very stiff, poorly graded.
	50							
			SP	80	3.2			Sand with little silt - fine-coarse grain, grayish orange, loose, poorly graded.
	60							
			SP	100	4.0			Sand with little silt - fine-coarse grain, grayish orange, loose, poorly graded.
	70							
			SP					Sand with some silt - fine grain, pale yellowish brown, loose, well graded.
			SP	100	4.5			Sand with some silt - fine grain, pale yellowish brown, loose, well graded.
	80		SP					Silt with little sand and few clay - pale yellowish brown to dark yellowish orange, stiff, poorly graded.
			SP	100	2.8			Sand with few silt - medium-coarse grain, pale yellowish brown to moderate brown , loose, well graded.
	90							

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	3.0			Sand with little silt - fine-coarse grain, dark yellowish orange, loose, poorly graded, overlain by 0.5 feet of Sand with trace silt - medium-coarse grain, pale yellowish brown, loose, poorly graded.
	100							
			SP	100	3.0			Sand with some silt and few clay - fine-medium grain, pale yellowish brown, medium dense, poorly graded.
	110							
			SP					Sand with little silt - medium-coarse grain, dark yellowish orange, loose, well graded.
			SP	100	3.0			Sand with little silt - fine-medium grain, dark yellowish orange, loose, well graded.
			SM					Silt with little clay and trace sand - pale yellowish brown, very dense, poorly graded.
	120							
				75	2.2			Silt with little clay and trace sand - pale yellowish brown, very dense, poorly graded.
	130							
			SP					Sand with some silt - fine-medium grain, pale yellowish brown to dark yellowish orange, loose, poorly graded.
			SP	100	1.6			Sand with some silt - fine-medium grain, pale yellowish brown to dark yellowish orange, loose, poorly graded.
	140							
			SM					Sand with some silt - fine-medium grain, pale yellowish brown, loose, poorly graded.
			SP	100	2.4			Silt with some sand - pale yellowish brown to dark yellowish orange to dark gray, stiff, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-217 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150		SP	100	2.0			Silt with little sand and few clay - dark gray, very stiff, poorly graded.
	160		SP					Sand with little silt - fine grain, pale yellowish brown, loose, poorly graded, overlain by 0.5 feet of Sand with some silt - fine-medium grain, pale yellowish brown, medium dense, poorly graded.
			SP	100	2.0			Sand with few silt - fine grain, grayish orange, loose, poorly graded, overlain by 0.5 feet of Clay with little sand - light gray to dark yellowish orange, very stiff, poorly graded.
	170		SP	100	2.0			Sand with trace silt - medium-coarse grain, dark yellowish orange, loose, poorly graded.
	180		CL					Sand with little silt - fine-medium grain, very pale orange, loose, poorly graded.
			SM ML	100	0.0			Silt with trace sand - moderate yellowish brown, medium stiff, well graded.
	190		ML					Sand with few silt - fine-medium grain, grayish orange, loose, well graded.
			ML	100	1.2			Sand with few silt - fine-medium grain, grayish orange, loose, well graded.
	200		SP					Sand with little silt - fine grain, pale yellowish brown, loose, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-217 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SM	100	0.0		VP16	Sand with some silt - medium-fine grain, grayish orange to dark yellowish orange, loose, poorly graded.
	210							
			ML	100	2.1			Silt with little sand - very light gray, medium stiff.
	220							
			SW	100	0.0		VP18	Sand with little silt - fine-medium grain, pale yellowish brown, loose, well graded.
	230		SW					Sand with trace silt - fine-coarse grain, grayish orange, loose, well graded.
			SP	100	1.2			Sand with gravel - medium-coarse grain, grayish orange, loose, poorly graded.
	240		SP					Sand with little silt - fine grain, pale yellowish brown to moderate red to pale red to dark yellowish orange to dark gray, medium dense, poorly graded.
			SP	100	0.0		VP20	Sand with little silt - fine grain, pale yellowish brown to moderate red to pale red to dark yellowish orange to dark gray, medium dense, poorly graded.
	250		CL					Clay with some silt - medium dark gray, very stiff.
			ML	100	0.0			Silt with few clay - grayish orange, stiff.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-217 Deep
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Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260		ML	100	0.0			Silt with little clay - very pale orange, medium stiff.
	270		SP				VP23	Sand with trace silt - fine-coarse grain, grayish orange pink, loose, poorly graded.
			SP	100	0.0			Sand with some gravel and few silt - fine-coarse grain, light red to very pale orange, loose, poorly graded.
	280		SP					Sand with little gravel and few silt - fine-coarse grain, very pale orange, loose, poorly graded.
			SP	100	0.0		VP24	Sand with little gravel and few silt - fine-coarse grain, very pale orange, loose, poorly graded.
	290		SP					Sand - fine-medium grain, light brown, medium dense, poorly graded.
			CL	100	0.0			Clay with little silt - gray, very stiff, poorly graded.
	300		SP	100	0.0		VP26	Clay with little silt - gray, very stiff, poorly graded.
			SP					Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.
	310							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-217 Deep
	Page 7 of 11	**WELL NO.:** MW-217-490

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	50	0.0			Sand with trace gravel - fine-medium grain, light brown, medium dense, poorly graded.
	320							
			SP	100	0.0		VP28	Sand with trace gravel - fine-medium grain, light brown, medium dense, poorly graded.
	330							
			SP					Sand - fine-medium grain, yellowish brown, medium dense, poorly graded.
			SP	100	5.0			Sand - fine-medium grain, light gray, medium dense, poorly graded.
	340							
			SP	100	1.8			Sand - fine-medium grain, light gray, medium dense, poorly graded.
	350						VP31	
			SP					Sand - fine-medium grain, greenish gray, medium dense, poorly graded.
			CL	100	0.0			Clay with sand - gray to black, stiff.
	360							
			CL	100	0.0			Clay with sand - gray to black, stiff.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-217 Deep
	Page 8 of 11	**WELL NO.:** MW-217-490

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	370		SP				VP33	Sand - fine-medium grain, light yellowish brown, medium dense, poorly graded.
			SP	100	0.0			Sand - fine-medium grain, light yellowish brown, medium dense, poorly graded.
	380							
			SP	50	0.0		VP34	Sand with trace gravel - fine-medium grain, light gray, loose, poorly graded.
	390							
			SP	100	0.0			Sand with trace gravel - fine-medium grain, light gray, loose, poorly graded.
	400							
			SP	35	0.0			Sand with trace gravel - fine-medium grain, light gray, loose, poorly graded.
	410						VP37	
			SM					Sand with trace gravel and silt/clay - fine-medium grain, yellowish orange, loose, poorly graded.
			CL					Clay with little silt and sand - light gray, medium soft, poorly graded.
			SP	100	0.0			Sand with trace gravel - fine-medium grain, loose, poorly graded.
	420							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-217 Deep
	Page 9 of 11	WELL NO.: MW-217-490

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			CL	40	0.0			Clay with trace sand - light gray, medium soft.
	430						VP39	
			SP	100	0.0			Sand - fine-medium grain, light gray, medium dense, poorly graded.
	440		CL					Clay with few silt and sand - light gray to tan, stiff.
			SP					Sand - fine-medium grain, yellowish orange to light gray, medium dense, poorly graded.
			SP	100	0.0		VP40	Sand - fine-medium grain, yellowish orange to light gray, medium dense, poorly graded, overlain by 3 feet of Clay with few silt and sand - light gray to tan, medium soft, poorly graded.
	450		ML					Silt with little clay and trace sand - pale yelloiwsh brown, poorly graded.
			SP					Sand - fine-medium grain, light gray, loose, poorly graded.
			SP	100	0.0			Sand with few clay - fine-medium grain, gray to yellowish orange, loose, poorly graded.
	460		ML					Silt with some sand - pale yellowish brown, loose.
			ML					Silt with some sand - pale yelloiwsh brown to dark brown, stiff.
			ML	100	0.0		VP42	Silt with little sand and few clay - dark gray, very stiff.
	470		SP					Sand with few clay - fine-medium grain, loose, poorly graded.
			CL					Clay with few silt and sand - light gray to black.
				100	0.0			

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-217 Deep
	Page 10 of 11	**WELL NO.:** MW-217-490

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	480		CH					Clay with few silt and sand - light gray, very stiff.
			SP					Sand with trace clay - medium grain, yellowish orange, loose, poorly graded.
			SP					Sand - fine-medium grain, light gray, loose, poorly graded.
			SP	100	0.0		VP44	Sand - fine-medium grain, light gray, loose, poorly graded.
	490							
			NR					No Recovery
	500							
			SP	40	0.0		VP46	Sand - fine-medium grain, light gray, medium dense, poorly graded.
	510							
			SP					Sand with trace silt - fine-medium grain, light gray to light brown, medium dense, poorly graded.
			SP	100	0.0			Sand - fine-coarse grain, light tan to gray, loose, poorly graded, overlain by 0.5 feet of Sand - fine-coarse grain, light gray, loose, poorly graded.
	520							
			SP					Sand - fine-medium grain, light tan to gray, dense, poorly graded.
			ML					Silt with little sand - very light gray, medium stiff, well graded.
			ML	100	0.0		VP48	Silt with little sand - very light gray, medium stiff, well graded.
	530							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-217 Deep
	Page 11 of 11	**WELL NO.:** MW-217-490

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					Sand - fine-medium grain, light gray, dense, poorly graded.
			SP	100	0.0			Sand - fine-medium grain, light gray, loose, poorly graded.
	540		SP					Sand - fine-coarse grain, light gray, loose, poorly graded.
			SP					Sand - fine-medium grain, light gray, loose, poorly graded.
			CH	100	0.0		VP50	Clay with some silt - medium dark gray, very stiff.
	550							
			MH					Silt with few clay - grayish orange, stiff.
			ML	100	0.0			Silt with little clay - very pale orange, medium stiff.
	560		SP					Sand - fine-medium grain, medium dense, poorly graded.
			SP	100	0.0		VP52	Sand - medium grain, light tan to gray, loose, poorly graded.
	570							
			SP	100	0.0			Sand with little gravel and trace silt/clay - medium-coarse grain, dense, poorly graded.
	580							
								End of Soil Core Collection and Groundwater Profiling at 586 ft bgs

Drilling Log

BORING NO.:	MW-218 Deep
WELL NO.:	MW-218-95
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Cascade
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	10/3/2014
DATE FINISHED:	10/10/2014
DRILLER:	J. Sigler
INSPECTOR:	T. Dillon, E&E, Inc.
NORTHING (ft):	218960.87
EASTING (ft):	110945.49
GROUND ELEVATION (ft):	137.98

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 7	
Total Depth (ft): 206	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft): N/A	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		SW	100	0.0	6000		Sand with little gravel - fine-coarse grain, grayish orange pink, loose, well graded.
			SW	100	0.0	6000		Sand with some gravel - fine-coarse grain, grayish orange pink to pale yellowish orange, loose, well graded.
	10							
			SW	30	--	5200		Sand with little gravel - fine-coarse grain, grayish orange to dark yellowish orange; some seams of moderate brown, loose, well graded.
	20							
	30							
			SW	70	4.4	5000		Sand with little gravel - fine-coarse grain, grayish orange to dark yellowish orange; some seams of moderate brown, loose, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-218 Deep
	Page 2 of 5	WELL NO.: MW-218-95

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40							
			SW	60	0.0	5000		Sand with little gravel - fine-coarse grain, very pale orange, loose, well graded.
	50							
			SW	70	0.0	5000		Sand with trace gravel and trace silt - very fine-coarse grain, very pale orange, loose, well graded.
	60							
			SP					Sand with trace silt - very fine-fine grain, very pale orange, loose, poorly graded.
			SP	40	0.0	5000		Sand - medium-coarse grain, moderate yellowish brown, loose, poorly graded.
							VP02	
	70							
	80							
			SP	50	3.0	5000	VP04	Sand - medium-coarse grain, moderate yellowish brown, loose, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-218 Deep
	Page 3 of 5	WELL NO.: MW-218-95

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	100							
			SP	50	0.0	5000	VP06	Sand - medium-fine grain, moderate yellowish brown, loose, poorly graded.
	110							
	120							
			SP	60	0.0	5000	VP08	Sand with trace silt - medium-coarse grain, pale yellowish brown to moderate yellowish brown, loose to medium dense, poorly graded.
	130							
	140							
			SW	35	0.0	5000	VP10	Sand - fine-coarse grain, moderate yellowish brown, loose, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-218 Deep
	Page 4 of 5	WELL NO.: MW-218-95

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
	160							
			SP	65	0.0	5000	VP12	Sand - fine-medium grain, moderate yellowish brown to pale yellowish brown, loose, poorly graded.
	170							
	180							
			SP	60	0.0	5000	VP14	Sand - fine-coarse grain, moderate yellowish brown, loose, poorly graded.
	190							
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-218 Deep
	Page 5 of 5	WELL NO.: MW-218-95

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP16	**End of Soil Core Collection and Groundwater Profiling at 206 ft bgs**
	210							

Drilling Log

BORING NO.:	MW-219 Deep
WELL NO.:	MW-219-560
CLIENT:	USACE Kansas City District
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	10/16/2014
DRILLING CONTRACTOR:	Cascade
DATE FINISHED:	10/30/2014
DRILLING METHOD:	Sonic
DRILLER:	D. Roberts
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	T. Dillon, E&E, Inc.
Diameter (in):	7
NORTHING (ft):	212324.46
Total Depth (ft):	616
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1108323.49
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 114.33
Depth to Water (ft):	N/A
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		ML	100	0.0			Silt with few gravel - grayish orange, loose.
			SW	80	45.0			Sand with trace silt and some gravel - fine-coarse grain, pale yellowish orange, loose, well graded.
	10		GW					Gravel with some sand and trace silt and cobbles - fine-coarse grain, moderate brown, loose, well graded.
			GW	100	12.0			Gravel with some sand and trace silt and cobbles - fine-coarse grain, moderate brown, loose, well graded.
	20		SW					Sand with few gravel - fine-coarse sand grain, very pale orange, loose, well graded.
			SW	100	65.0			Sand with some gravel and trace silt and cobbles - grain, dark yellowish orange, loose, well graded.
	30		SW	90	3.0			Sand with some gravel and trace silt and cobbles - grain, dark yellowish orange, loose, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-219 Deep
	Page 2 of 12	WELL NO.: MW-219-560

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SW	95	0.0			Sand with some gravel and trace silt - fine-coarse grain, moderate yellowish brown, loose, well graded.
			CH					Clay with trace silt - grayish brown-grayish orange, stiff.
	50		SP					Sand - medium-fine grain, pale yellowish orange, loose, poorly graded.
			SP					Sand - medium-fine grain, dusky red to very pale orange, dense, poorly graded.
	60							
			SP	100	0.0			Sand - medium-fine grain, dusky red to very pale orange, dense, poorly graded.
			SP					Sand with trace silt - medium-fine grain, very light gray, medium dense, poorly graded.
	70		SP					Sand with trace silt - medium-fine grain, very light gray to very pale orange to light red to light brown, medium dense, poorly graded.
	80							
			SP	75	0.0			Sand with trace silt - medium-fine grain, dark yellowish orange, loose, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-219 Deep
	Page 3 of 12	WELL NO.: MW-219-560

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					Sand with trace silt - medium-fine grain, dark yellowish orange, loose, poorly graded.
	100							
			SP	100	0.0			Sand with trace silt - medium-fine grain, dark yellowish orange, loose, poorly graded.
	110							
			CL					Clay with some silt - grayish brown to grayish orange, stiff.
	120							
			CL	100	0.0			Clay with some silt - grayish brown to grayish orange, stiff.
			SP					Sand - medium-fine grain, grayish orange, loose, poorly graded.
	130							
			CH					Clay with trace silt - very light gray to dark grayish orange, stiff.
			SP					Sand with trace silt - fine-medium grain, dark yellowish orange, loose, poorly graded.
	140							
			SP	70	0.0			Sand with few silt - medium-fine grain, dusky yellow to dark yellowish orange to grayish orange, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-219 Deep
	Page 4 of 12	WELL NO.: MW-219-560

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
			CL					Clay with trace silt - very light gray to dark grayish orange, stiff.
	160		SP					Sand with few silt - medium-fine grain, dark yellowish orange to moderate brown, loose, poorly graded.
			SP	100	0.0			Sand with few silt - medium-fine grain, dark yellowish orange to moderate brown, loose, poorly graded.
	170							
			SP					Sand with some silt - very fine-fine grain, very light gray to dark yellowish orange, medium dense, poorly graded.
	180							
			SP	100	0.0			Sand with trace silt - medium-very fine grain, grayish orange to light brown, loose, poorly graded.
	190							
			SP	100	0.0			Sand - medium-fine grain, moderate yellowish brown, loose, poorly graded.
	200							

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
							VP16	
			SP					Sand - medium-fine grain, dark yellowish orange, loose, poorly graded.
	210							
			SM					Sand with some silt and little clay - medium-very fine grain, dark yellowish orange to dusky briwn, medium dense, poorly graded.
			SP	80	0.0			Sand with few silt and trace clay - medium-fine grain, dark yellowish orange to medium dark gray, loose, poorly graded.
	220							
							VP18	
	230							
			SP	100	0.0			Sand - medium grain, dark yellowish orange, loose, poorly graded.
	240							
							VP20	
	250		SM					Sand with some silt and trace clay - medium grain, dark yellowish orange to medium dark gray, medium dense, poorly graded.
			SP	100	0.0			Sand with trace silt - medium-fine grain, dark yellowish orange to moderate

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-219 Deep
	Page 6 of 12	WELL NO.: MW-219-560

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260						VP22	yellowish brown, loose, poorly graded.
	270		ML					Silt with some sand - moderate yellowish brown, medium soft.
			SP	100	0.0			Sand - medium-fine grain, dark yellowish orange, loose, poorly graded.
	280							
	290		CL				VP24	Clay with some sand and silt - pale brown to moderate yellowish brown, soft.
			CL					Clay - pale yellowish brown to yellowish gray, very stiff.
			SP	100	0.0			Sand with little clay and silt - fine-medium grain, moderate brown to dark yellowish brown, loose, poorly graded.
	300		SP					Sand - medium grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
							VP26	
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-219 Deep
	Page 7 of 12	WELL NO.: MW-219-560

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					Sand with little silt - medium-very fine grain, moderate yellowish brown to dark yellowish orange to dark yellowish brown, medium dense, poorly graded.
			SM	100	0.0			Sand with some silt - fine-very fine grain, pale yellowish brown to dark yellowish brown, loose, poorly graded.
	320		ML					Silt with few to little sand and trace clay - medium gray, soft to stiff.
							VP28	
	330							
			CL					Clay with little silt and few sand - medium gray, medium stiff to stiff.
			SC	85	0.0			Sand with some clay - medium-fine grain, medium light gray to dark yellowish brown, loose, poorly graded.
	340		SP					Sand - medium grain, dark yellowish orange, medium dense, poorly graded.
							VP30	
	350							
			SP					Sand - medium grain, very light gray, loose, poorly graded.
			SP	100	0.0			Sand with trace clay - medium-fine grain, moderate yellowish brown, medium dense to loose, poorly graded.
	360							
							VP32	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-219 Deep
	Page 8 of 12	WELL NO.: MW-219-560

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	370							
			SP	100	0.0			Sand - medium grain, moderate yellowish brown, loose, poorly graded.
	380							
							VP34	
	390							
			SP	100	0.0			Sand with few sandy clay - medium grain, moderate yellowish brown to pale yellowish brown, loose, poorly graded.
	400							
	410							
			SP	100	0.0		VP37	Sand with trace clay - medium-fine grain, moderate yellowish brown to pale yellowish brown, loose to medium dense, poorly graded.
	420							

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	430						VP38	
			SP	75	0.0			Sand with trace silt - medium grain, moderate yellowish brown, medium dense, poorly graded.
	440							
							VP40	
	450							
			SP	100	0.0			Sand - medium grain, dark yellowish brown to pale yellowish brown, loose, poorly graded.
	460							
							VP43	
	470							
			SP	100	0.0			Sand with few clay - medium grain, light olive gray, dense, poorly graded.

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					Sand - medium-coarse grain, moderate yellowish brown, loose to medium dense, poorly graded.
	480							
			SP				VP44	Sand - fine grain, moderate yellowish brown, dense, poorly graded.
			SP					Sand - fine-medium grain, dark yellowish brown to pale yellowish brown, loose, poorly graded.
	490							
			SP					Sand - medium-coarse grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
			SP					Sand with trace clay - fine-medium grain, light olive gray, loose, poorly graded.
			SW	100	0.0			Sand - fine-coarse grain, moderate yellowish brown to moderate reddish brown, loose, well graded.
	500							
							VP46	
	510		SP					Sand with little silt - fine grain, yellowish gray to pale reddish brown, medium dense, poorly graded.
			SP					Sand with little silt - fine grain, yellowish gray , medium dense to dense, poorly graded, overlain by 0.5 feet of Sand with little gravel and few silt - fine-coarse grain, pale reddish brown, loose, well graded.
			SP	100	4.0			Sand - medium-fine grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
	520							
							VP48	
			SW					Sand with some silt and few gravel - coarse-fine grain, dark yellowish orange to moderate reddish brown, loose, well graded.
	530		SP					Sand with some to little silt and trace gravel and clay - coarse-fine grain, pale yellowish brown to dark yellowish orange, medium dense to loose, poorly

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
								graded.
			SW	100	10.0			Sand with little gravel and few silt - coarse-fine grain, dark yellowish orange, loose, well graded.
	540							
			SM				VP50	Sand with some gravel and little to some silt - coarse-fine grain, dark yellowish orange, loose, well graded.
			SP					Sand with trace clay and silt - coarse-fine grain, pale yellowish brown, loose, poorly graded.
	550							
			GP					Gravel with some sand and trace silt - coarse-fine grain, grayish orange pink to pale yellowish brown, loose, poorly graded.
			GW	100	8.0			Gravel with some sand and trace silt - coarse-fine grain, pale yellowish brown, loose, well graded.
	560							
			SC				VP52	Sand with some clay - fine-very fine grain, moderate yellowish brown, dense to very dense, poorly graded.
	570							
			GW					Gravel with some sand - coarse-fine grain, pale yellowish brown, loose, well graded.
			GW	100	0.0			Gravel with some sand - coarse-fine grain, pale yellowish brown, loose, well graded.
	580							
			SC					Sand with some clay and gravel - medium-fine grain, moderate yellowish brown, medium dense to loose, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-219 Deep
	Page 12 of 12	WELL NO.: MW-219-560

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP				VP54	Sand - medium-fine grain, pale yellowish brown, loose, poorly graded.
	590							
			SP	100	8.0			Sand - medium-fine grain, pale yellowish brown to dark yellowish orange, loose, poorly graded.
	600		SP					Sand with trace gravel and clay - fine-very fine grain, moderate brown, dense, poorly graded, overlain by 1.5 feet of Clay - pinkish gray, stiff.
			CH					Clay - medium dark gray, very stiff.
			CH					Clay - medium gray, medium stiff to stiff.
	610		CL					Clay with some sand - medium gray, stiff.
			CH					Clay - medium gray to reddish orange pink, very stiff.
				100	0.0			**End of Soil Core Collection and Groundwater Profiling at 616 ft bgs**
	620							

Drilling Log

BORING NO.:	MW-220 Deep
WELL NO.:	MW-220-325
CLIENT:	USACE Kansas City District
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Cascade
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	11/18/2014
DATE FINISHED:	12/10/2014
DRILLER:	D. Roberts
INSPECTOR:	T. Dillon, E&E, Inc.
NORTHING (ft):	215424.82
EASTING (ft):	1108396.56
GROUND ELEVATION (ft):	117.20

BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in): 7	
Total Depth (ft): 516	Volatile Organic Compounds (SW8260B)
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft): N/A	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Gamma (ppm)	Analytical Sample No.	Description
	0		ML	100	0.0			Silt with some sand and gravel - fine grain, moderate brown, soft, overlain by 1 foot of Silt/Top soil
			SP					Sand with some gravel - fine-medium grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
			SW	100	0.0			Sand with some gravel - medium-coarse grain, dark yellowish orange, loose, well graded.
	10							
			SW	80	4.5			Sand with some gravel - fine-coarse grain, moderate yellowish brown to dark yellowish orange, loose, well graded.
	20							
			SW	75	0.0			Sand with some gravel - fine-coarse grain, dark yellowoish brown to dark yellowish orange, loose, well graded.
	30							
			SW	90	0.0			Sand with little gravel - fine-coarse grain, dark yellowish orange, loose, well graded.

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-220 Deep
	Page 2 of 10	**WELL NO.:** MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	40		SW					Sand with few gravel - medium-coarse grain, dark yellowish orange, loose, well graded.
			CL					Clay with some silt and sand - moderate brown to dark yellowish brown, soft.
			SP	100	0.0			Sand - medium grain, dark yellowish orange, very dense, poorly graded.
			SP					Sand - medium grain, dark yellowish orange to grayish orange, loose, poorly graded.
	50							
			SP	100	0.0			Sand with trace silt and clay - medium-fine grain, moderate yellowish brown to dark yellowish orange, loose to medium dense, poorly graded.
							VP01	
	60							
	70							
			SP	100	0.0			Sand with trace silt - fine-medium grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
	80							
			CH					Clay - pale brown, medium stiff to stiff.
			SP					Sand with trace silt - fine-medium grain, dark yellowish orange to pale yellowish brown, loose, poorly graded.
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-220 Deep
	Page 3 of 10	**WELL NO.:** MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	75	0.0			Sand with trace clay - medium grain, dark yellowish brown to dark yellowish orange to pale yellowish brown, loose, poorly graded.
	100							
							VP06	
	110							
			CL	100	0.0			Clay with little to few sand - brownish black, medium stiff to stiff.
	120							
			CH					Clay with little sand - dark gray , stiff.
	130		CH	100	0.0			Clay - grayish orange pink, medium stiff.
			SP					Sand with trace silt and gravel - medium-fine grain, moderate yellowish brown to dark yellowish orange to pale yellowish brown, loose to medium dense, poorly graded.
							VP09	
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-220 Deep
	Page 4 of 10	**WELL NO.:** MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	150							
			CH					Clay with few sand - grayish orange pink, medium stiff.
				100	0.0			
			SP					Sand - medium-fine grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
	160							
							VP12	
	170							
			SP	100	0.0			Sand with few clay - medium-fine grain, dark yellowish orange to moderate yellowish brown, medium dense to loose, poorly graded.
	180							
							VP14	
	190							
			SP	65	0.0			Sand - medium-fine grain, moderate yellowish brown, loose, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-220 Deep
	Page 5 of 10	WELL NO.: MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	210						VP16	
	220		NR					No recovery
	230		SP	100	10.0			Sand - medium-fine grain, pale yellowish brown, loose, poorly graded.
	240		ML					Silt with sand and clay - grayish black, medium stiff.
			SP					Sand with trace silt - medium-fine grain, dark brownish orange to pale yellowish brown, medium dense to loose, poorly graded.
			SP				VP20	Sand with few clay and trace silt - medium-fine grain, dark brownish orange to moderate yellowish brown to pale yellowish brown, medium dense, poorly graded.
	250		SP	100	0.0			Sand - medium grain, moderate yellowish brown to dark yellowish brown, loose,

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-220 Deep
	Page 6 of 10	WELL NO.: MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	260							poorly graded.
							VP22	
	270							
			CL	100	30.0			Clay with some sand - grayish orange pink, medium stiff to soft.
			SP					Sand with trace clay and silt - medium-fine grain, dark yellowish brown, loose, poorly graded.
	280		CH					Clay with sand - pale yellowish brown to dark yellowish brown, stiff to very stiff.
							VP24	
	290		ML					Silt with little sand - pale yellowish brown to dark yellowish orange, medium stiff to stiff.
			SM					Sand with some silt - fine-medium grain, pale yellowish brown, loose, poorly graded.
			SP	100	0.0			Sand with trace silt - fine-medium grain, pale yellowish brown to dark yellowish orange, loose to medium dense, poorly graded.
	300							
							VP26	
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-220 Deep
	Page 7 of 10	WELL NO.: MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP	100	0.0			Sand with trace silt and clay - medium-fine grain, moderate yellowish brown, loose to medium dense, poorly graded.
	320						VP28	
	330		CH					Clay with trace sand - pale brown to grayish black, medium stiff.
			NR					No recovery
	340							
	350							
			SP	100	0.0			Sand with trace clay and silt - medium grain, dark gray to grayish brown, loose to medium dense, poorly graded.
	360						VP32	

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-220 Deep
	Page 8 of 10	**WELL NO.:** MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP					Sand with few silt - fine-medium grain, dark yellowish orange, medium dense to dense, poorly graded.
	370		CL					Clay with trace to few silt and sand - moderate yellowish brown to dark gray, medium stiff to stiff.
			SP	100	0.0			Sand with few to trace silt and trace clay - fine-medium grain, dark yellowish orange to moderate yellowish brown, medium dense to loose, poorly graded.
	380						VP34	
			SP					Sand - medium grain, pale yellowish orange to very pale yellowish brown, loose , poorly graded.
	390							
			SP					Sand with few clay - fine grain, pale yellowish brown to very light gray, loose, poorly graded.
			SP	90	0.0			Sand with trace silt - medium-fine grain, moderate yellowsh brown to dark yellowish orange, loose to medium dense, poorly graded.
	400							
							VP36	
	410							
			SP	100	0.0			Sand - medium-fine grain, pale yellowish brown, loose, poorly graded.
	420							

	PROJECT NO.: 2001764.012.05	**BORING NO.:** MW-220 Deep
	Page 9 of 10	**WELL NO.:** MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
			SP				VP38	Sand with trace silt - mediun-fine grain, pale yellowish brown to moderate yellowish brown to dark yellowish orange, medium dense to dense, poorly graded.
	430							
			SP	100	0.0			Sand with trace silt - medium grain, moderate yellowish brown, loose, poorly graded.
	440							
			ML				VP40	Silt with little sand - pale yellowish brown, soft.
			SP					Sand with little silt - fine grain, pale yellowish brown to dark yellowish orange, medium dense to loose, poorly graded.
	450							
			SP	100	0.0			Sand - medium-fine grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
			SP					Sand with some silt - fine grain, pale yellowish brown to medium light gray, medium dense, poorly graded.
	460							
							VP42	
	470							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-220 Deep
	Page 10 of 10	WELL NO.: MW-220-325

Elev.	Depth	Lith.	USCS	Rec.	PID	Gamma	Sample	Description
	480		SP	100	0.0			Sand with few silt and clay - medium-fine grain, moderate yellowish brown, medium dense to loose, poorly graded.
			SP					Sand - medium-fine grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
	490		SM				VP45	Sand with some silt - fine grain, medium light gray to pale yellowish brown, medium dense, poorly graded.
			SP	100	0.0			Sand with little silt - mediun-fine grain, moderate yellowish brown to light gray, medium dense, poorly graded.
	500						VP46	
	510							**End of Soil Core Collection and Groundwater Profiling at 516 ft bge**
	520							

Drilling Log

BORING NO.:	MW-221-Deep
WELL NO.:	MW-221-320
CLIENT:	USACE
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	2/23/2016
DRILLING CONTRACTOR:	Cascade Drilling, LP.
DATE FINISHED:	3/7/2016
DRILLING METHOD:	Sonic
DRILLER:	S. Craig
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	M. Osterberg, E+E, Inc.
Diameter (in):	7
NORTHING (ft):	216002.19
Total Depth (ft):	507.00
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1108684.30
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 122.63
Depth to Water (ft):	50
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Alpha/Beta (cpm)	Analytical Sample No.	Description
122.63	0		SP	100	0.0			Sand with trace silt and trace gravel - medium-coarse grain, dark brown, poorly graded.
121.13			GP					Sand with some gravel and trace silt - medium-coarse grain, medium yellowish brown, poorly graded.
118.63								
117.63			SP	100	1.1			Sand with some gravel and trace silt - medium-coarse grain, dark yellowish brown to moderate yellow, well graded.
				100	0.0			
	10							
106.63			SM					Sand with some silt - medium grain, moderate brown, poorly graded.
105.63			SP	100	0.0			Sand with some gravel - medium grain, dark yellowish brown, well graded.
	20							
95.63			SP	95	0.0			Sand with some gravel - medium to coarse grain, dark yellowish brown to dark yellowish orange, well graded.
	30							
85.63			SP	85	0.0			Sand with some gravel - medium to coarse grain, yellowish grey to dark

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	40							yellowish orange, well graded.
75.63			SP	100	0.0			Sand with few gravel and trace silt - fine-medium grain, yellowish grey to dark orange yellow, well graded.
70.63			SM					Sand with some silt and few gravel - fine-medium grain, yellowish grey to dark orange yellow, well graded.
68.63			SP					Sand with few gravel and trace silt - fine-medium grain, yellowish grey to dark orange yellow, well graded.
65.63			SM	100	0.0			Sand with trace silt - medium grain, dark yellowish orange to yellowish grey, poorly graded.
	60							
55.63			SM	100	0.0			Sand with trace silt - fine grain, yellowish grey, well graded.
53.63			CL					Clay - yellowish grey to orange brown, medium plasticity.
52.63	70		SP					Sand with trace silt - fine grain, yellowish grey, well graded.
45.63			SP-SM	98	0.0			Sand with few silt - fine-medium grain, medium orange brown, well graded.
	80							
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-221-Deep
	Page 3 of 10	WELL NO.: MW-221-320

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
25.63			SP	98	0.0			Sand with trace silt - medium-coarse grain, light yellowish grey to medium yellowish grey, well graded.
	100							
							VP06	
12.63	110		CL					Clay - pale brown, medium plasticity.
5.63			SP	95	0.0			Sand with trace silt and trace clay - fine grain, light orange brown, well graded.
	120							
-4.37			CL				VP08	Clay with trace silt - yellowish grey, medium plasticity.
	130							
-9.37			CL					Clay with trace silt - medium grey to black, low plasticity.
-12.37			CL					Clay with trace silt - light yellowish grey, medium plasticity.
-14.37			SP	95	0.0			Sand with trace silt and trace clay - fine-medium grain, medium orange yellow to yellowish grey, well graded.
	140							
							VP10	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-221-Deep
	Page 4 of 10	WELL NO.: MW-221-320

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	150							
-34.37			SP	93	7.5			Sand with trace silt and trace clay - medium-coarse grain, moderate yellow to light olive grey, well graded.
	160							
							VP12	
	170							
-53.37			CL					Clay - yellowish grey to dark yellowish orange, medium plasticity.
-54.37			SP	100	3.0			Sand with trace silt and trace clay - fine-medium grain, yellowish grey to dark yellowish orange, well graded.
	180							
	190							
							VP15	
-74.37			SP	65	0.0			Sand with trace silt - medium grain, pale brown, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-221-Deep
	Page 5 of 10	WELL NO.: MW-221-320

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
							VP16	
	210							
-94.37			NR	0	0.0			No Recovery
	220							
-104.37			SP	100	0.0			Sand with trace silt and trace clay - fine-medium grain, medium yellowish orange, poorly graded.
	230							
-108.37			CL				VP19	Clay with few silt and trace sand - medium dark grey, low plasticity.
-112.37			SM					Sand with some silt - fine-medium grain, yellowish grey to medium orange yellow, poorly graded.
-114.37			SP	98	0.0			Sand with few silt - fine-medium grain, yellowish grey to medium orange brown, poorly graded.
	240							
							VP20	
	250							
-130.37			SC					Silt with some clay - medium ligh grey.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-221-Deep
	Page 6 of 10	WELL NO.: MW-221-320

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-134.37	260		SP	100	0.0		VP22	Sand with trace silt - fine-medium grain, yellowish grey to medium orange yellow, poorly graded.
-145.37	270		CL					Clay with some silt - medium light grey, medium plasticity.
-154.37	280		SP	100	0.0		VP24	Sand - medium-coarse grain, yellowish grey, poorly graded.
-174.37	290		SP	100	0.0			Sand with trace silt - medium grain, yellowish grey, poorly graded.
-183.37	300		SP				VP26	Sand with few gravel - medium-coarse grain, medium grey to dark grey, poorly graded.
-187.37	310		SC					Sand with some silt and some clay - fine grain, light grey to dark orange yellow, well graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-221-Deep
	Page 7 of 10	WELL NO.: MW-221-320

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-190.37			SM					Sand with some silt - fine-medium grain, dark yellowish orange to light grey, poorly graded.
-194.37			SP	95	0.0			Sand with trace silt - medium grain, yellowish grey to moderate yellow, poorly graded.
	320							
-204.37			SW				VP28	Sand with few gravel and trace silt and clay - medium-coarse grain, dark grey, well graded.
-206.37			SP					Sand with few silt and clay - fine-medium grain, light grey to medium light grey, poorly graded.
	330							
-214.37			SP	100	0.0			Sand with trace gravel - medium-coarse grain, medium light grey to light grey, poorly graded.
	340							
							VP30	
	350							
-228.37			SP					Sand with few silt - fine grain, light grey to very light grey, poorly graded.
-234.37			SP	98	45.0			Sand with trace silt and trace clay - coarse grain, medium dark grey, poorly graded.
	360							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-221-Deep
	Page 8 of 10	WELL NO.: MW-221-320

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-245.37			SC				VP32	Sand with some clay - medium-coarse grain, medium dark grey, poorly graded.
	370							
-248.37			CL					Clay - dark grey, very dense.
	380							
-259.37			SP	98	0.0			Sand with trace clay - medium-coarse grain, light to medium grey, poorly graded.
-263.37			SC				VP34	Sand with some clay - medium-coarse grain, dark yellowish orange to medium dark grey, poorly graded.
	390							
-271.37			SP					Sand with few clay - medium grain, light grey, poorly graded.
-274.37			SP	90	0.0			Sand with trace silt - fine-coarse grain, light grey to yellowish grey, poorly graded.
	400							
							VP36	
	410							
-291.37			SP					Sand with some gravel and trace silt - medium-coarse grain, light grey to yellowish grey, poorly graded.
-292.37								
-294.37			SP	90	0.0			Sand with few silt and clay - medium-coarse grain, light grey to yellowish grey, poorly graded.
	420							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-221-Deep
	Page 9 of 10	WELL NO.: MW-221-320

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-301.37			SM					Sand with mostly silt - medium grain, light grey and yellowish grey, poorly graded.
-304.37			SP				VP38	Sand with few silt and clay - medium-coarse grain, light grey to medium grey, poorly graded.
	430							
-311.37			SP					Sand with few gravel and clay - medium-coarse grain, light grey, well graded.
-314.37			SP	90	0.0			Sand with few silt - fine-medium grain, light grey to yellowish grey, poorly graded.
	440							
							VP40	
	450							
-334.37			SP	90	0.0			Sand with trace silt - fine-medium grain, dark yellowish orange and medium grey, loose, poorly graded.
	460							
							VP42	
	470							
-348.37			SM					Sand with some silt - fine-medium grain, light grey to very light grey, medium dense, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-221-Deep
	Page 10 of 10	WELL NO.: MW-221-320

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-354.37			SP	90	5.2			Sand - medium grain, dark yellowish orange to greyish orange, loose, poorly graded.
	480							
-364.37			SP				VP44	Sand with mostly gravel - medium-coarse grain, yellowish grey to light grey, loose, poorly graded.
-367.37	490		SP					Sand - fine-medium grain, light grey to medium light grey, medium dense, poorly graded.
-373.37			SP					Sand with some gravel - medium-coarse grain, moderate yellowish brown to
-374.37				80	2.3			yellowish pale brown, loose, poorly graded.
	500							
							VP46	**End of Soil Core Collection and Groundwater Profiling at 507 ft bgs**
	510							

Drilling Log

BORING NO.:	MW-222-Deep
WELL NO.:	MW-222-340
CLIENT:	USACE
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	3/7/2016
DRILLING CONTRACTOR:	Cascade Drilling, LP.
DATE FINISHED:	3/25/2016
DRILLING METHOD:	Sonic
DRILLER:	M. Bond
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	T. Dillon, E+E, Inc.
Diameter (in):	7
NORTHING (ft):	214682.51
Total Depth (ft):	537.00
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1108883.61
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 120.66
Depth to Water (ft):	58
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Alpha/Beta (cpm)	Analytical Sample No.	Description
120.66	0		SW	100	0.0			Sand with mostly gravel - medium-coarse grain, dark yellowish brown to moderate yellowish brown, loose, well graded.
115.66			SP	100	0.0			Sand with little gravel - fine-medium grain, dark yellowish orange to moderate yellowish brown, loose, well graded.
113.66			SW	70	0.0			Sand with mostly gravel - fine-coarse grain, dark yellowish orange to moderate yellowish brown, loose, well graded.
	10							
103.66			SW	70	0.0			Sand with mostrly gravel - medium-coarse grain, dark yellowish orange, loose, well graded.
	20							
99.66			SW					Sand with little gravel - fine-medium grain, moderate yellowish brown to dark yellowish orange, loose, well graded.
93.66			SW	60	0.0			Sand with some gravel - fine-coarse grain, dark yellowish orange to light yellowish brown, loose, well graded.
	30							
				70	0.0			

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 2 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	40							
73.66			SP	50	0.0			Sand with some gravel - medium-fine grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
	50							
				80	0.0			
	60							
58.66			SP					Sand with little gravel - medium grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
53.66			SW	40	0.0			Sand with some gravel - fine-coarse grain, moderate yellowish brown to light yellowish orange, loose, well graded.
	70							
43.66			SM	65	0.0			Sand with little silt and clay and trace gravel - fine-medium grain, moderate yellowish brown to dark yellowish brown, loose, poorly graded.
	80							
39.66			SM					Sand with some silt and few clay - fine-medium grain, dark yellowish orange, loose, poorly graded.
34.66			SP					Sand - fine-medium grain, dark yellowish orange, loose, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 3 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
23.66			ML	43	0.0		VP05	Silt with mostly sand - light brown to reddish brown, medium dense.
	100							
17.66			ML					Silt with mostly sand - medium dark grey to greyish brown, medium dense.
11.66	110		ML					Silt with mostly sand - light brown to dark reddish brown, medium dense.
3.66			SP	45	0.0		VP07	Sand with few silt - fine-medium grain, dark yellowish orange to dark brown, loose, poorly graded.
	120							
-5.34			SP					Sand with trace clay - fine-medium grain, moderate yellowish brown to dark yellowish orange, medium dense, poorly graded.
	130							
-16.34			SP	55	0.0		VP09	Sand - medium grain, moderate yellowish brown to light grey, loose, poorly graded.
	140							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 4 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	150						VP11	
-36.34			SP	90	0.0			Sand - medium grain, dark yellowish orange to yellowish brown, loose, poorly graded.
	160							
-45.34			ML					Silt with little clay and trace sand - dark yellowish orange to moderate yellowish brown, soft.
	170							
-53.34			SP					Sand - fine-medium grain, dark yellowish orange to moderate yellowish brown, medium dense, poorly graded.
-56.34			SP	60	0.0		VP13	Sand - medium grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
	180							
	190							
-73.34			SM					Sand with some silt and trace clay - fine-medium grain, dark yellowish orange, loose, poorly graded.
-76.34			SP	75	0.0		VP15	Sand - medium grain, dark yellowish brown, loose, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 5 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	210							
-92.34			SP					Sand - medium grain, dark yellowish orange, loose, poorly graded.
				90	0.0		VP17	
	220							
-104.34			ML					Silt with some sand and little clay - dark yellowish orange to yellowish grey, soft.
-107.34			SP					Sand - fine grain, yellowish grey to dark yellowish orange, loose, poorly graded.
	230							
-116.34			SP	90	0.0		VP19	Sand with little silt - fine-medium grain, moderate yellow, loose, poorly graded.
	240							
	250							
-134.34			SP					Sand - fine grain, medium light grey, medium dense, poorly graded.
							VP21	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 6 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-136.34			SP	100	0.0			Sand - medium grain, light olive grey, loose, poorly graded.
	260							
-145.34			SP					Sand with few silt - fine-medium grain, yellowish grey, medium dense, poorly graded.
-148.34			CL					Clay - very pale orange, medium stiff.
	270							
-150.34			SP					Sand with few silt - fine-medium grain, yellowish grey to greyish black, medium dense, poorly graded.
-153.34			SP					Sand - fine-medium grain, dark yellowish orange to yellowish grey, medium dense, poorly graded.
-156.34			SP	100	0.0		VP23	Sand - medium grain, dark yellowish orange, loose, poorly graded.
	280							
-159.34			CH					Clay - dark grey to medium grey, very dense.
-166.34			CH	20	0.0			Clay - pale yellowish brown, dense.
-167.34			SP					Sand - medium grain, dark yellowish orange, loose, poorly graded.
	290							
-176.34			SC	90	0.0			Sand with some clay - medium grain, greyish orange, medium dense, poorly graded.
-177.34			SP					Sand - medium grain, yellowish grey, loose, poorly graded.
	300							
							VP26	
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 7 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-196.34			SP	90	0.0		VP27	Sand - medium grain, moderate yellowish brown, loose, poorly graded.
-198.34	320		SP					Sand - medium grain, pale yellowish brown, loose, poorly graded.
	330							
-216.34			SM	75	0.0		VP29	Sand with some silt - fine-medium grain, yellowish grey, medium dense, poorly graded.
	340							
-225.34			SP					Sand - medium grain, yellowish grey, loose, poorly graded.
	350							
-231.34			ML					Clay with some silt - medium light grey, slightly dense.
				100	0.0		VP31	
-239.34	360		ML					Clay with some silt - medium dark grey, dense.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 8 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-247.34			SP					Sand - medium grain, dark yellowish orange to light grey, loose, poorly graded.
	370							
-256.34			CH	75	0.0			Clay - very pale orange, very dense.
	380							
-261.34			SP				VP34	Sand - fine-medium grain, light olive grey, slightly dense, poorly graded.
-266.34			SP					Sand - fine grain, light olive grey, loose, poorly graded.
	390							
-276.34			NR	0	--			No Recovery
	400						VP36	
-286.34			SP	100	0.0			Sand with trace clay - medium grain, yellowish grey, medium dense, poorly graded.
	410							
-296.34			SP				VP37	Sand - medium grain, yellowish grey, loose, poorly graded.
	420							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 9 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-306.34	430		SP	63	0.0			Sand - medium grain, pale to dark yellowish brown, loose, poorly graded.
-310.34			SP					Sand - fine grain, pale yellowish brown, loose, poorly graded.
	440						VP39	
-326.34			ML	80	0.0			Clay with some silt - pale brown, very dense.
-328.34	450		ML					Clay with some silt - pale yellowish brown, very dense.
-330.34			SP				VP41	Sand - medium grain, light olive grey, loose, poorly graded.
-336.34	460		SP	100	0.0			Sand - medium grain, pinkish grey, loose, poorly graded.
-341.34			CH					Clay with some silt - pinkish grey, very dense.
-344.34			SP					Sand - medium grain, dark yellowish orange, loose, poorly graded.
-346.34	470		SP	100	0.0			Sand - medium grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
							VP43	
	480							
-361.34			SP					Sand - medium-coarse grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
-362.34								
			SP					Sand with few clay - fine-medium grain, light olive brown to dusky yellow, medium dense, poorly graded.
-366.34			SP	60	0.0			Sand - medium grain, light olive brown, loose, poorly graded.
	490							
-370.34			SP					Sand - fine-medium grain, light grey to yellowish grey, medium dense, poorly graded.
-372.34								
-376.34			SP	53	0.0		VP45	Sand - fine-medium grain, light grey to yellowish grey, medium dense, poorly graded.
	500							
-386.34			SP					Sand with few silt - fine-medium grain, light grey, loose, poorly graded.
	510							
-393.34			SP					Sand with few silt - fine-medium grain, yellowish grey, loose, poorly graded.
-394.34			SM					Sand with some silt and trace clay - fine grain, yellowish grey to moderate yellowish brown, dense, poorly graded.
-396.34			SP	100	0.0			Sand - medium grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
	520							
							VP48	
-405.34			SW					Sand with little gravel and few clay - medium grain, pale yellowish brown to dark yellowish orange, loose, well graded.
	530							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-222-Deep
	Page 11 of 11	WELL NO.: MW-222-340

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-410.34	540		GC				VP49	Gravel with mostly clay and sand - moderate yellowish brown to pale yellowish brown, dense, well graded. **End of Soil Core Collection and Groundwater Profiling at 537 ft bgs**

Drilling Log

BORING NO.:	MW-223-Deep
WELL NO.:	MW-223-580
CLIENT:	USACE
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	1/4/2016
DRILLING CONTRACTOR:	Cascade Drilling, LP.
DATE FINISHED:	2/17/2016
DRILLING METHOD:	Sonic
DRILLER:	M. Osterberg
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	J. Ganz, Louis Berger
Diameter (in): 7	
NORTHING (ft):	210665.07
Total Depth (ft): 601.00	Volatile Organic Compounds (SW8260B)
EASTING (ft):	1109257.82
Disposition of Hole: Monitoring Well	Total Nickel (SW6010B)
GROUND ELEVATION (ft):	108.61
Depth to Water (ft): 46.15	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Alpha/Beta (cpm)	Analytical Sample No.	Description
108.61	0		SM	100				Silt with little sand - dark yellowish brown, soft, poorly graded.
107.11			SP					Sand with few gravel - fine-coarse grain, moderate yellowish brown, loose, poorly graded.
103.61			SP	100				Sand with little gravel - medium-coarse grain, moderate yellowish brown, loose, poorly graded.
101.61			SP	100				Sand with some gravel - fine-coarse grain, moderate yellowish brown, loose, poorly graded.
	10							
91.61			SP	70				Sand with some gravel - fine-coarse grain, moderate yellowish brown, loose, poorly graded.
88.61	20		SP					Sand with few gravel - fine-medium grain, moderate yellowish brown to dark yellowish brown, loose, poorly graded.
81.61			SP	90				Sand with few gravel - fine-coarse grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.
	30							
71.61			SP	30				Sand with few gravel - fine-medium grain, dark yellowish brown to moderate

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
								brown, loose, poorly graded.
	40							

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	100			100				
	110							
-2.39			SP					Sand with little sand and clay - medium-coarse grain, dark yellowish orange, medium dense, poorly graded.
-6.39			SP					Sand with few silty clay - fine-medium grain, dark yellowish orange to greyish brown, dense, poorly graded.
-8.39			SP	85				Sand with few silty clay - fine-medium grain, moderate yellowish brown to very pale orange, medium dense, poorly graded.
	120							
	130							
-28.39			SP	100				Sand with few silt and few gravel - fine-medium grain, moderate orange brown to dusky yellow, loose, poorly graded.
	140							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-223-Deep
	Page 4 of 12	WELL NO.: MW-223-580

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	150							
-45.39			CL					Clay with few sand - brownish black, very dense.
				98				
	160							
-59.39			SP					Sand with little silty clay - fine-medium grain, dark yellowish orange to moderate yellow, loose, poorly graded.
	170							
-68.39			SP	95	0.0			Sand with few silty clay - fine-coarse grain, dark yellowish brown to moderate brown, loose, poorly graded.
	180							
	190							
-85.39			SC					Sand with some silty clay - fine-medium grain, dark yellowish orange to pale yellowish brown, dense, poorly graded.
-88.39			SP	85	0.0			Sand with few silt - fine-medium grain, pale yellowish brown, loose, poorly graded.
	200							

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-108.39	210		SP	68	0.0			Sand with few silt - fine-medium grain, pale yellowish brown to dusky yellow, loose, poorly graded.
	220							
	230						VP19	
-128.39			SP	100	0.0			Sand with few silt - fine-medium grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
	240							
-134.39			CL					Clay with few sand - fine grain, pale yellowish brown to dark grey, dense, poorly graded.
-138.39			CL				VP20	Clay with few sand - black to brownish black, very dense.
-140.39	250		SP-SM					Sand with little silt and few gravel - fine-coarse grain, light olive grey to dark yellowish orange, medium dense, poorly graded.

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-148.39	260		SP	98	0.0		VP22	Sand with few silt and few gravel - fine-coarse grain, moderate yellowish brown to light olive grey, medium dense, poorly graded.
	270							
-168.39	280		SP	98	0.0			Sand with few silt - fine-medium grain, dark orange brown to moderate orange brown, loose, poorly graded.
-173.39			SP-SM					Sand with little silt - fine-medium grain, dark yellowish orange to pale olive grey, medium dense, poorly graded.
-178.39	290		CL				VP24	Clay - yellowish brown, dense.
-188.39	300		SP	95	0.0		VP26	Sand - medium-coarse grain, dusky yellow, loose, poorly graded.
-199.39	310		CL					Clay with trace sand - pale yellowish brown to medium grey, very stiff.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-223-Deep
	Page 7 of 12	WELL NO.: MW-223-580

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-205.39			SP					Sand - medium-coarse grain, dusky yellow, loose, poorly graded.
-208.39			SP	100	0.0			Sand - fine-coarse grain, greyish orange, loose, poorly graded.
	320							
-216.39			SM				VP28	Sand with some silt - fine-medium grain, yellowish grey to moderate brown, medium dense, poorly graded.
-220.39	330		SP					Sand with few silt - fine-medium grain, pale yellowish brown, loose, poorly graded.
-228.39			SP	100	0.0			Sand with few silt - fine-coarse grain, pale yellowish brown to dark yellowish orange, loose, poorly graded.
	340							
							VP30	
	350							
-243.39			SP-SM					Sand with little silt - fine-coarse grain, pale yellowish orange to moderate yellowish brown, medium dense, poorly graded.
-248.39			SP	100	0.0			Sand with few silt - medium grain, light olive grey to medium dense, medium dense, poorly graded.
	360							

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
							VP32	
	370							
-268.39			SP	80	0.0			Sand - medium-coarse grain, dark yellowish orange to yellowish grey, loose, poorly graded.
	380							
-279.39			ML					Silt - brownish grey, very stiff.
	390						VP35	
-282.39			CL					Clay with few sand - pale yellowish brown, stiff.
-288.39			SP	90	0.0			Sand with few silt - fine-coarse grain, light olive brown to olive grey, loose, poorly graded.
	400							
							VP36	
	410							
-308.39			SP	100	0.0			Sand with few sand - fine-coarse grain, pale yellowish brown, loose, poorly graded.
	420							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-223-Deep
	Page 9 of 12	WELL NO.: MW-223-580

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-317.39			SP-SM				VP38	Sand with little silt - fine-medium grain, little olive grey, medium dense, poorly graded.
	430							
-325.39			SM					Sand with some silt - fine-medium grain, little olive grey to dark yellowish orange, medium dense, poorly graded.
-328.39			SP-SM	100	0.0			Sand with little silt - fine-coarse grain, light oliver grey to greenish grey, loose, poorly graded.
	440							
							VP40	
	450							
-344.39			CL					Clay with few sand - pale yellowish brown, stiff.
-346.39			SM					Sand with some silt - fine-medium grain, pale brown, loose, poorly graded.
-348.39			SP-SM	100	0.0			Sand with little silt - fine-coarse grain, light olive grey, loose, poorly graded.
	460							
-352.39			SM					Sand with some silt - fine-medium grain, dusky yellow, loose, poorly graded.
							VP42	
-359.39			SP					Sand with few silt - fine-coarse grain, greenish grey, medium dense, poorly graded.
	470							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-223-Deep
	Page 10 of 12	WELL NO.: MW-223-580

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-368.39			SP	100	0.0			Sand with few silt - fine-coarse grain, light olive grey to moderate brown, loose, poorly graded.
	480							
							VP44	
-381.39	490		SP-SM					Sand with little silt - fine-coarse grain, moderate yellowish brown, loose, poorly graded.
-388.39			SP-SM	97	0.0			Sand with little silt - fine-medium grain, pale yellowish brown, loose, poorly graded.
	500							
			SP					Sand with few clayey silt and few gravel - fine-coarse grain, dusky yellowish brown to dark yellowish orange, loose, poorly graded.
-400.39								
-401.39	510		SP-SM					Sand with little silt - fine-coarse grain, pale yellowish brown, medium dense, poorly graded.
-403.39			SP	92	0.0			Sand with few silt - fine-coarse grain, greyish orange pink to dusky yellow, loose, poorly graded.
	520							
							VP48	
	530							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-223-Deep
	Page 11 of 12	WELL NO.: MW-223-580

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-428.39			SP	100	0.0			Sand with few silt - fine-medium grain, greyish orange to light olive grey, loose, poorly graded.
	540							
-438.39			SP-SM				VP50	Sand with little silt and few clay - fine-coarse grain, yellowish grey to pale yellowish brown, loose, poorly graded.
	550							
-448.39			SP	55	0.0			Sand with some gravel - fine-coarse grain, pale yellowish brown, medium dense, poorly graded.
	560							
				50	0.0			
	570							
-462.39			SP					Sand with few silt and few gravel - fine-coarse grain, greyish orange, medium dense, poorly graded.
-468.39			SP	100	0.0		VP53	Sand with some gravel and few clayey silt - medium-coarse grain, greyish orange pink, medium dense, poorly graded.
	580							
-473.39			SP					Sand with few silt - fine-medium grain, pale yellowish brown, medium dense, poorly graded.

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	590			50	0.0		VP55	
-484.39			SP					Sand with few silt - fine-medium grain, light olive grey, medium dense, poorly graded.
-486.39			SP-SM	100	0.0			Sand with some gravel and little silty clay - medium-coarse grain, light brown, dense, poorly graded.
-488.39			SP					Sand with some gravel and trace silty clay - fine-coarse grain, light brown to pale yellowish orange, medium dense, poorly graded.
-491.39	600		SM					Sand with some silt and few gravel - fine-coarse grain, pale yellowish brown, stiff, poorly graded.
								End of Soil Core Collection and Groundwater Profiling at 601 ft bgs

Drilling Log

BORING NO.:	MW-224-Deep
WELL NO.:	MW-224-330
CLIENT:	USACE
PROJECT NO:	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP
DATE STARTED:	2/17/2016
DRILLING CONTRACTOR:	Cascade Drilling, LP.
DATE FINISHED:	3/4/2016
DRILLING METHOD:	Sonic
DRILLER:	M. Bond
BOREHOLE DATA	**SAMPLES FOR CHEMICAL ANALYSIS**
INSPECTOR:	T. Dillon, E+E, Inc.
Diameter (in):	7
NORTHING (ft):	220190.78
Total Depth (ft):	435.00
Volatile Organic Compounds (SW8260B)	**EASTING (ft):** 1106763.49
Disposition of Hole:	Monitoring Well
Total Nickel (SW6010B)	**GROUND ELEVATION (ft):** 147.62
Depth to Water (ft):	72.5
Total Uranium (D5174)	

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Alpha/Beta (cpm)	Analytical Sample No.	Description
147.62	0		SW	100	0.0			Sand with some gravel - medium-coarse grain, moderate yellowish brown, loose, well graded.
142.62			SW	100	0.0			Sand with few gravel - fine-medium grain, moderate yellowish brown, loose, well graded.
140.62			SW	100	0.0			Sand with little gravel - medium-coarse grain, yellowish brown to dark yellowish orange, loose, well graded.
	10							
130.62			SW	80	0.0			Sand with few gravel - medium-coarse grain, moderate yellowish brown to dark yellowish orange, loose, well graded.
	20							
120.62			SW	70	0.0			Sand with few gravel - medium-coarse grain, moderate yellowish brown, loose, well graded.
	30							
110.62			SP	100	0.0			Sand with trace gravel - fine-medium grain, moderate yellowish brown, loose,

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	40							poorly graded.
100.62			SW	90	0.0			Sand with trace gravel - fine-medium grain, dark yellowish orange, loose, well graded.
	50							
				100	0.0			
	60							
80.62			SP	70	0.0			Sand with little gravel - medium grain, dark yellowish orange to moderate yellowish orange, loose, poorly graded.
	70							
70.62			SP	100	0.0			Sand - medium-coarse grain, dark yellowish orange to dark yellowish brown, loose, poorly graded.
	80							
							VP04	
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-224-Deep
	Page 3 of 9	WELL NO.: MW-224-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
50.62			SP	90	0.0			Sand - medium-coarse grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
	100							
45.62			SW					Sand with some gravel - medium-coarse grain, dark yellowish orange to moderate yellowish, loose, well graded.
42.62			SP					Sand - medium-coarse grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
	110						VP06	
				55	0.0			Sand - medium-coarse grain, dark yellowish orange to moderate yellowish brown, loose, poorly graded.
	120							
	130						VP08	
10.62			SP	70	0.0			Sand - medium grain, dark yellowish orange, loose, poorly graded.
	140							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-224-Deep
	Page 4 of 9	WELL NO.: MW-224-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	150						VP10	
-4.38			SP					Sand - fine-medium grain, dark yellowish orange, medium dense, poorly graded.
-9.38			SP	20	0.0			Sand - fine-medium grain, light yellowish orange, fine-medium, poorly graded.
	160							
	170						VP12	
-29.38			SP	75	0.0			Sand with few gravel - medium grain, dark yellowish orange, medium dense, poorly graded.
	180							
	190						VP14	
-49.38			SP	40	0.0			Sand - medium grain, dark yellowish orange, loose, poorly graded.
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-224-Deep
	Page 5 of 9	WELL NO.: MW-224-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	210						VP17	
-69.38			SP	70	0.0			Sand - medium grain, light yellowish orange to dark yellowish orange, loose, poorly graded.
	220							
	230						VP19	
-89.38			SP	65	0.0			Sand - fine-medium grain, dark yellowish orange to light olive grey, loose, poorly graded.
	240							
	250						VP20	
-106.38			SP					Sand - medium grain, olive grey, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-224-Deep
	Page 6 of 9	WELL NO.: MW-224-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-109.38			SP	100	0.0			Sand - medium grain, dark yellowish orange, loose, poorly graded.
	260							
	270						VP22	
-129.38			SP	50	72.0			Sand - fine-medium grain, dark yellowish orange to light yellowish orange, loose, poorly graded.
	280							
	290						VP25	
-149.38			SP	55	42.0			Sand - medium grain, dark yellowish orange, loose, poorly graded.
	300							
	310						VP27	

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-224-Deep
	Page 7 of 9	WELL NO.: MW-224-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-165.38			SP					Sand with little gravel - medium-coarse grain, dark yellowish orange, loose, well graded.
				100	0.0			Sand with little gravel - medium-coarse grain, dark yellowish orange, loose, well graded.
	320							
	330						VP28	
-185.38			SP-SC					Sand with few clay - fine-medium grain, light olive grey, dense, poorly graded.
-187.38			SP					Sand - medium grain, light olive grey, medium dense, poorly graded.
-189.38			SP	100	3.0			Sand - medium grain, dark yellowish orange, medium dense, poorly graded.
	340							
-199.38			CL					Clay with little silt and little sand - light olive grey, stiff.
	350						VP31	
-209.38			SP	100	178.0			Sand - medium grain, yellowish grey, loose, poorly graded.
	360							
-214.38			SP					Sand - medium-coarse grain, moderate yellowish brown to dark yellowish orange, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-224-Deep
	Page 8 of 9	WELL NO.: MW-224-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
	370						VP32	
-229.38			SP	90	59.0			Sand - medium-fine grain, yellowish grey, loose, poorly graded.
	380							
-234.38			SP					Sand with few silt - fine grain, yellowish grey, loose, poorly graded.
-237.38			SP					Sand - fine-medium grain, yellowish grey, loose, poorly graded.
-242.38	390		SP				VP35	Sand - medium grain, yellowish grey, dense, poorly graded.
-244.38			SP					Sand with few clay - medium grain, yellowish grey to dark yellowish orange, loose, poorly graded.
-249.38			SP	65	0.0			Sand - medium grain, dark yellowish brown to moderate yellowish brown, loose, poorly graded.
	400							
	410						VP36	
-264.38			SP					Sand - fine grain, greyish orange to dark yellowish orange, loose, poorly graded.
-269.38			SP	100	0.0			Sand - medium grain, moderate yellowish brown to greyish orange, loose, poorly graded.
-272.38	420		CH					Clay with trace sand - dark grey, very stiff.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-224-Deep
	Page 9 of 9	WELL NO.: MW-224-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-274.38			CH	90	0.0			Clay - dark grey, very stiff.
-277.38			CH					Clay - medium light grey to yellowish grey, very stiff.
	430							
								End of Soil Core Collection and Groundwater Profiling at 435 ft bgs
	440							

Drilling Log

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BORING NO.:	MW-225-Deep
WELL NO.:	MW-225-330
CLIENT:	USACE
PROJECT:	Sylvania Corning FUSRAP
DRILLING CONTRACTOR:	Cascade Drilling, LP.
DRILLING METHOD:	Sonic
PROJECT NO:	2001764.012.05
DATE STARTED:	3/9/2016
DATE FINISHED:	3/22/2016
DRILLER:	M. Osterberg
INSPECTOR:	S. Craig, E+E, Inc.
NORTHING (ft):	218257.52
EASTING (ft):	1107262.42
GROUND ELEVATION (ft):	137.84

BOREHOLE DATA		**SAMPLES FOR CHEMICAL ANALYSIS**
Diameter (in):	7	
Total Depth (ft):	460.00	Volatile Organic Compounds (SW8260B)
Disposition of Hole:	Monitoring Well	Total Nickel (SW6010B)
Depth to Water (ft):	70.0	Total Uranium (D5174)

Elevation	Depth	Lithology	USCS	Core Recovery (%)	Field Screening (PID) (ppm)	Field Screening Alpha/Beta (cpm)	Analytical Sample No.	Description
137.84	0		SM	100	0.0			Sand with some silt and few clay - mediuum grain, yellowish brown, loose, poorly graded.
132.84			SP	100	0.0			Sand with few gravel - coarse grain, moderate yellow, loose, poorly graded.
130.84			SP	100	0.0			Sand with some gravel - coarse grain, medium yellowish orange to moderate brown, loose, poorly graded.
	10							
120.84			SP	100	15.0			Sand with some gravel - coarse grain, moderate brown, loose, poorly graded.
	20							
110.84			SP	85	5.0			Sand with some gravel - coarse grain, yellowish orange, loose, poorly graded.
	30							
100.84			SP	100	8.0			Sand with some gravel - medium-coarse grain, moderate brown to greyish

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-225-Deep
	Page 2 of 9	WELL NO.: MW-225-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
								orange, loose, poorly graded.
	40							
90.84			SP	100	0.0			Sand with trace gravel - medium grain, dark yellowish orange, loose, poorly graded.
	50							
86.84			ML					Silt with some clay overlain with 1' sand with trace gravel - yellowish grey. dense
81.84								
80.84			ML	100	0.0			Silt with some clay - yellowish grey, dense.
77.84	60		SP					Sand with trace silt and trace clay - medium grain, dark yellowish orange, medium dense, poorly graded.
70.84			SP	100	0.0			Sand with few silt - fine-medium grain, yellowish grey to pale red, medium dense, poorly graded.
	70							
							VP03	
	80							
50.84			SP	100	0.0			Sand with few silt - fine grain, yellowish grey to pale red, medium dense, poorly graded.
	90							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-225-Deep
	Page 3 of 9	WELL NO.: MW-225-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
							VP05	
	100							
30.84			SP	90	5.0			Sand with trace silt - medium grain, moderate yellow, loose, poorly graded.
	110							
							VP07	
	120							
16.84			SM					Sand with some silt - fine grain, yellowish grey, medium dense, poorly graded.
10.84			SM	100	15.0			Sand with some silt - fine-medium grain, moderate yellowish grey, medium dense, poorly graded.
	130							
							VP09	
	140							
-9.16			SP	100	0.0			Sand - medium grain, moderate yellow to dark yellowish orange, loose, poorly

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
								graded.
	150							
-16.16			OL					Silt and Clay - dark grey to black, very dense.
							VP13	
	160							
-28.16			CL					Clay - pale yellowish brown to greyish brown, very dense.
-29.16			CL	100	13.0			Clay - dark grey, very dense.
	170							
							VP13	
	180							
-45.16			CL					Clay - light greyish brown, medium dense.
-48.16			SM					Sand with some silt - fine grain, light grey, loose, poorly graded.
-49.16			SM	100	0.0			Sand with some silt - medium grain, moderate yellow to dark yellowish orange, loose, poorly graded.
	190							
							VP15	
	200							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-225-Deep
	Page 5 of 9	WELL NO.: MW-225-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-69.16			SP	100	0.0			Sand with trace clay and trace gravel - medium grain, moderate yellow to dark yellowish orange, loose, poorly graded.
	210							
-74.16			SM					Sand with some silt - fine grain, light grey to yellowish grey, medium dense, poorly graded.
							VP17	
-81.16	220		CL					Clay - yellowish grey, medium dense.
-83.16			SM					Sand with some silt and few clay - fine grain, light grey to yellowish grey, medium dense, poorly graded.
-89.16			CL	100	0.0			Clay - dark grey, very dense.
	230							
	240							
-109.16			CL	70	0.0			Clay - yellowish grey, very dense.
-111.16	250		SP					Sand with few silt - medium grain, moderate yellow to dark yellowish orange, loose, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-225-Deep
	Page 6 of 9	WELL NO.: MW-225-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-119.16			SP	100	0.0			Sand with trace silt and trace clay - medium grain, moderate yellow to dark yellowish orange, loose, poorly graded.
	260						VP22	
	270							
-139.16			SP	100	0.0		VP23	Sand with trace silt - medium grain, moderate yellow to dark yellowish orange, loose, poorly graded.
	280							
-149.16			SC					Sand with some clay - fine grain, yellowish grey, very stiff.
-152.16	290		CL					Clay - dark grey, very stiff.
-155.16			SC					Sand with some clay - fine grain, yellowish grey to greyish orange, very stiff.
-159.16			SP	100	0.0			Sand with trace silt - fine-medium grain, yellowish grey, loose, poorly graded.
	300							
-169.16			SP	80	0.0		VP26	Sand with trace silt - fine-medium grain, light grey to yellowish grey, loose, poorly graded.
	310							

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-225-Deep
	Page 7 of 9	WELL NO.: MW-225-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
							VP27	
	320							
-189.16			SP	93	0.0			Sand with trace silt - fine-medium grain, moderate yellow to yellowish grey, loose, poorly graded.
	330							
							VP29	
	340							
-209.16			SP	100	0.0			Sand - fine-medium grain, moderate yellow to yellowish grey, loose, poorly graded.
	350							
-218.16			SP				VP31	Sand - medium-coarse grain, yellowish orange to moderate yellow, loose, poorly graded.
	360							
-224.16			SM					Sand with some silt - fine-medium grain, light grey to yellowish grey, dense, poorly graded.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-225-Deep
	Page 8 of 9	WELL NO.: MW-225-330

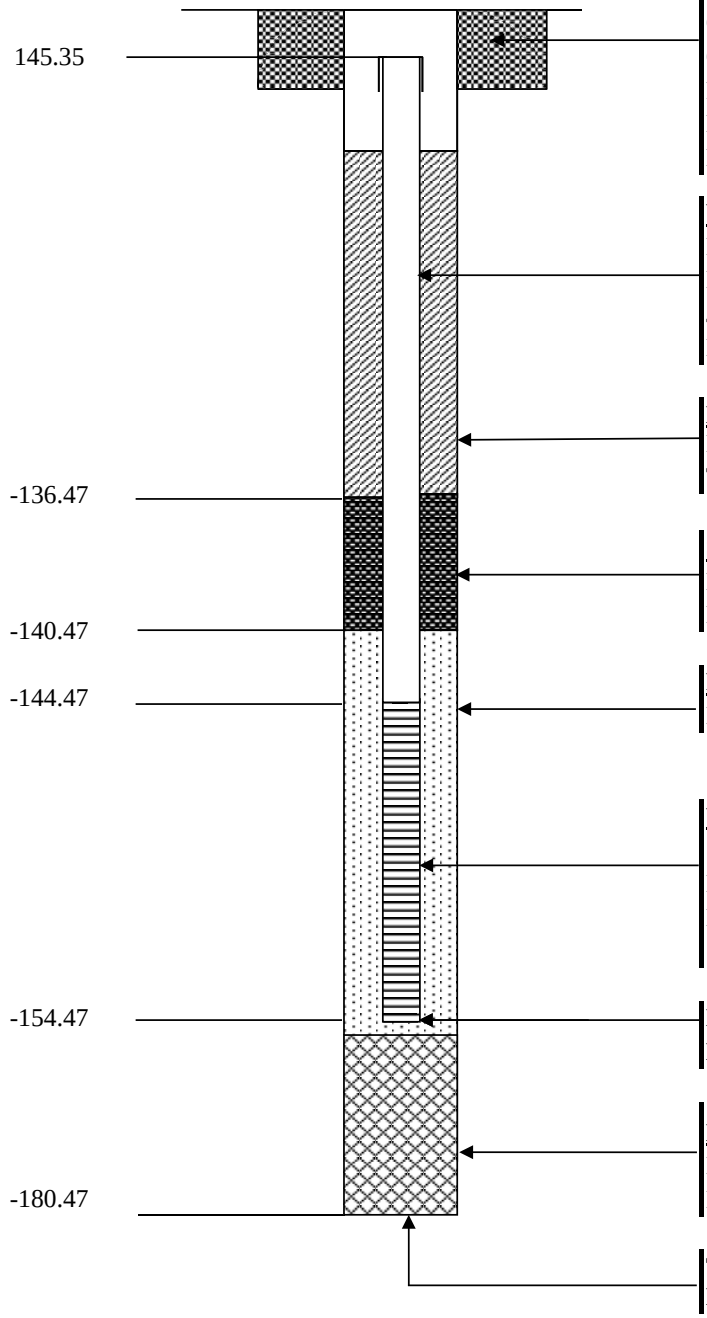
Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
-229.16			SP	100	5.0			Sand with few silt - fine-medium grain, light grey to moderate yellow, loose, poorly graded.
	370							
							VP33	
	380							
-249.16			SP	20	0.0			Sand with few silt - fine-medium grain, yellowish grey to medium grey, loose, poorly graded.
	390							
-258.16			CL					Clay with some silt - dark grey, hard.
	400							
-267.16			SP					Sand with few silt - fine-medium grain, yellowish grey to moderate yellow, loose, poorly graded.
				100	0.0			
	410							
							VP37	
	420							
-283.16								Clay with some silt - dark grey, firm.

	PROJECT NO.: 2001764.012.05	BORING NO.: MW-225-Deep
	Page 9 of 9	WELL NO.: MW-225-330

Elev.	Depth	Lith.	USCS	Rec.	PID	Alpha Beta	Sample	Description
			CL					
-285.16			SP					Sand with few silt - fine-medium grain, yellowish grey, loose, poorly graded.
-288.16			CL					Clay with some silt - dark grey, firm.
-289.16			SP	100	0.0			Sand with few silt - fine-medium grain, yellowish grey, loose, poorly graded.
-292.16	430		SM					Sand with some silt - fine-medium grain, pale brown, stiff.
-294.16			SP					Sand with few silt - fine-medium grain, yellowish grey, loose, poorly graded.
-297.16			SM				VP39	Sand with some silt - fine-medium grain, light yellowish brown, stiff, poorly graded.
-302.16	440		ML					Silt with few sand - light grey, hard, poorly graded.
				100	0.0			
-311.16	450		SW					Sand - fine-coarse grain, light brown, loose, well graded.
-317.16			ML					Silt with few sand - fine-coarse grain, light grey, stiff, poorly graded.
-318.16			SM					Sand with some silt - fine-medium grain, light yellowish brown, stiff, poorly graded.
	460						VP41	**End of Soil Core Collection and Groundwater Profiling at 460 ft bgs**

	Well Construction Diagram		WELL NO.:	MW-13D-300
CLIENT:	USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP		**DATE STARTED:**	11/8/2008
DRILLING CONTRACTOR:	Borat Longyear		**DATE FINISHED:**	11/18/2008
DRILLING METHOD:	Sonic		**DRILLER:**	M. Mclean
NORTHING (FT):	219754.5	**GS ELEVATION (FT):** 145.53	**INSPECTOR:**	B. Cole, E&E, Inc.
EASTING (FT):	1108775.2	**WATER LEVEL (FT, BTOC):** 64.30	**TOTAL WELL DEPTH (FT, BGS):**	300

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

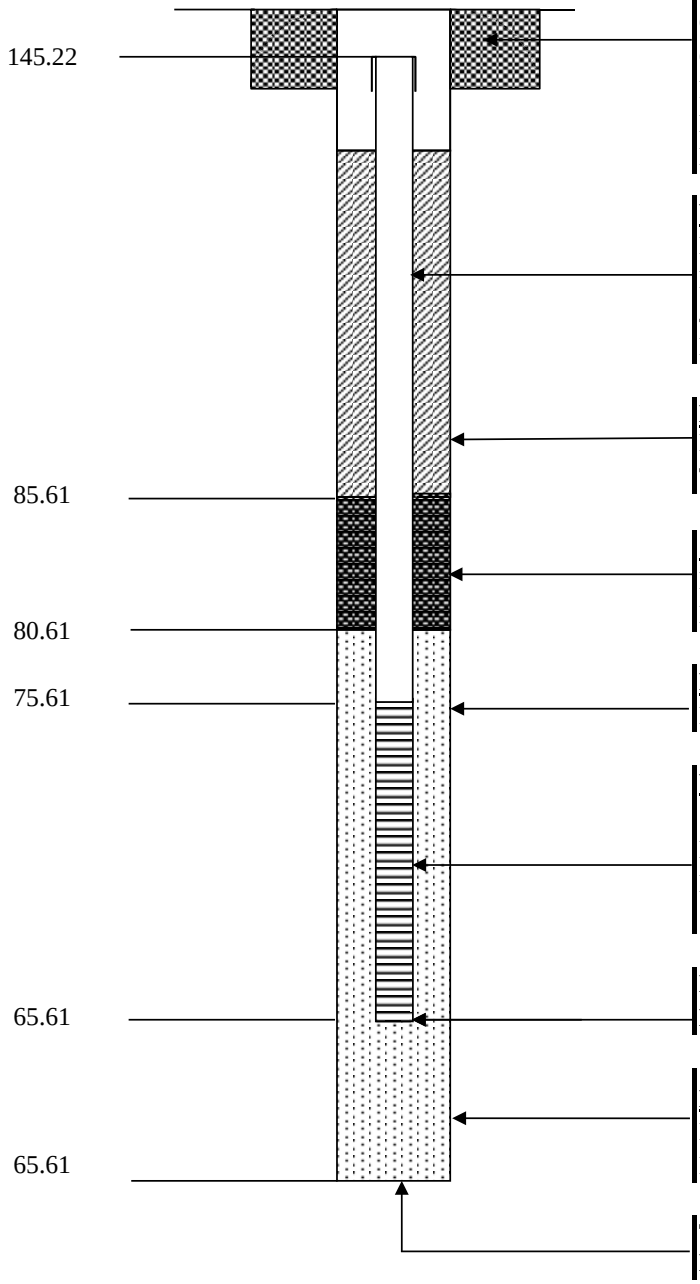


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**289.82 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**281.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 14 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**300 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Colapse / 26 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**326 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-13S-80**

CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	12/14/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	12/16/2009
DRILLING METHOD:	Sonic			**DRILLER:**	G. Perch
NORTHING (FT):	219755.9	**GS ELEVATION (FT):**	145.61	**INSPECTOR:**	P. Connelly, CDM
EASTING (FT):	1108764.5	**WATER LEVEL (FT, BTOC):**	62.18	**TOTAL WELL DEPTH (FT, BGS):**	80

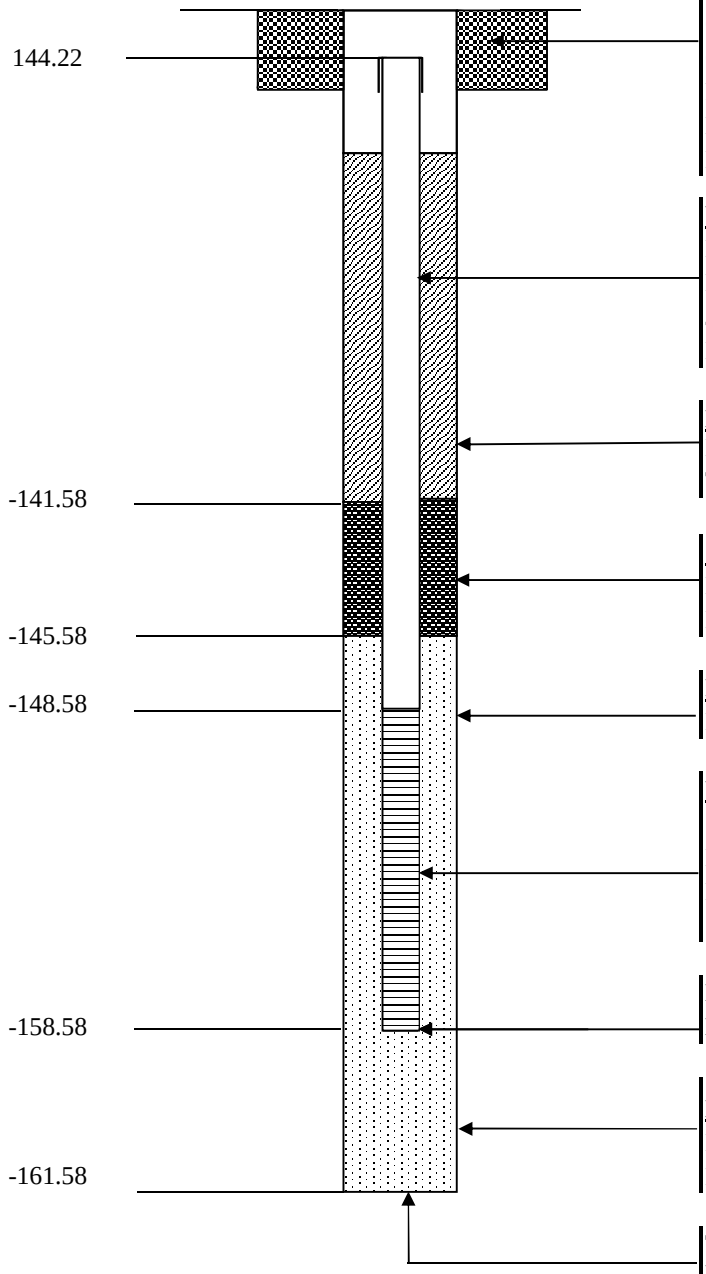
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.61 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**59.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**80 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**80 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-14D-305
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	11/8/2008
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	11/17/2008
DRILLING METHOD:	Sonic	**DRILLER:**	M. Mclean
NORTHING (FT):	219828.2	**GS ELEVATION (FT):** 144.42	**INSPECTOR:** S. Craig, E&E, Inc.
EASTING (FT):	1109083.5	**WATER LEVEL (FT, BTOC):** 63.19	**TOTAL WELL DEPTH (FT, BGS):** 305

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

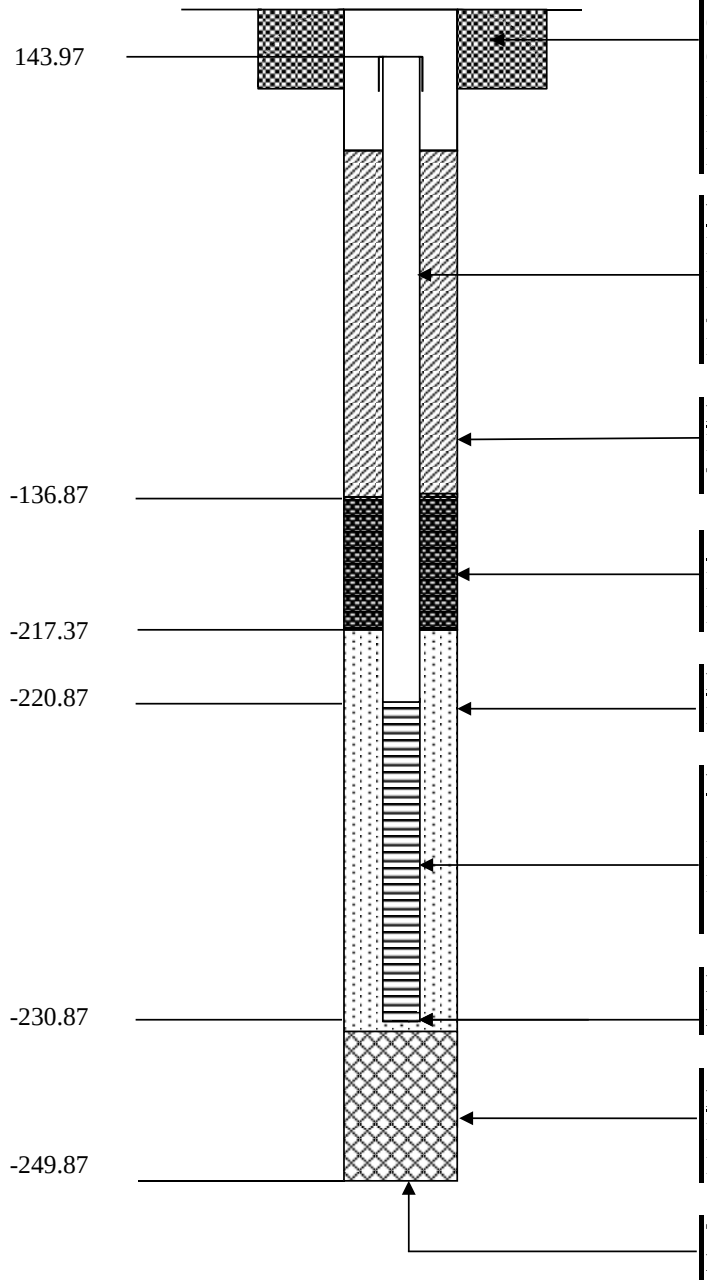


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**294**
BACKFILL AROUND CASING	
MATERIAL	**Portland Cement**
THICKNESS	**285.3 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**305 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**306 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-14DD-375**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	11/10/2009
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	12/11/2009
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	A. Carsen
NORTHING (FT):	219846.0	**GS ELEVATION (FT):**	144.13	**INSPECTOR:**	P. Connelly, CDM
EASTING (FT):	1109089.2	**WATER LEVEL (FT, BTOC):**	63.11	**TOTAL WELL DEPTH (FT, BGS):**	375

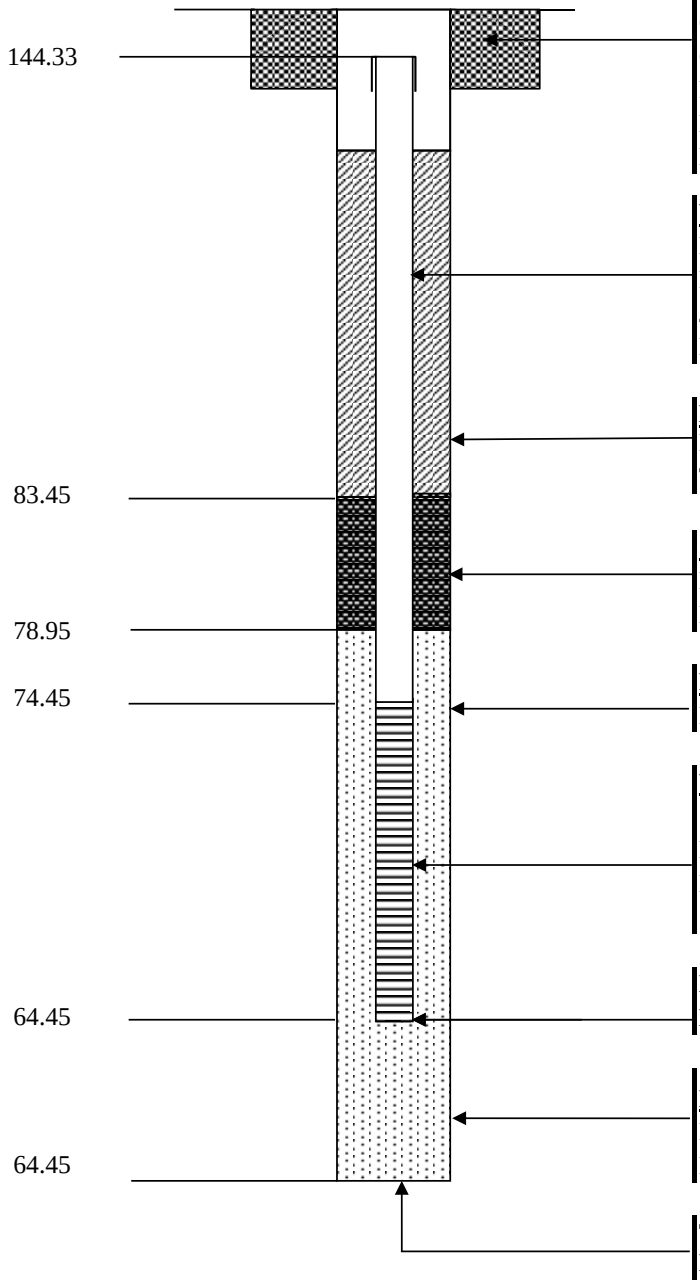
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**364.84 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**280.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 80.5 feet**
MATERIAL / THICKNESS	
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 13.5 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**375 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 19 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**394 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-14S-80
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	11/9/2009
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	11/10/2009
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	B. Zamow
NORTHING (FT):	219812.9	**GS ELEVATION (FT):** 144.45	**INSPECTOR:** P. Connelly, CDM
EASTING (FT):	1109078.9	**WATER LEVEL (FT, BTOC):** 63.26	**TOTAL WELL DEPTH (FT, BGS):** 80

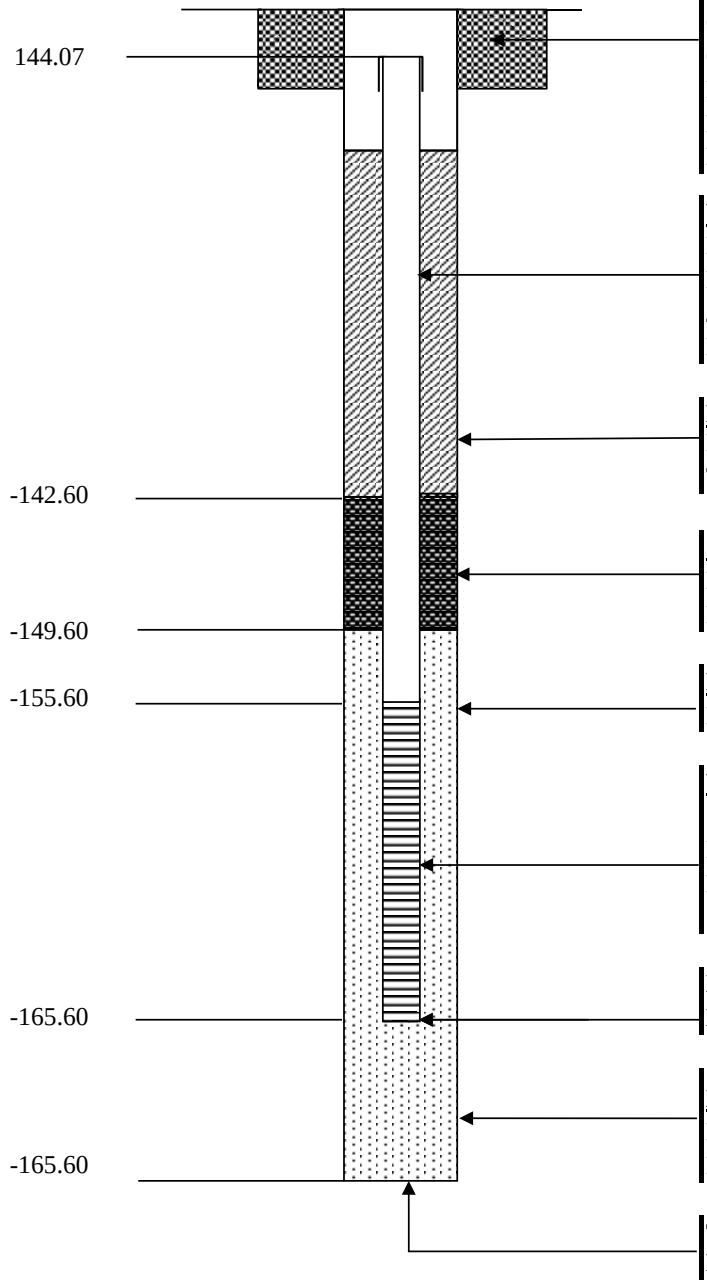
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.88 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**60.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4.5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 14.5 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**80 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**80 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-15D-310
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	11/3/2008
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	11/19/2008
DRILLING METHOD:	Sonic	**DRILLER:**	C. March
NORTHING (FT):	219761.0	**GS ELEVATION (FT):** 144.38	**INSPECTOR:** M. Werth, E&E, Inc.
EASTING (FT):	1109357.4	**WATER LEVEL (FT, BTOC):** 62.82	**TOTAL WELL DEPTH (FT, BGS):** 310

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

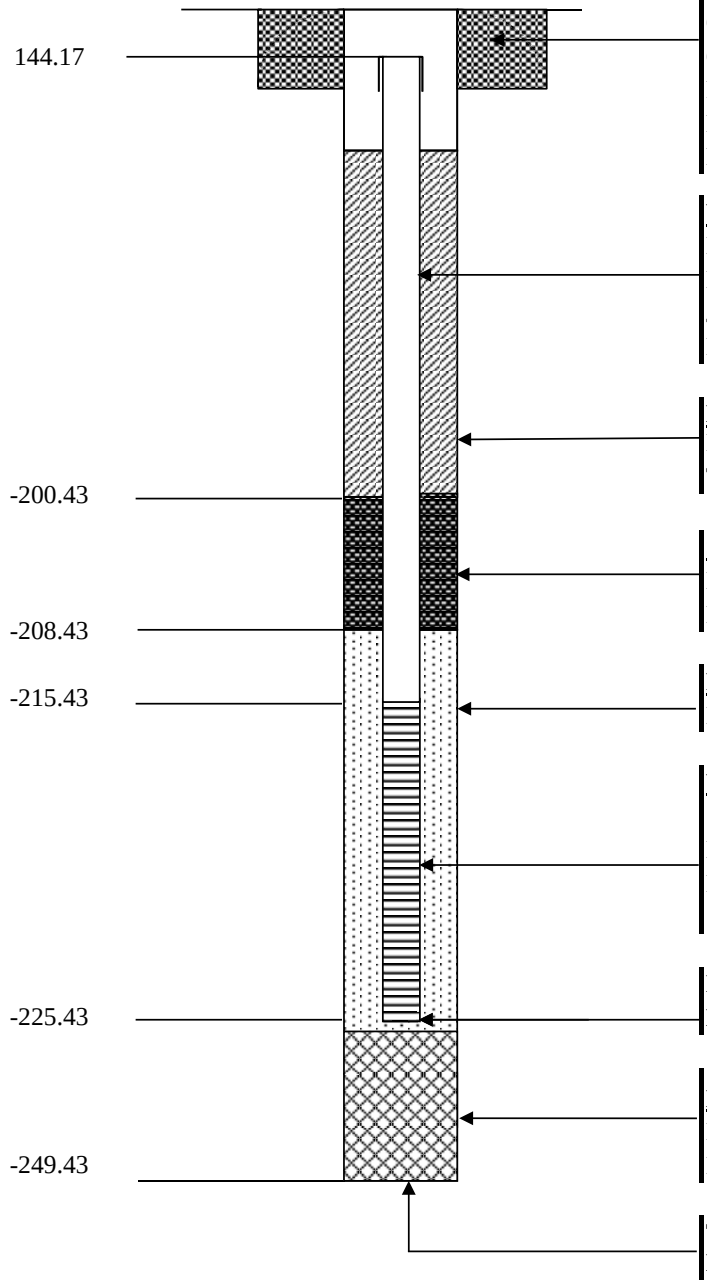


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**299.67 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**286.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 7 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**310 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**310 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	WELL NO.:	MW-15DD-370

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	1/4/2010
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	1/19/2010
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	N/A
NORTHING (FT):	219742.7	**GS ELEVATION (FT):**	144.57	**INSPECTOR:**	J. Button, CDM
EASTING (FT):	1109354.8	**WATER LEVEL (FT, BTOC):**	63.35	**TOTAL WELL DEPTH (FT, BGS):**	370

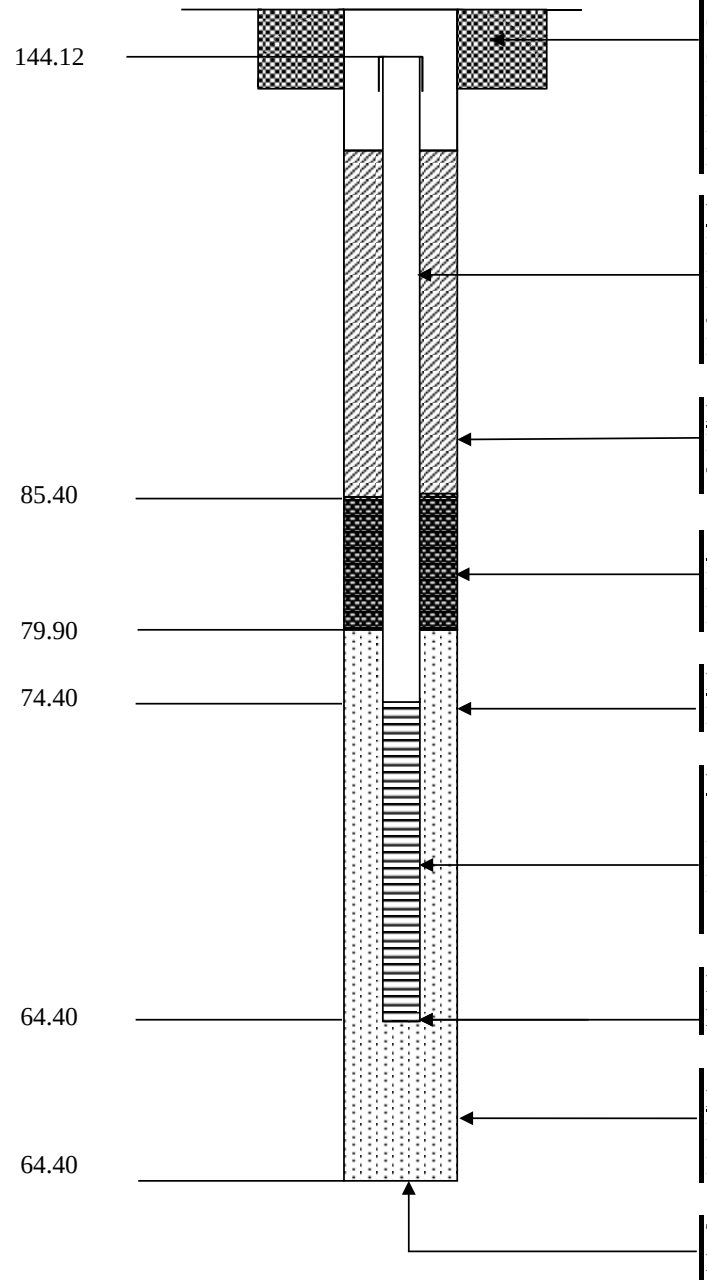
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**360 feet**
BACKFILL AROUND CASING	
MATERIAL	**Portland Cement**
THICKNESS	**359.6 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 8 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 17 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**370 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 24 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**394 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-15S-80
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	11/5/2009
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	11/6/2009
DRILLING METHOD: Rotary Sonic		**DRILLER:**	N/A
NORTHING (FT): 219751.8	**GS ELEVATION (FT):** 144.37	**INSPECTOR:**	P. Connelly, CDM
EASTING (FT): 1109340.9	**WATER LEVEL (FT, BTOC):** 62.95	**TOTAL WELL DEPTH (FT, BGS):**	80

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.72 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**58.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5.5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#1 Sand / 15.5 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **80 feet**

BOTTOM SEAL / BACKFILL

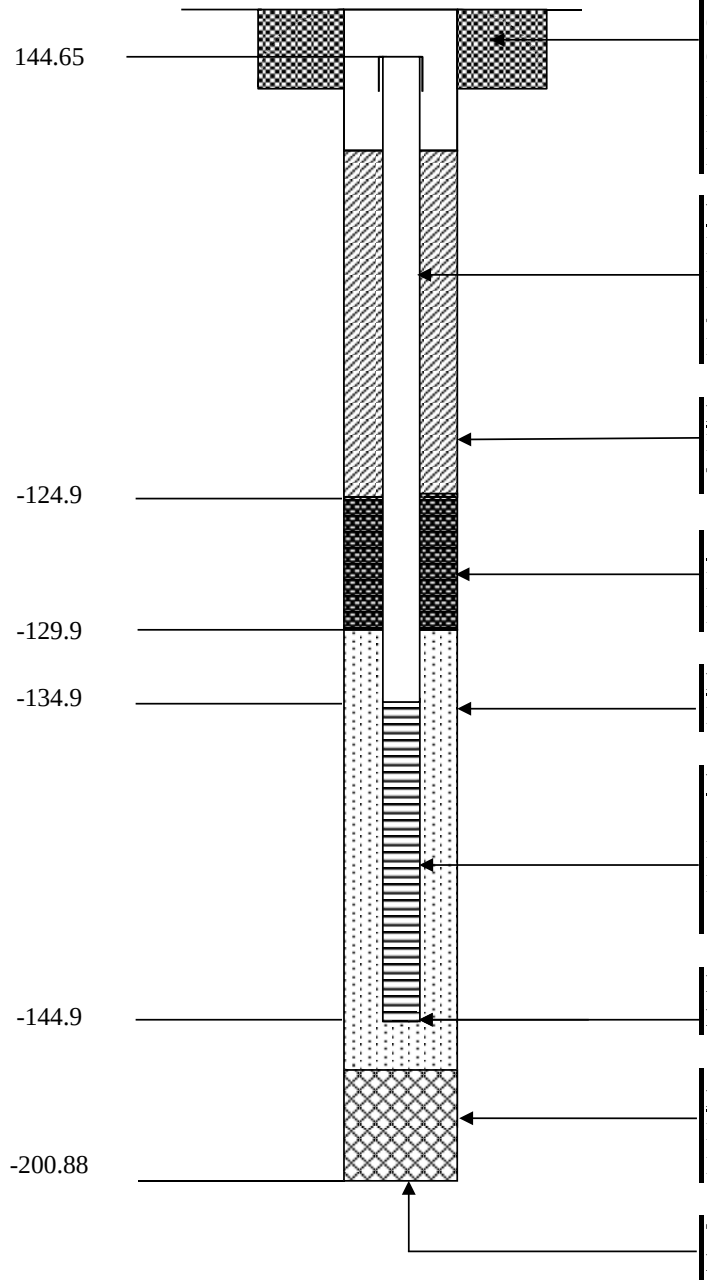
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **80 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	WELL NO.:	MW-16D-290
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	2/19/2009
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	3/2/2009
DRILLING METHOD: Sonic		**DRILLER:**	G. Sealey
NORTHING (FT): 220170.4	**GS ELEVATION (FT):** 145.12	**INSPECTOR:**	S. Craig, E&E, Inc.
EASTING (FT): 1109648.2	**WATER LEVEL (FT, BTOC):** 63.13	**TOTAL WELL DEPTH (FT, BGS):**	290

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**289 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**269.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 35 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **290 feet**

BOTTOM SEAL / BACKFILL

MATERIAL / THICKNESS	**Formation Collapse / 36 feet**
MATERIAL / THICKNESS	

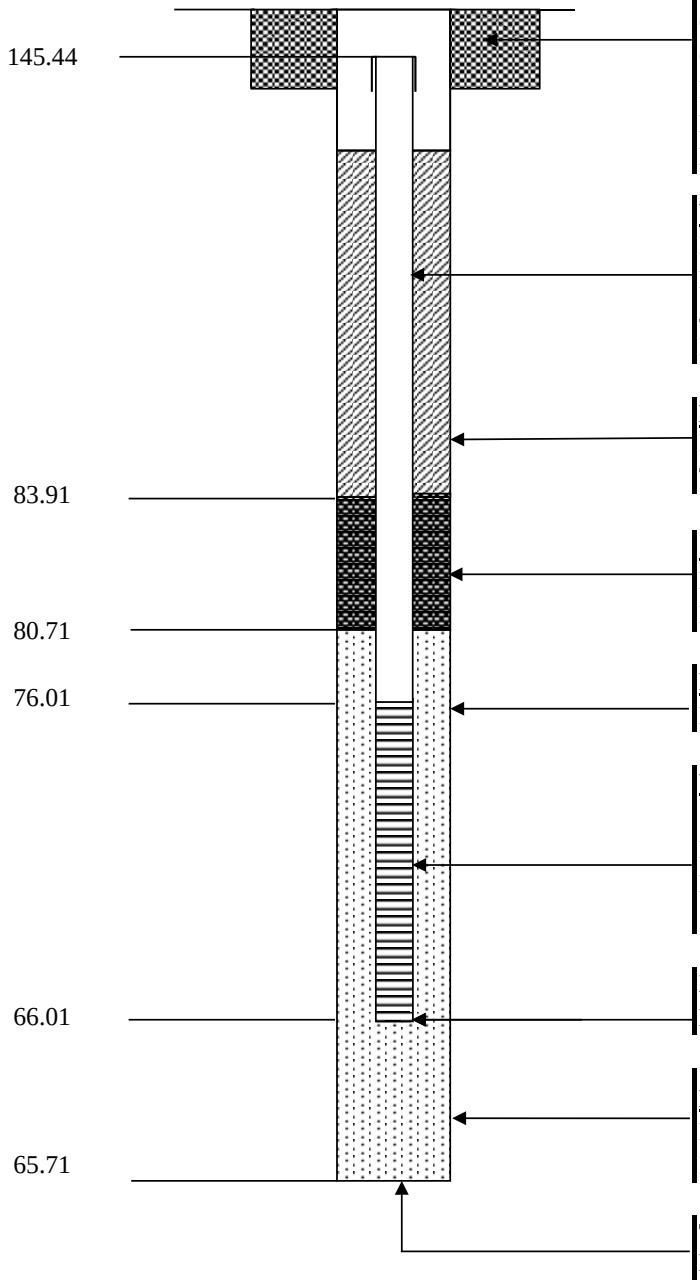
TOTAL DEPTH OF BOREHOLE — **346 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-16S-80**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	3/16/2010
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	3/18/2010
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	N/A
NORTHING (FT):	2200169.7	**GS ELEVATION (FT):**	145.71	**INSPECTOR:**	T.Horn, CDM
EASTING (FT):	1109631.0	**WATER LEVEL (FT, BTOC):**	64.00	**TOTAL WELL DEPTH (FT, BGS):**	79.7

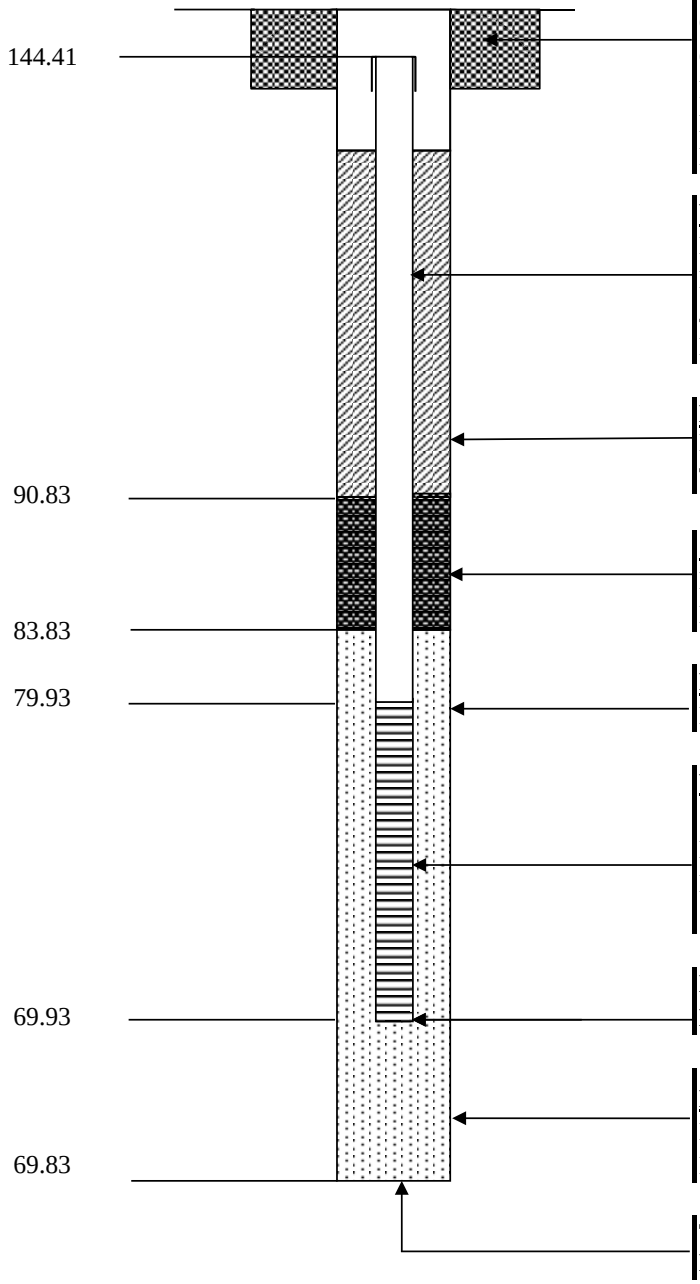
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**70.43 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**61.3 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3.2 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**79.7 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**80 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-17S-75**
CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	2/20/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	2/22/2009
DRILLING METHOD:	Sonic			**DRILLER:**	F.Lavoie
NORTHING (FT):	219668.8	**GS ELEVATION (FT):**	144.83	**INSPECTOR:**	M.Werth, E&E, Inc.
EASTING (FT):	1108969.5	**WATER LEVEL (FT, BTOC):**	63.33	**TOTAL WELL DEPTH (FT, BGS):**	75

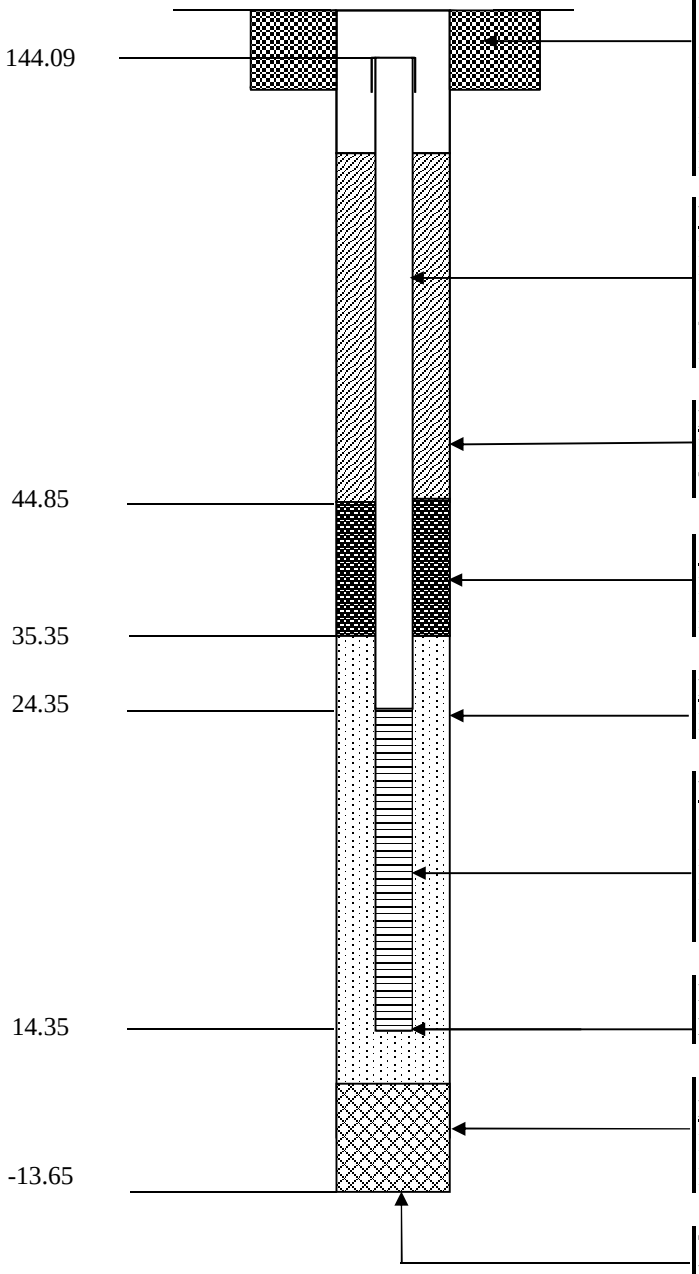
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**64.58 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**53.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 7 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 14 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**75 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**75 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	WELL NO.:	MW-18I-130
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	11/17/2009
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	12/15/2009
DRILLING METHOD: Rotary Sonic		**DRILLER:**	C.Boyd
NORTHING (FT): 219610.2	**GS ELEVATION (FT):** 144.35	**INSPECTOR:**	S.Britch, CDM
EASTING (FT): 1109338.7	**WATER LEVEL (FT, BTOC):** 62.96	**TOTAL WELL DEPTH (FT, BGS):**	130

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**117.74 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**99.19 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 9.5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#1 Sand / 28 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **130 feet**

BOTTOM SEAL / BACKFILL

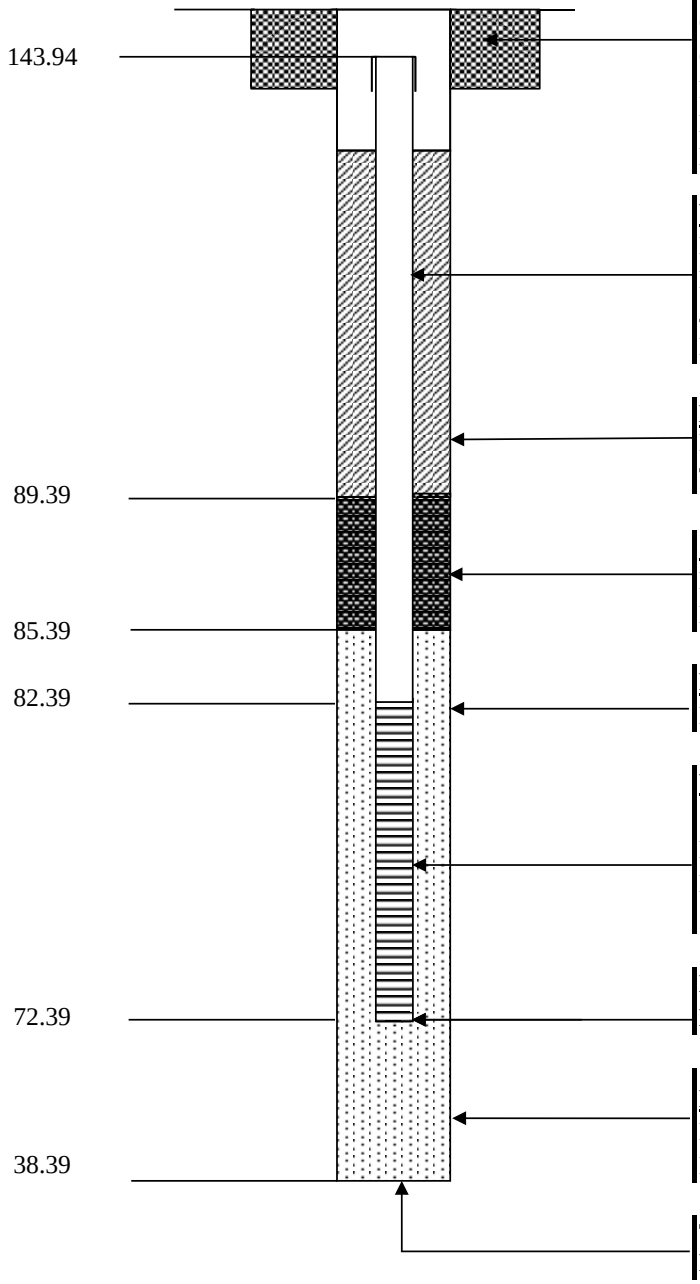
MATERIAL / THICKNESS	**Formation Collapse / 23 feet**
MATERIAL / THICKNESS	

TOTAL DEPTH OF BOREHOLE — **158 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-18S-72
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	12/18/2008
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	12/20/2008
DRILLING METHOD:	Sonic	**DRILLER:**	D.Cunnigham
NORTHING (FT):	219624.0	**GS ELEVATION (FT):** 144.39	**INSPECTOR:** B.Cole, E&E, Inc.
EASTING (FT):	1109344.6	**WATER LEVEL (FT, BTOC):** 62.79	**TOTAL WELL DEPTH (FT, BGS):** 72

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**61.55 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**54.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 13 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **72 feet**

BOTTOM SEAL / BACKFILL

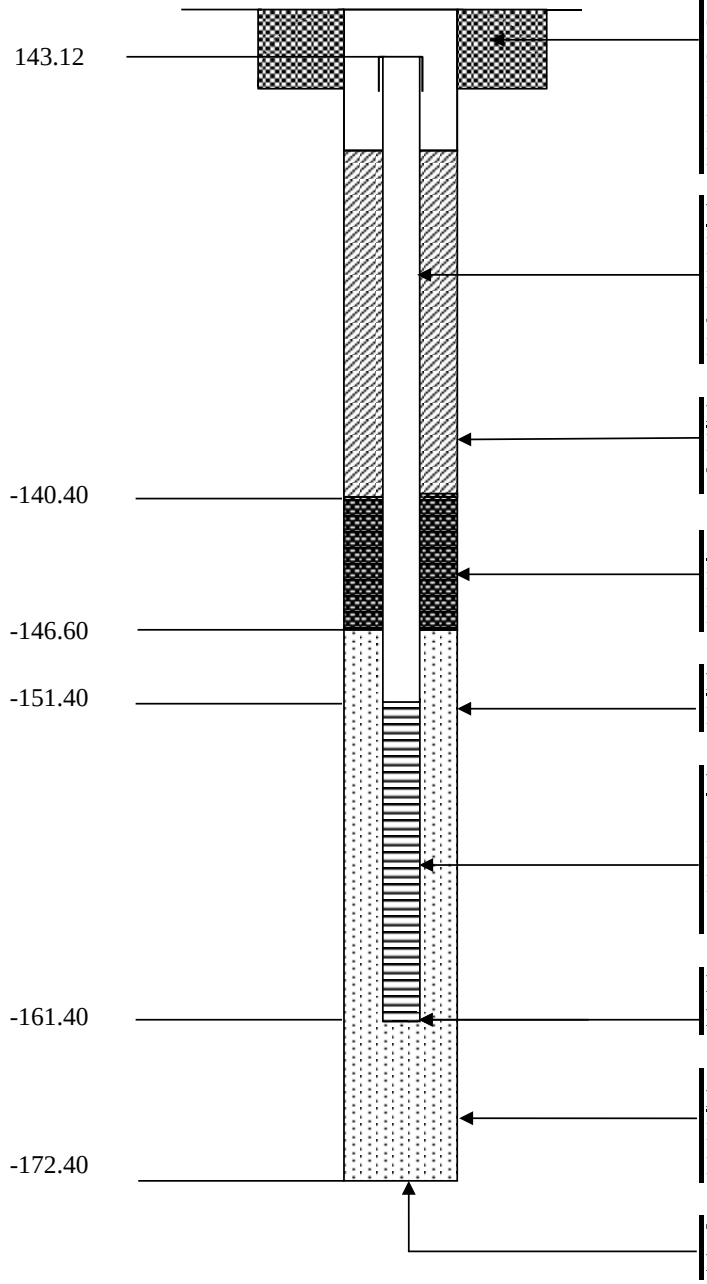
MATERIAL / THICKNESS	**Formation Collapse / 34 feet**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **106 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	WELL NO.:	MW-19D-305
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	11/22/2008
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	12/9/2008
DRILLING METHOD:	Sonic	**DRILLER:**	M.Mclean
NORTHING (FT):	219606.4	**GS ELEVATION (FT):** 143.60	**INSPECTOR:** S.Craig, E&E, Inc.
EASTING (FT):	1108952.4	**WATER LEVEL (FT, BTOC):** 62.10	**TOTAL WELL DEPTH (FT, BGS):** 305

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**151.40 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**283.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 6.2 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 25.8 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **305 feet**

BOTTOM SEAL / BACKFILL

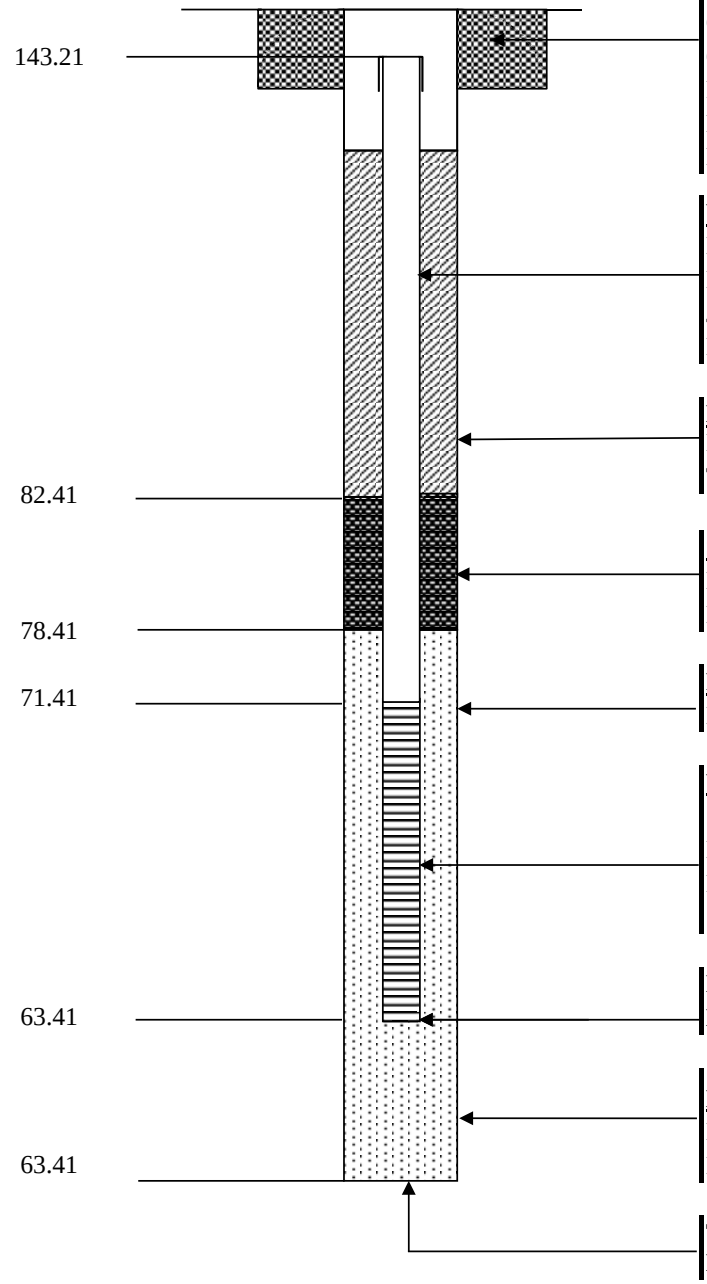
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **316 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	WELL NO.:	MW-19S-80
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	12/1/2009
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	12/3/2009
DRILLING METHOD: Roatry Sonic		**DRILLER:**	N/A
NORTHING (FT): 219606.4	**GS ELEVATION (FT):** 143.41	**INSPECTOR:**	T.Bennett, CDM
EASTING (FT): 1108964.7	**WATER LEVEL (FT, BTOC):** 62.20	**TOTAL WELL DEPTH (FT, BGS):**	80

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.80 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**60.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#1 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **80 feet**

BOTTOM SEAL / BACKFILL

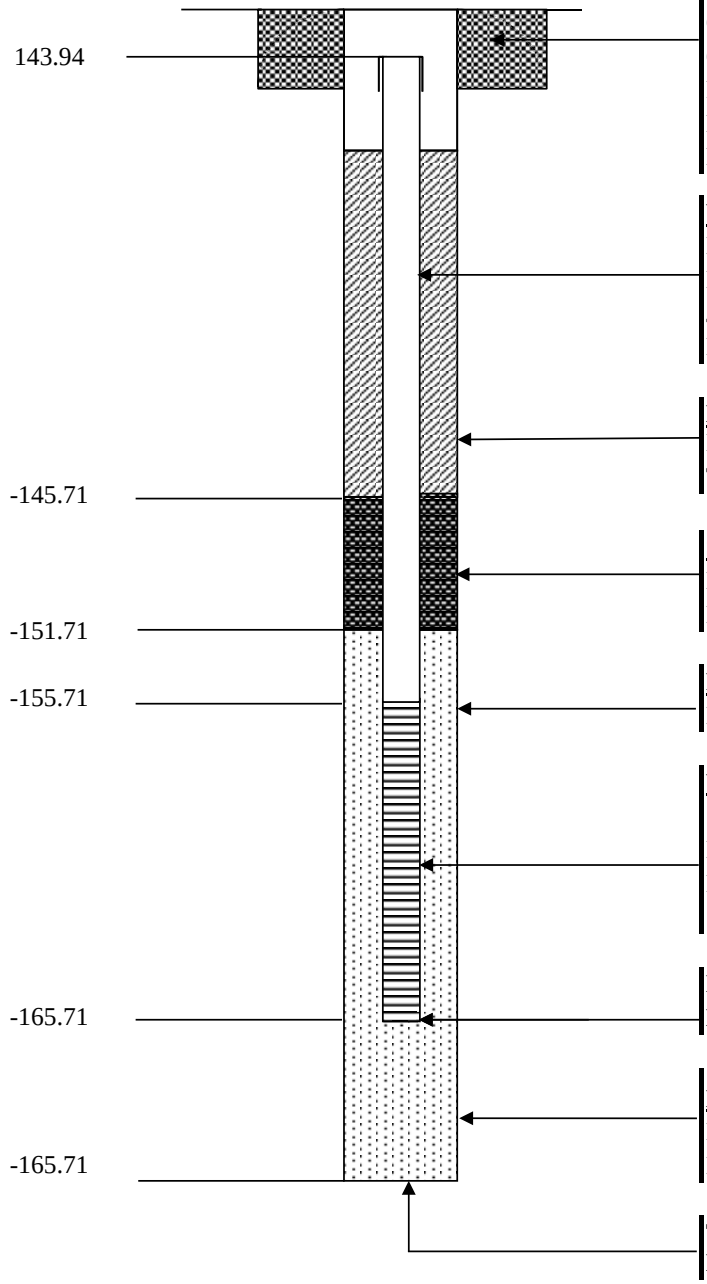
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **80 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-20D-310
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	11/24/2008
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	12/9/2008
DRILLING METHOD:	Sonic	**DRILLER:**	J.Sigler
NORTHING (FT):	219561.6	**GS ELEVATION (FT):** 144.29	**INSPECTOR:** S.Craig, E&E, Inc.
EASTING (FT):	1109313.0	**WATER LEVEL (FT, BTOC):** 32.81	**TOTAL WELL DEPTH (FT, BGS):** 310

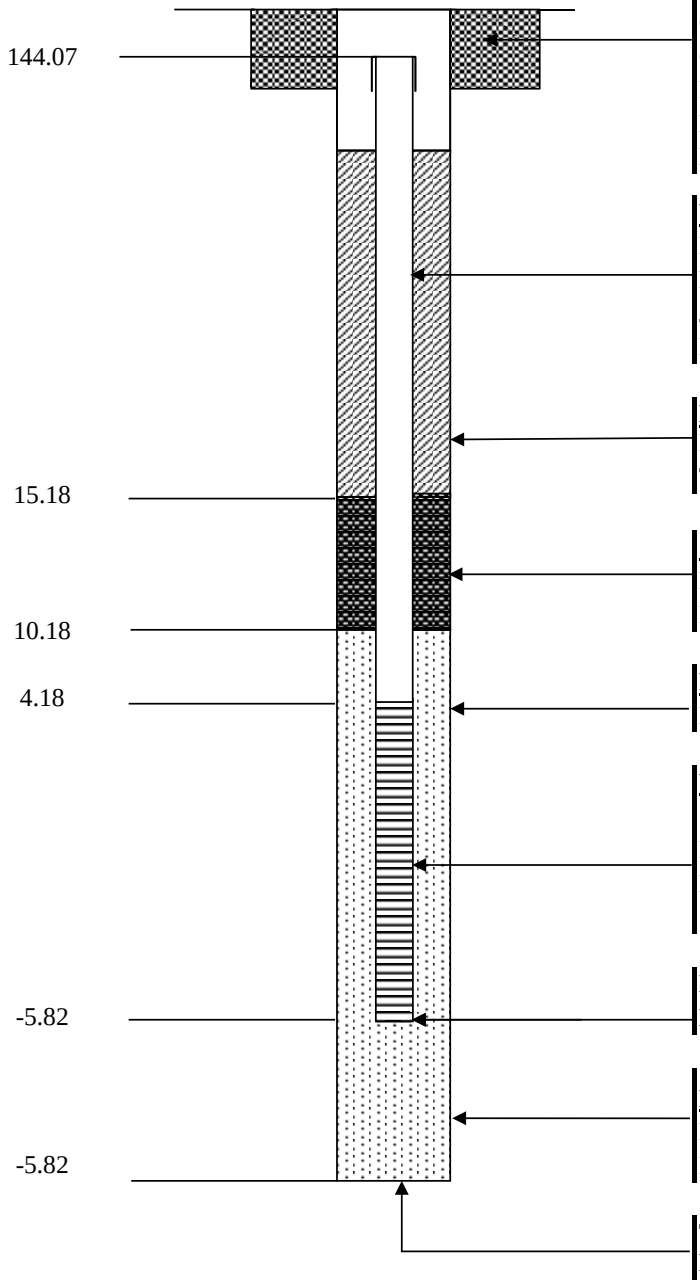
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**299.65 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**289.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 14 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**310 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**310 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	WELL NO.:	MW-20I-150
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	11/13/2008
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	11/17/2008
DRILLING METHOD:	Sonic	**DRILLER:**	J.Johnson
NORTHING (FT):	219552.2	**GS ELEVATION (FT):** 144.18	**INSPECTOR:** C.Buerkle, CDM
EASTING (FT):	1109310.6	**WATER LEVEL (FT, BTOC):** 62.97	**TOTAL WELL DEPTH (FT, BGS):** 150

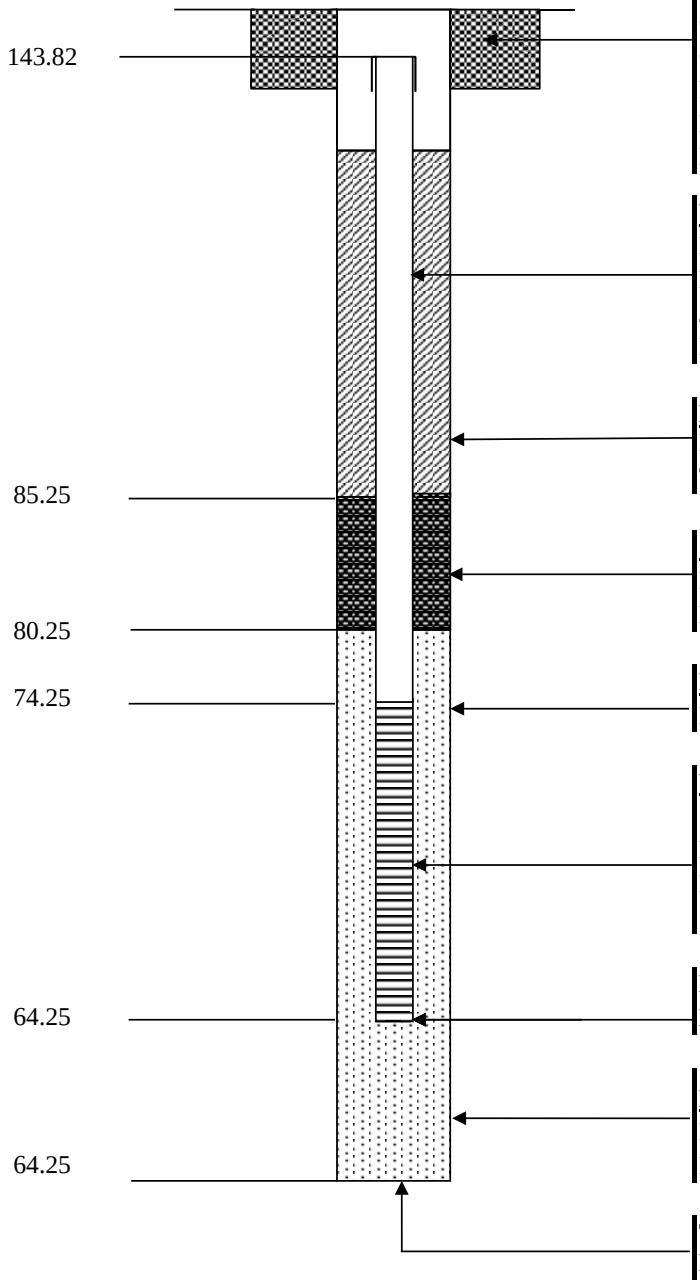
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**139.89 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**128.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#01 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**150 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**150 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-20S-80
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	11/12/2009
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	11/13/2009
DRILLING METHOD: Rotary Sonic		**DRILLER:**	J.Johnson
NORTHING (FT): 219567.7	**GS ELEVATION (FT):** 144.25	**INSPECTOR:**	C.Burkett, CDM
EASTING (FT): 1109323.4	**WATER LEVEL (FT, BTOC):** 62.74	**TOTAL WELL DEPTH (FT, BGS):**	80

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.57 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**58.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#01 Sand / 16 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **80 feet**

BOTTOM SEAL / BACKFILL

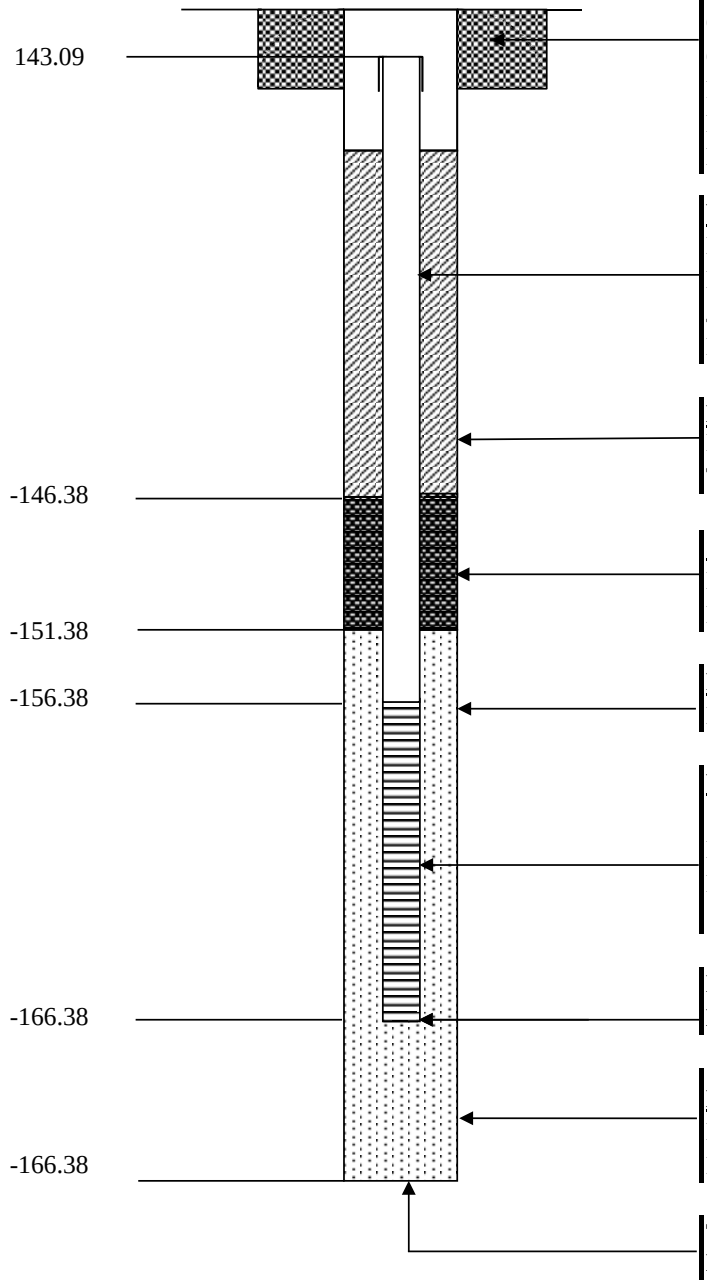
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **80 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-21D-310
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	11/19/2008
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	11/22/2008
DRILLING METHOD:	Sonic	**DRILLER:**	B.Grim
NORTHING (FT):	219484.0	**GS ELEVATION (FT):** 143.62	**INSPECTOR:** S.Craig, E&E, Inc.
EASTING (FT):	1108737.3	**WATER LEVEL (FT, BTOC):** 62.11	**TOTAL WELL DEPTH (FT, BGS):** 310

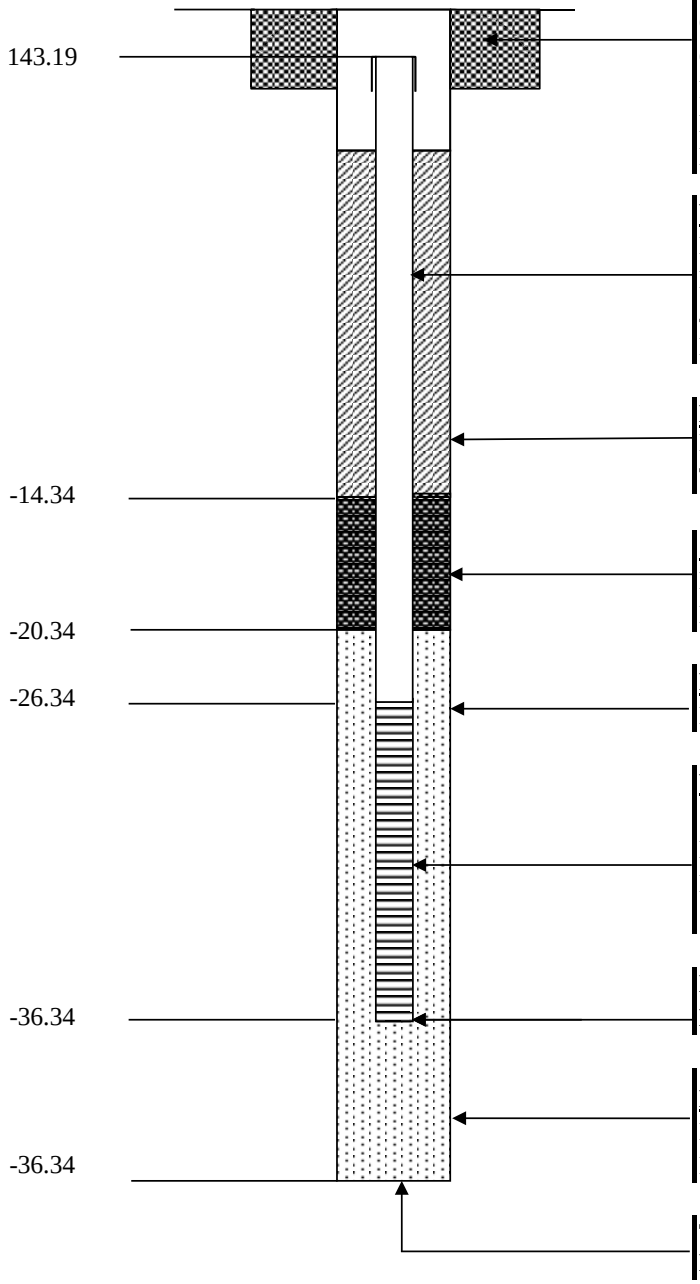
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**299.47 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**289.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**310 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**310 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	WELL NO.:	MW-21I-180
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	11/5/2009
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	11/11/2009
DRILLING METHOD: Rotary Sonic		**DRILLER:**	J.Johnson
NORTHING (FT): 219472.3	**GS ELEVATION (FT):** 143.66	**INSPECTOR:**	C.Berkle, CDM
EASTING (FT): 1108731.8	**WATER LEVEL (FT, BTOC):** 62.22	**TOTAL WELL DEPTH (FT, BGS):**	180

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

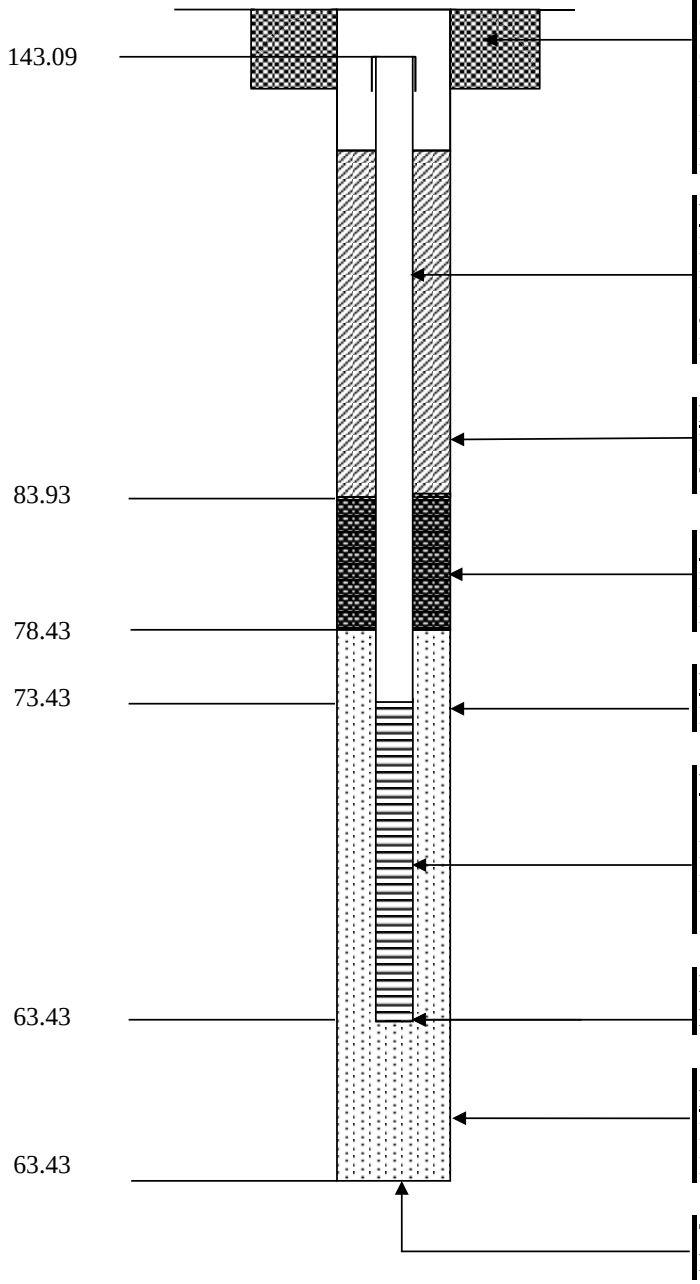


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**169.53 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**157.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets**
MATERIAL / THICKNESS	**6 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**180 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**180 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-21S-80**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	11/11/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	11/12/2009
DRILLING METHOD:	Sonic			**DRILLER:**	J.Johnson
NORTHING (FT):	219471.0	**GS ELEVATION (FT):**	143.43	**INSPECTOR:**	C.Buerkle, CDM
EASTING (FT):	1108742.2	**WATER LEVEL (FT, BTOC):**	62.19	**TOTAL WELL DEPTH (FT, BGS):**	80

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.66 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**59 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5.5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#1 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **80 feet**

BOTTOM SEAL / BACKFILL

MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

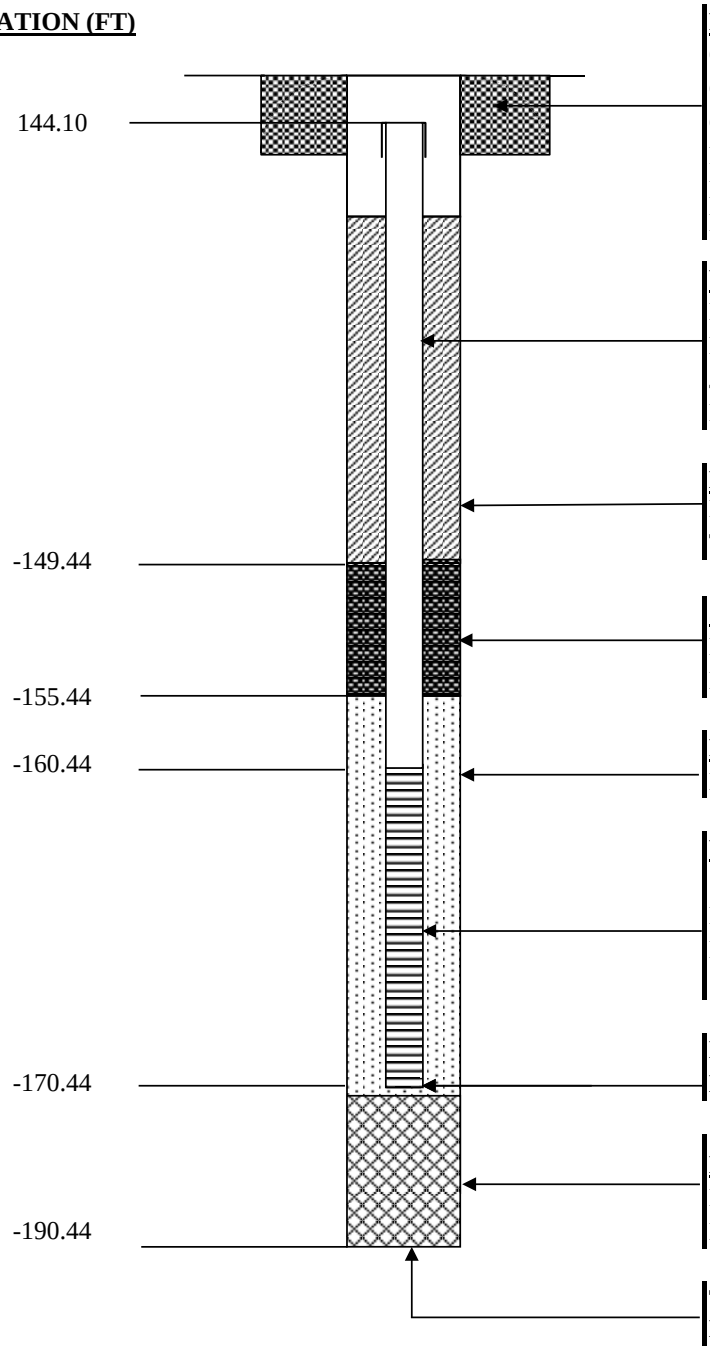
TOTAL DEPTH OF BOREHOLE — **80 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-22D-315**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	12/10/2008
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	12/17/2008
DRILLING METHOD:	Sonic			**DRILLER:**	D.Cunnighman
NORTHING (FT):	219329.4	**GS ELEVATION (FT):**	144.56	**INSPECTOR:**	M.Werth, E&E, Inc.
EASTING (FT):	1109334.4	**WATER LEVEL (FT, BTOC):**	63.61	**TOTAL WELL DEPTH (FT, BGS):**	315

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**304.54 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**293.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **315 feet**

BOTTOM SEAL / BACKFILL

MATERIAL / THICKNESS	**Formation Collapse / 20 feet**
MATERIAL / THICKNESS	**N/A**

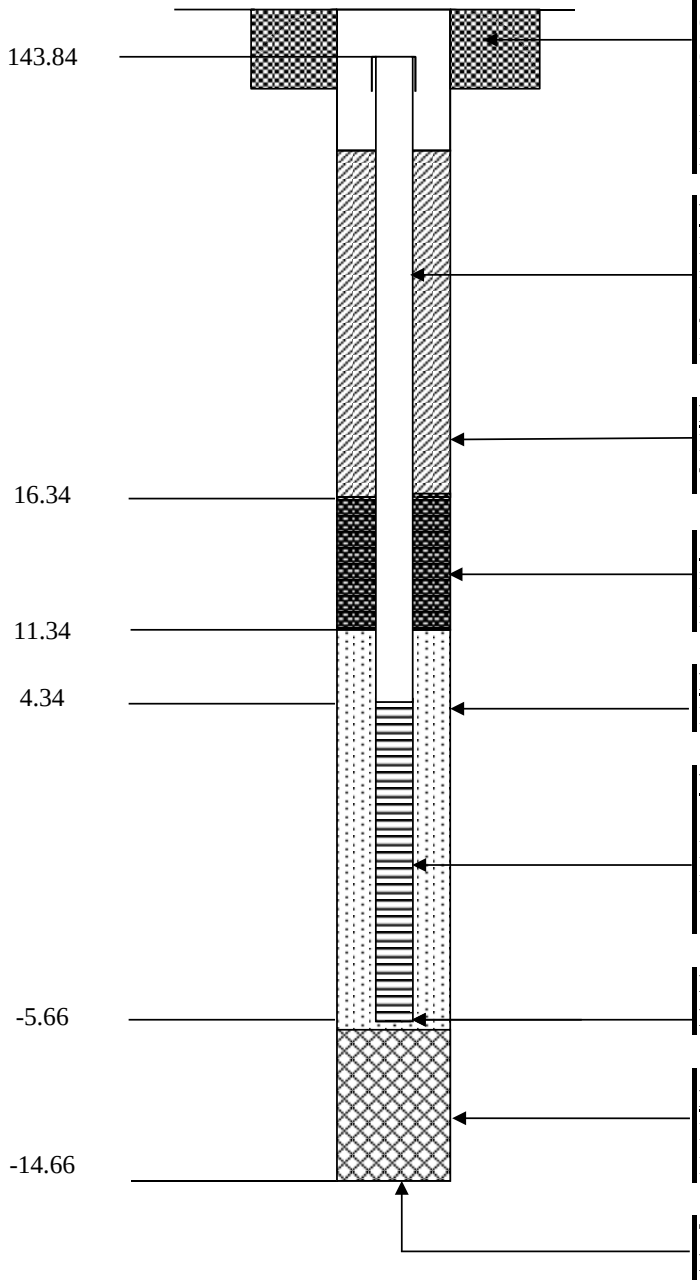
TOTAL DEPTH OF BOREHOLE — **335 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-22I-150**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	1/7/2010
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	1/13/2010
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	N/A
NORTHING (FT):	219400.0	**GS ELEVATION (FT):**	144.34	**INSPECTOR:**	T.Bennett, CDM
EASTING (FT):	1109338.7	**WATER LEVEL (FT, BTOC):**	63.11	**TOTAL WELL DEPTH (FT, BGS):**	150

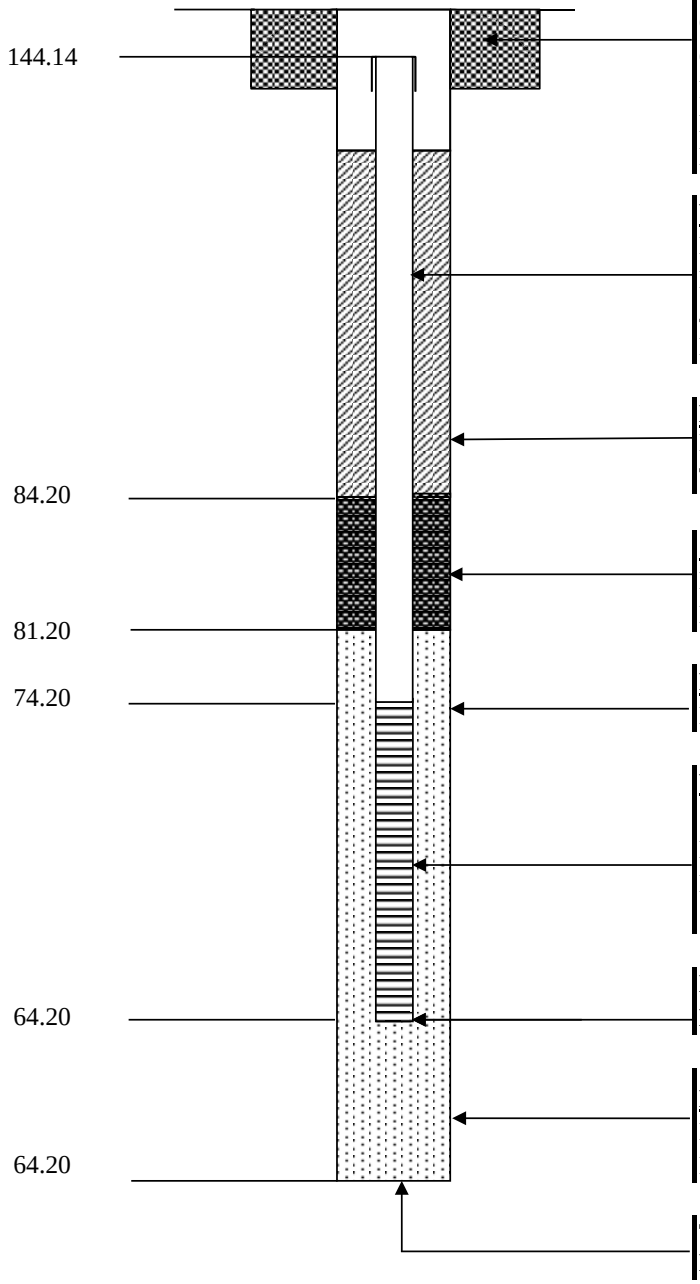
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**N/A**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**139.89 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**127.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#01 Sand / 17 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**150 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 9 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**159 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-22S-80
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	2/10/2010
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	2/11/2010
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	N/A
NORTHING (FT):	219412.5	**GS ELEVATION (FT):** 144.20	**INSPECTOR:** J.Button, CDM
EASTING (FT):	1109340.3	**WATER LEVEL (FT, BTOC):** 63.05	**TOTAL WELL DEPTH (FT, BGS):** 80

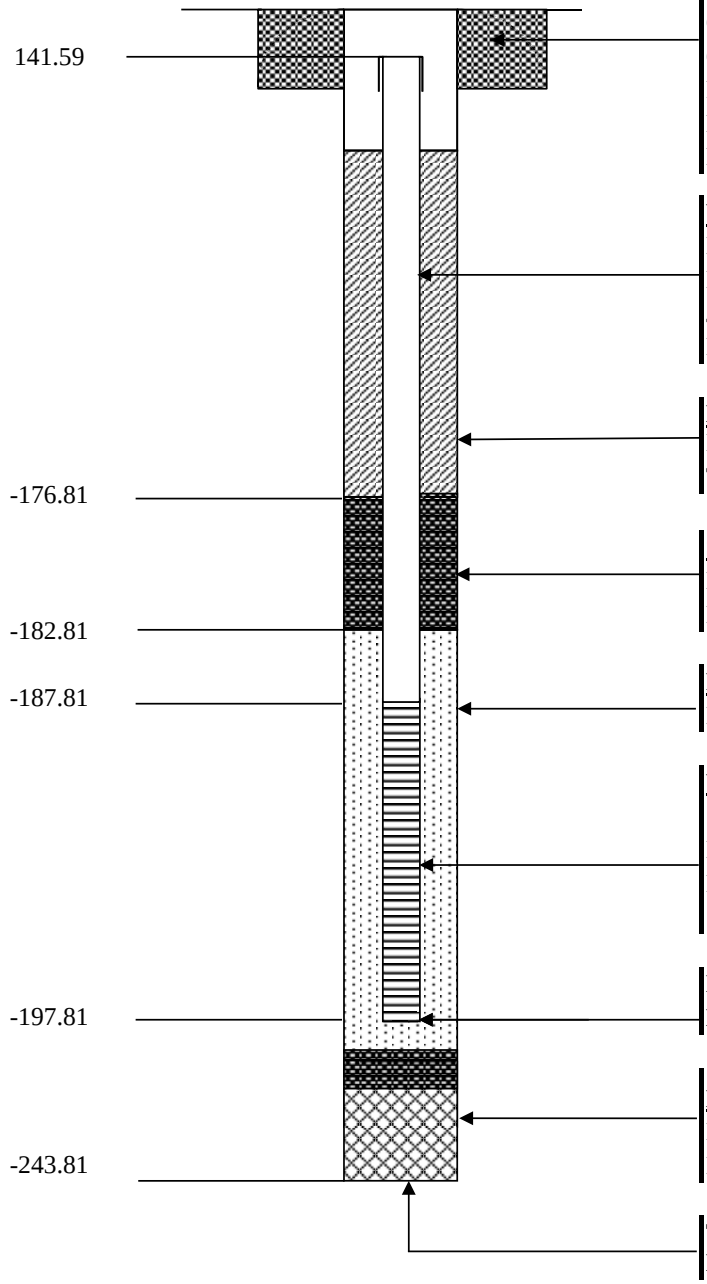
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.94 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**59.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 17 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**80 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**80 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-23D-340
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	1/12/2009
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	1/27/2009
DRILLING METHOD:	Sonic	**DRILLER:**	M.Mclean
NORTHING (FT):	219265.7	**GS ELEVATION (FT):** 141.86	**INSPECTOR:** B.Cole, E&E, Inc.
EASTING (FT):	1108976.6	**WATER LEVEL (FT, BTOC):** 61.04	**TOTAL WELL DEPTH (FT, BGS):** 340

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**329.4 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**317.8 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 16 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **340 feet**

BOTTOM SEAL / BACKFILL

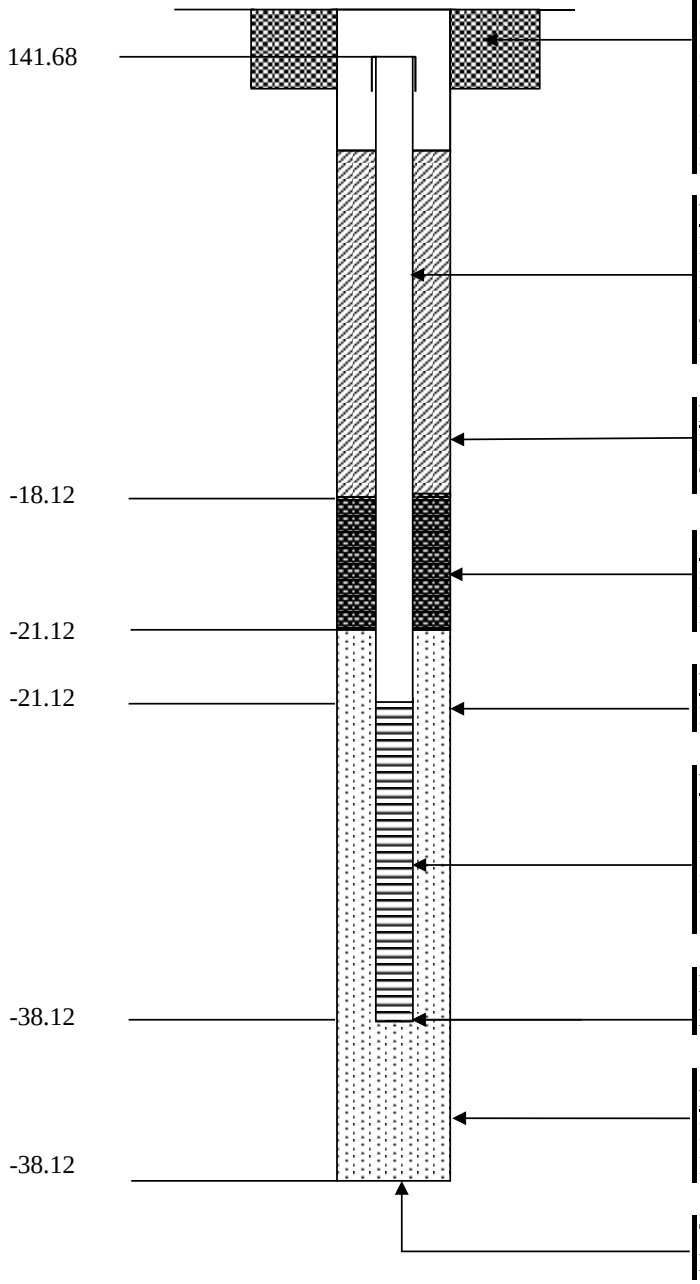
MATERIAL / THICKNESS	**Bentonite (Seal) / 5 feet**
MATERIAL / THICKNESS	**Formation Collapse / 40 feet**

TOTAL DEPTH OF BOREHOLE — **386 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	WELL NO.:	MW-23I-180
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	2/4/2010
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	2/9/2010
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	N/A
NORTHING (FT):	219256.5	**GS ELEVATION (FT):** 141.88	**INSPECTOR:** T.Bennett, CDM
EASTING (FT):	1108976.7	**WATER LEVEL (FT, BTOC):** 60.75	**TOTAL WELL DEPTH (FT, BGS):** 180

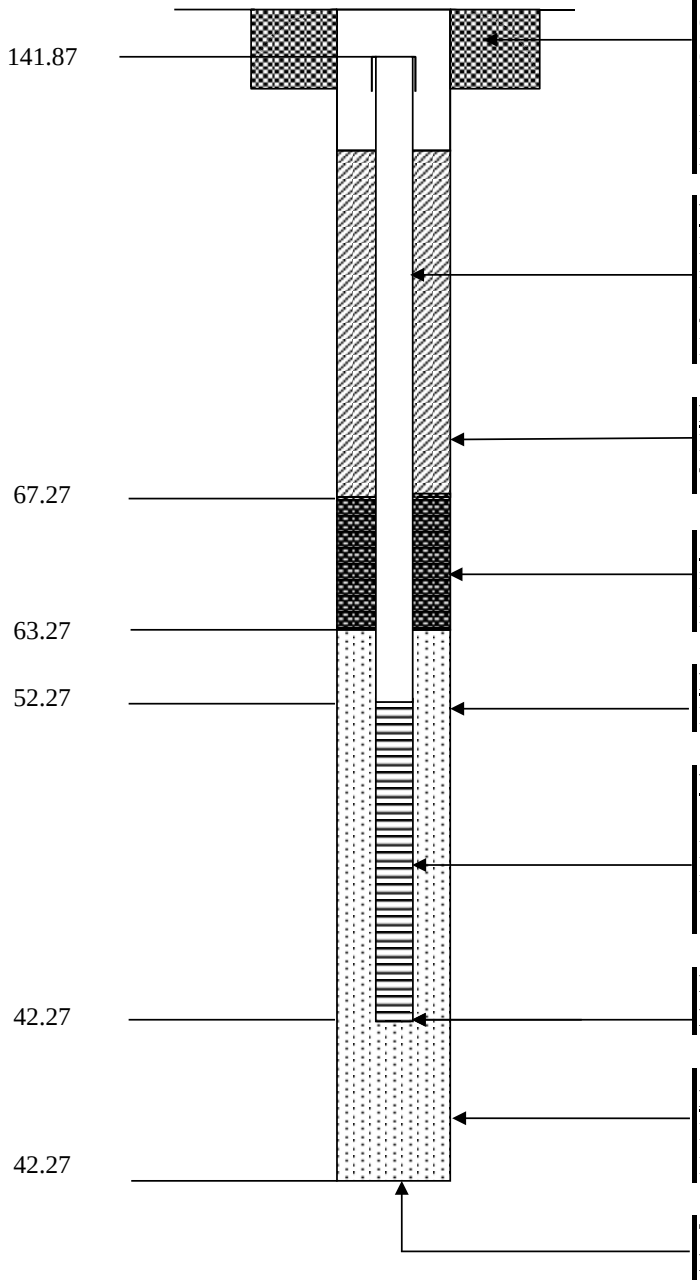
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**169.8 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**159.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#01 Sand / 17 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**180 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**180 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-23S-100
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	12/3/2009
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	12/7/2009
DRILLING METHOD: Rotary Sonic		**DRILLER:**	N/A
NORTHING (FT): 219265.1	**GS ELEVATION (FT):** 142.27	**INSPECTOR:**	T.Bennett, CDM
EASTING (FT): 1108968.9	**WATER LEVEL (FT, BTOC):** 60.92	**TOTAL WELL DEPTH (FT, BGS):**	100

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**89.6 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**74.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#01 Sand / 21 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **100 feet**

BOTTOM SEAL / BACKFILL

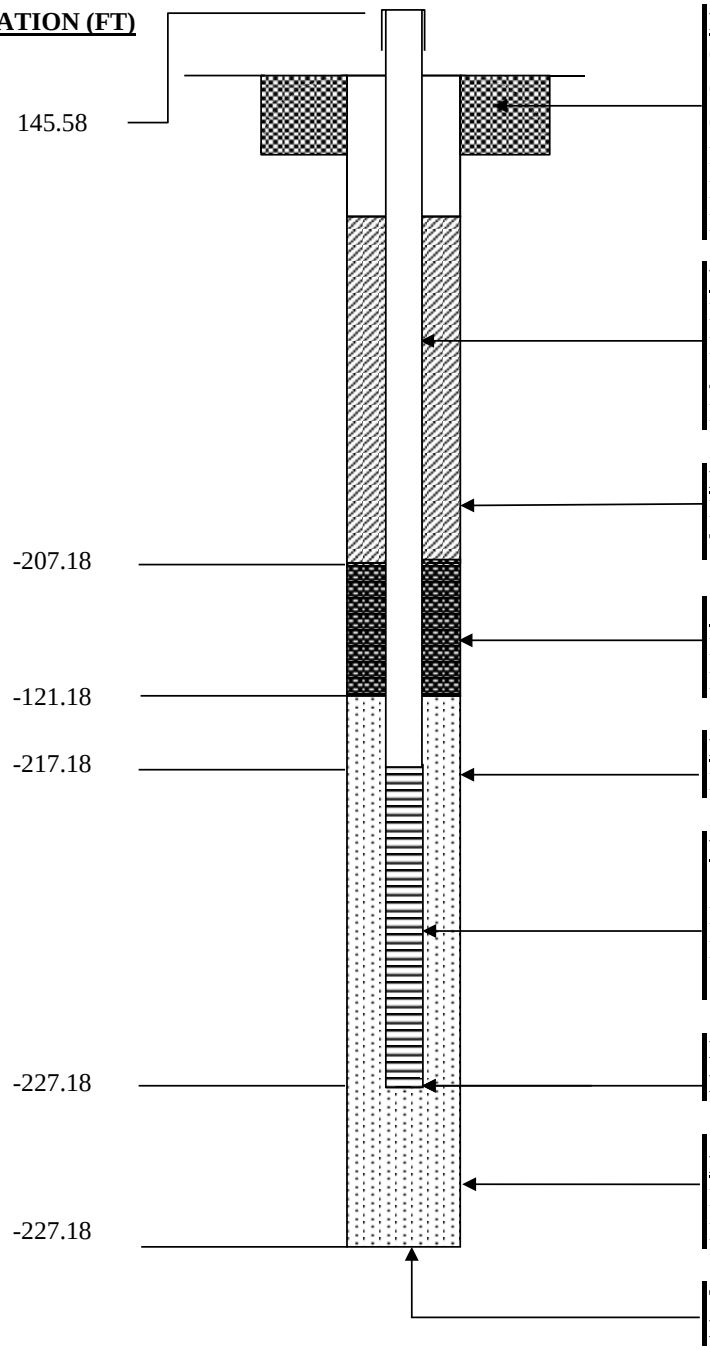
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **100 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-24DD-370**
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	1/5/2009
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	1/12/2009
DRILLING METHOD: Sonic		**DRILLER:**	M.Mclean
NORTHING (FT): 219337.2	**GS ELEVATION (FT):** 142.82	**INSPECTOR:**	M.Werth, E&E, Inc.
EASTING (FT): 1109085.2	**WATER LEVEL (FT, BTOC):** 64.95	**TOTAL WELL DEPTH (FT, BGS):**	370

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**N/A**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**360 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**351.88 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **370 feet**

BOTTOM SEAL / BACKFILL

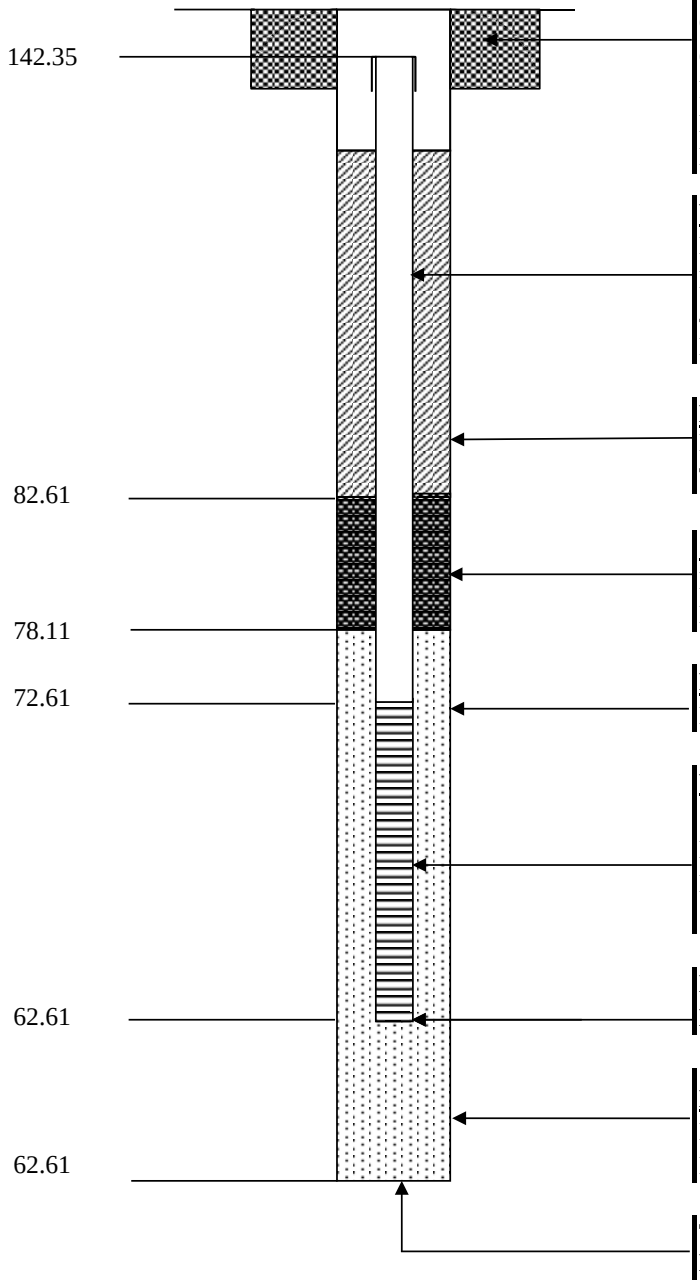
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **370 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	WELL NO.:	MW-24S-80
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	11/16/2009
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	11/18/2009
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	N/A
NORTHING (FT):	219336.9	**GS ELEVATION (FT):** 142.61	**INSPECTOR:** T.Bennett, CDM
EASTING (FT):	1109094.9	**WATER LEVEL (FT, BTOC):** 61.35	**TOTAL WELL DEPTH (FT, BGS):** 80

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

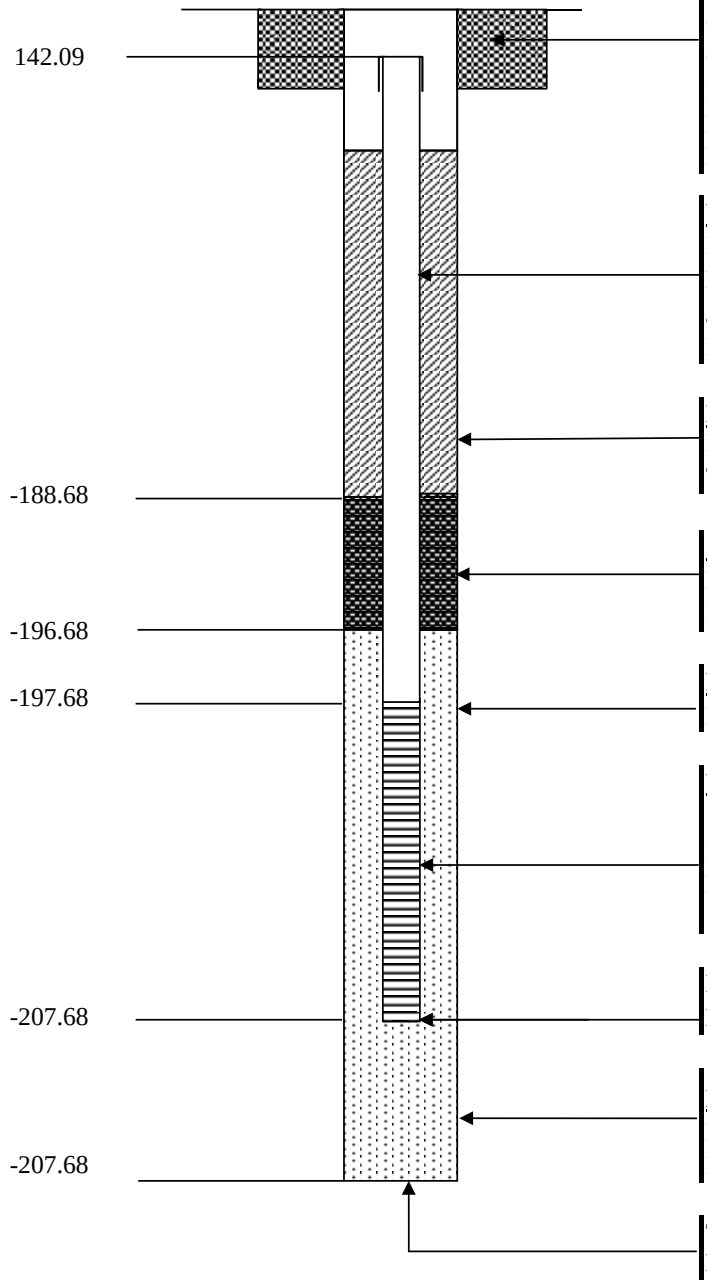


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.74 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**59.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4.5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#01 Sand / 15.5 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**80 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**80 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-25D-350**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	12/9/2008
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	12/17/2008
DRILLING METHOD:	Sonic			**DRILLER:**	M.Bond
NORTHING (FT):	219227.6	**GS ELEVATION (FT):**	142.32	**INSPECTOR:**	S.Craig, E&E, Inc.
EASTING (FT):	1108769.8	**WATER LEVEL (FT, BTOC):**	61.51	**TOTAL WELL DEPTH (FT, BGS):**	350

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

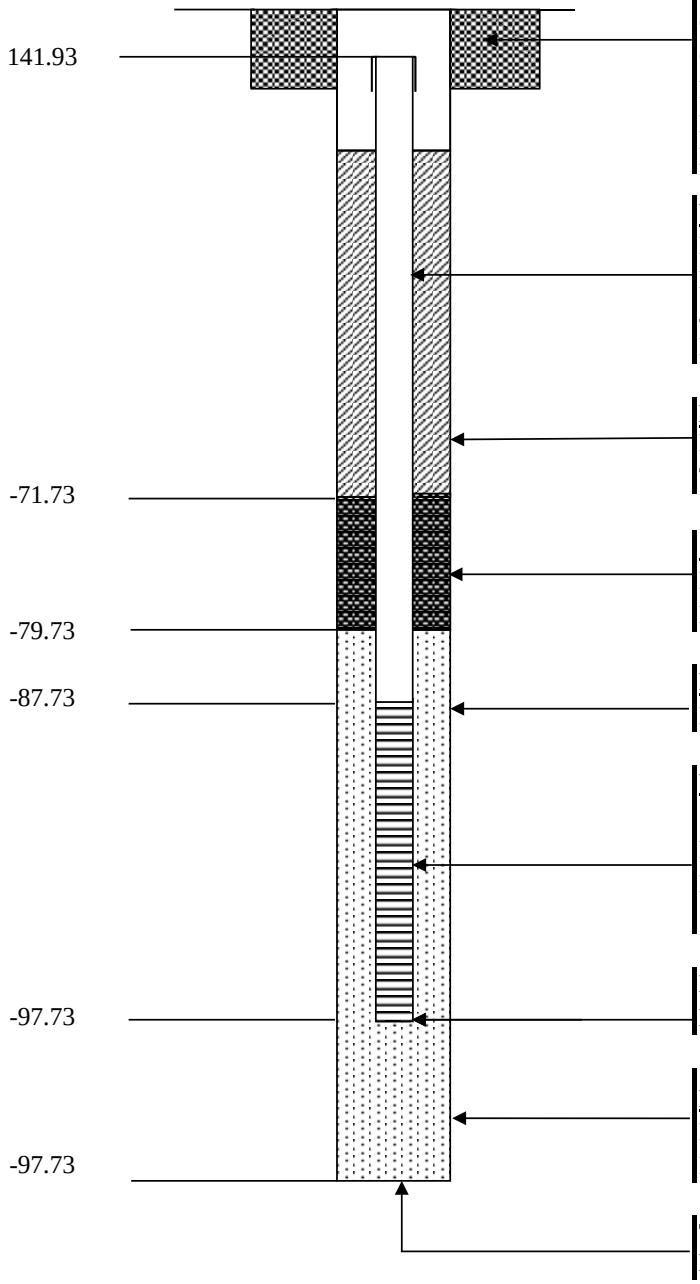


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**339.7 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**330.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 14 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**350 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**350 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-25I-240**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	12/16/2009
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	1/4/2010
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	G.Perch
NORTHING (FT):	219219.5	**GS ELEVATION (FT):**	142.27	**INSPECTOR:**	P.Connelly, CDM
EASTING (FT):	1108770.6	**WATER LEVEL (FT, BTOC):**	61.13	**TOTAL WELL DEPTH (FT, BGS):**	240

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

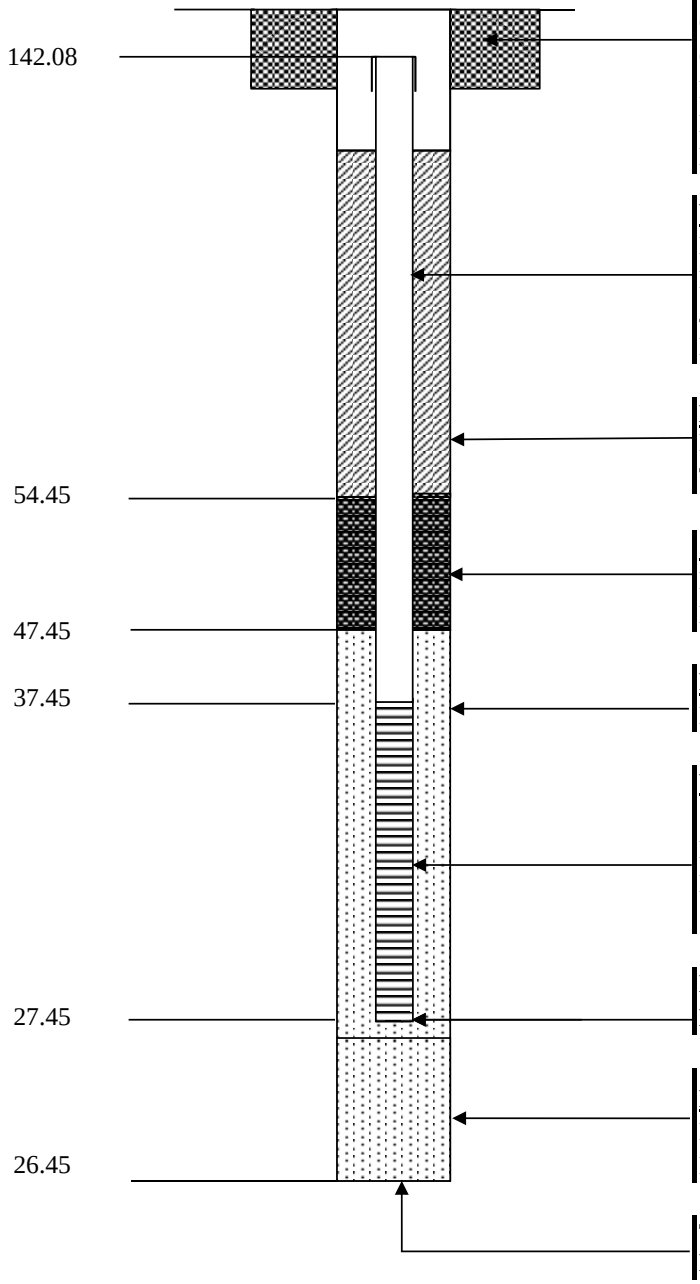


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**229.6 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**213.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 8 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#01 Sand / 18 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**240 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**240 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-25S-115**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	12/7/2009
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	12/11/2009
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	C.Boyd
NORTHING (FT):	219236.8	**GS ELEVATION (FT):**	142.45	**INSPECTOR:**	S.Britch, CDM
EASTING (FT):	1108768.9	**WATER LEVEL (FT, BTOC):**	61.19	**TOTAL WELL DEPTH (FT, BGS):**	115

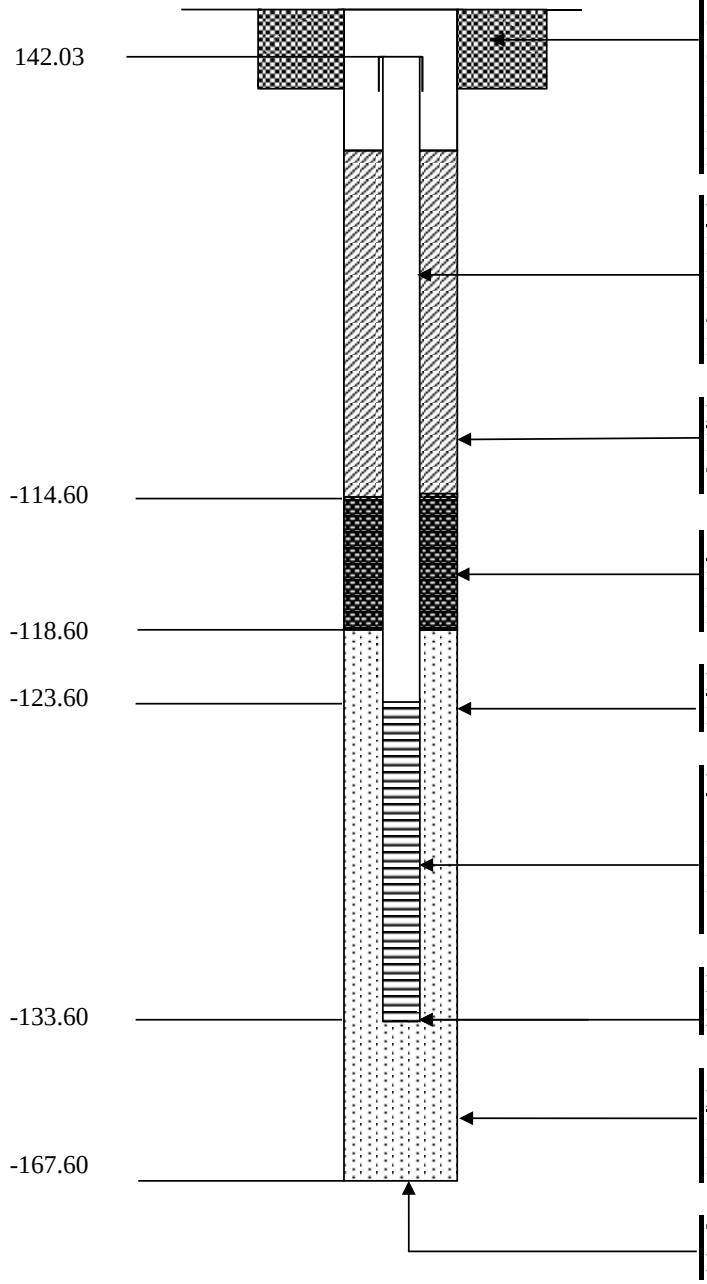
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.63 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**87.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 7 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 21 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**115 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**116 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-26D-276
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	12/17/2008
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	12/22/2008
DRILLING METHOD:	Sonic	**DRILLER:**	M.Bond
NORTHING (FT):	219260.3	**GS ELEVATION (FT):** 142.40	**INSPECTOR:** S.Craig, E&E, Inc.
EASTING (FT):	1108868.6	**WATER LEVEL (FT, BTOC):** 61.15	**TOTAL WELL DEPTH (FT, BGS):** 276

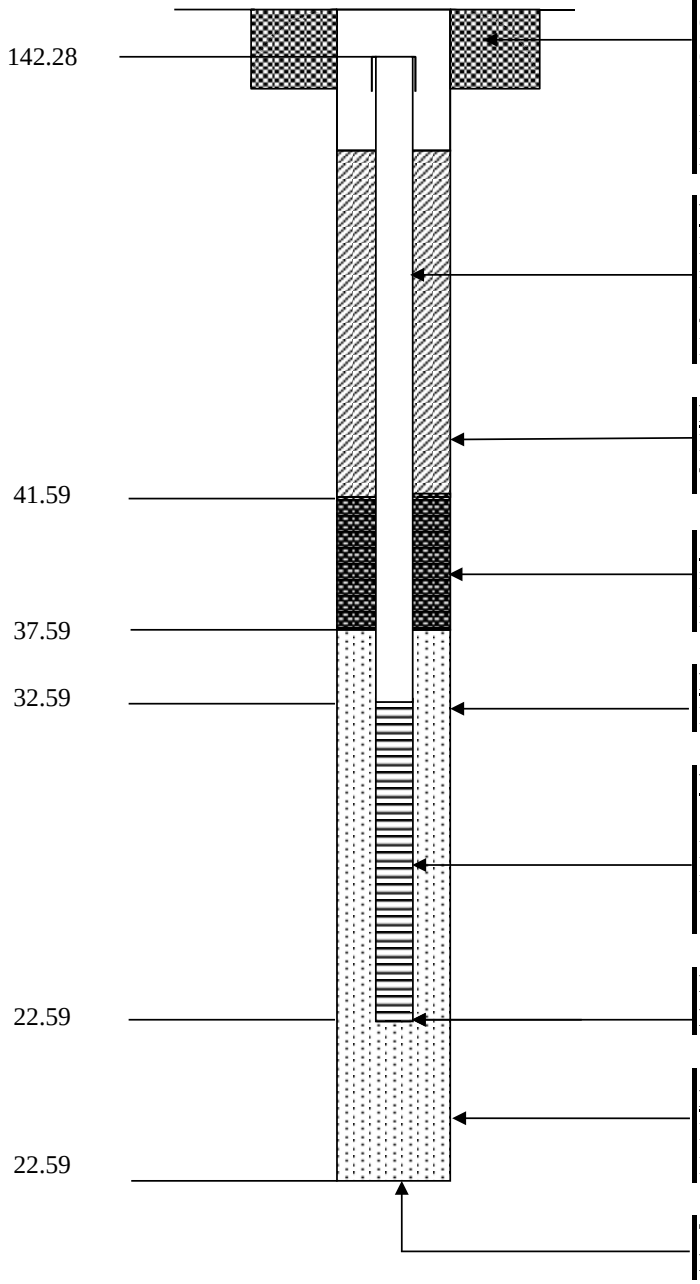
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**265.63 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**256.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 49 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**276 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**310 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	WELL NO.:	MW-26S-120
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	3/3/2010
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	3/8/2010
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	N/A
NORTHING (FT):	219265.2	**GS ELEVATION (FT):** 142.59	**INSPECTOR:** C.Burkele, CDM
EASTING (FT):	1108864.6	**WATER LEVEL (FT, BTOC):** 61.43	**TOTAL WELL DEPTH (FT, BGS):** 120

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**109.69 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**100.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#01 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **120 feet**

BOTTOM SEAL / BACKFILL

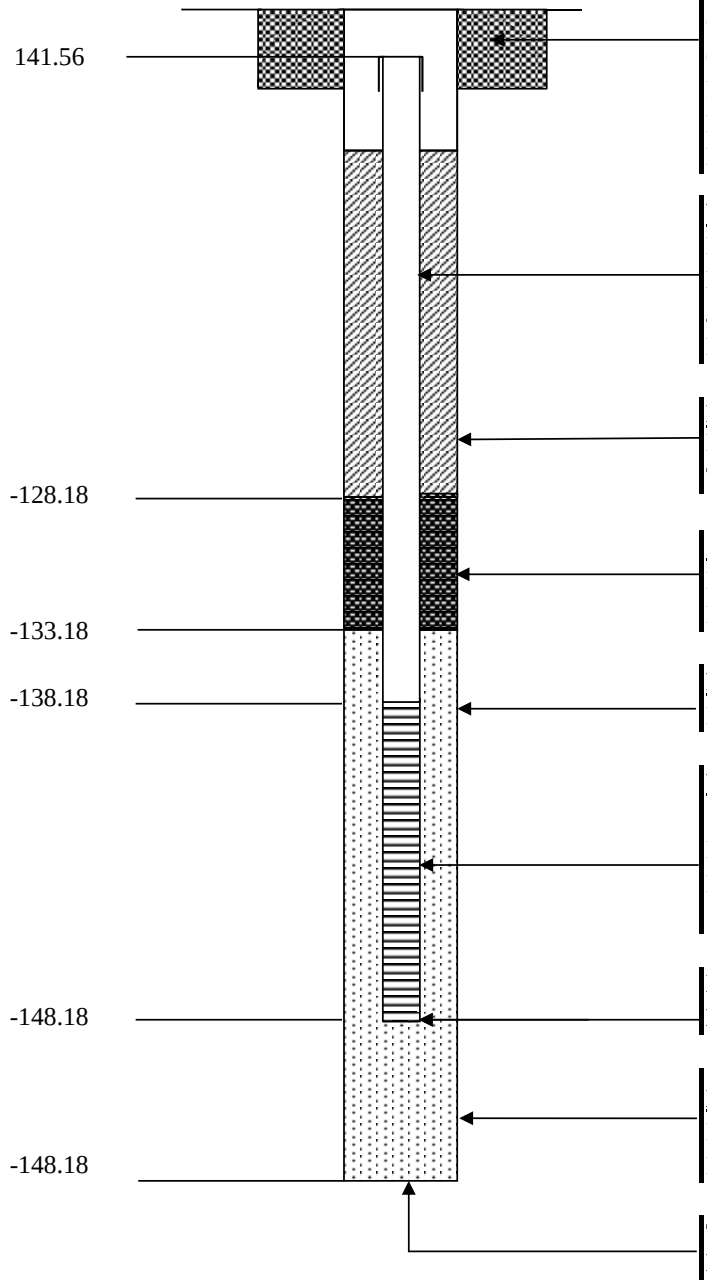
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **120 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-27D-290
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	3/3/2010
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	3/8/2010
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	N/A
NORTHING (FT):	219241.1	**GS ELEVATION (FT):** 141.82	**INSPECTOR:** T.Bennett, CDM
EASTING (FT):	1109106.0	**WATER LEVEL (FT, BTOC):** 60.57	**TOTAL WELL DEPTH (FT, BGS):** 290

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**279.74 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**269.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#01 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **290 feet**

BOTTOM SEAL / BACKFILL

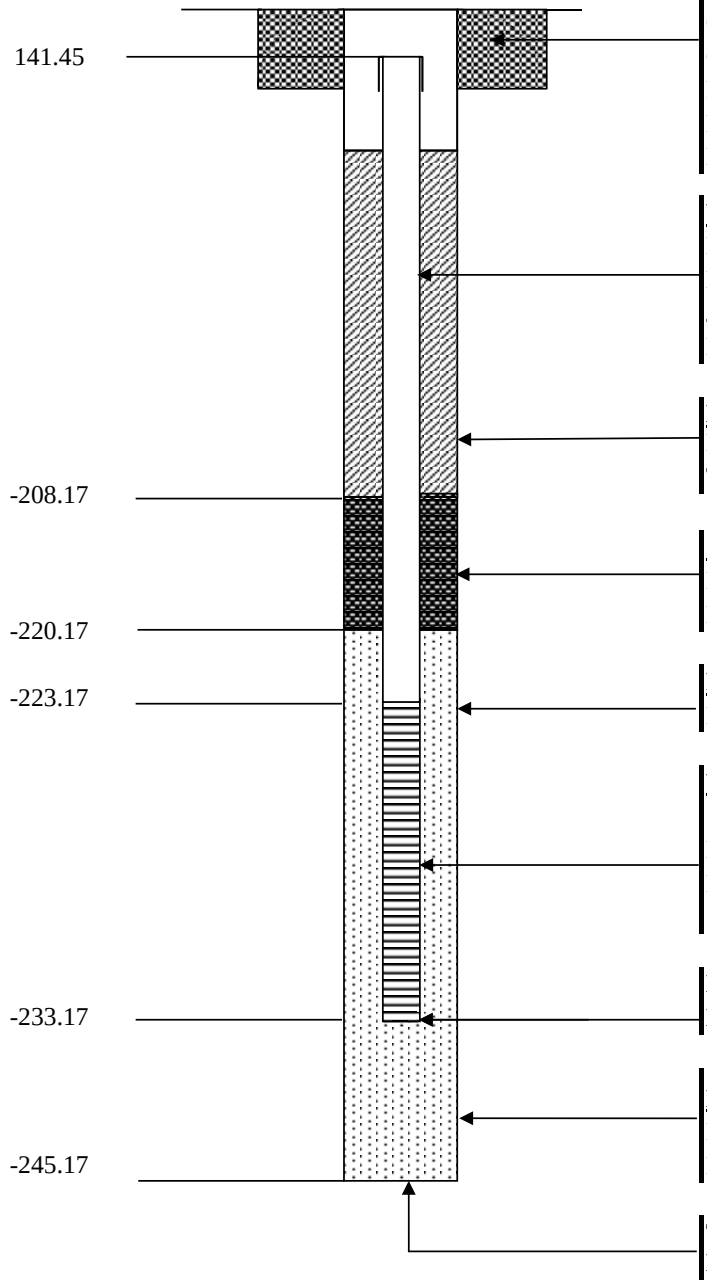
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **290 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-27DD-375
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	1/12/2009
DRILLING CONTRACTOR:	Boart Longyear	**DATE FINISHED:**	1/23/2009
DRILLING METHOD:	Sonic	**DRILLER:**	M.Bond
NORTHING (FT):	219240.7	**GS ELEVATION (FT):** 141.83	**INSPECTOR:** M.Werth, E&E, Inc.
EASTING (FT):	1109097.5	**WATER LEVEL (FT, BTOC):** 60.95	**TOTAL WELL DEPTH (FT, BGS):** 375

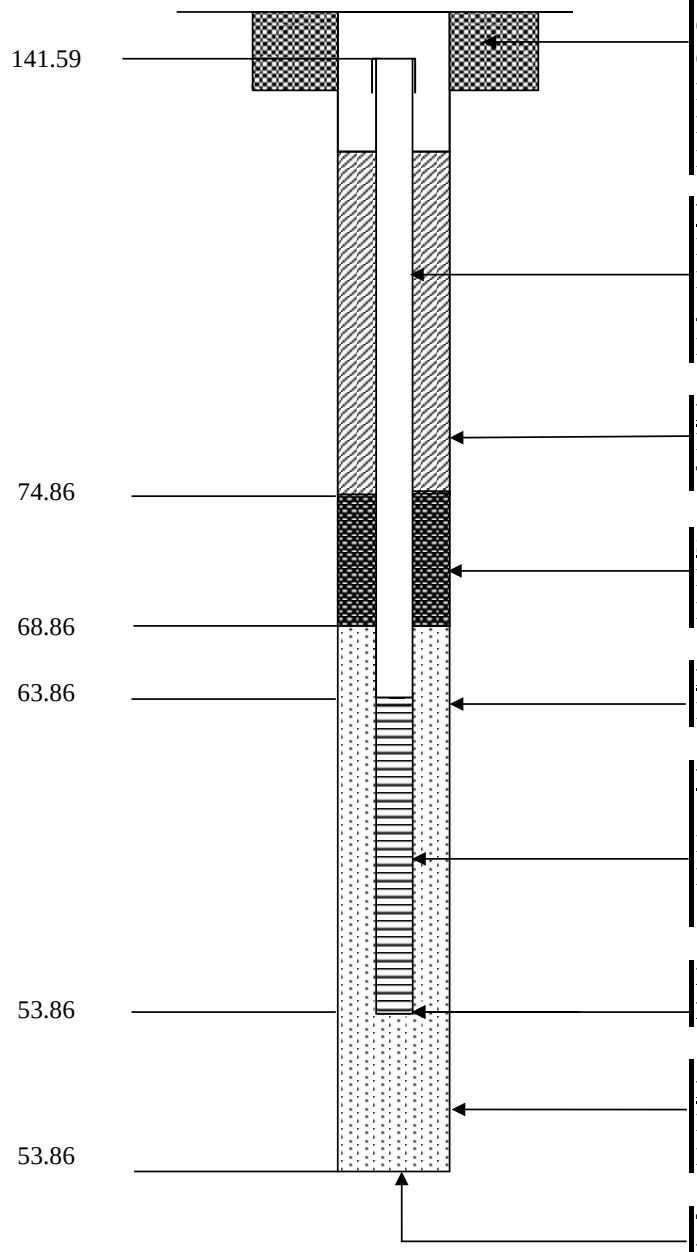
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**364.62 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**349.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 12 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 25 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**375 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**387 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram		WELL NO.: MW-27S-88
CLIENT: USACE Kansas City District			**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Coring FUSRAP			**DATE STARTED:** 3/9/2010
DRILLING CONTRACTOR: Boart Longyear			**DATE FINISHED:** 3/10/2010
DRILLING METHOD: Sonic			**DRILLER:** N/A
NORTHING (FT): 219236.7	**GS ELEVATION (FT):** 141.86		**INSPECTOR:** T.Bennett, CDM
EASTING (FT): 1109092.2	**WATER LEVEL (FT, BTOC):** 60.63		**TOTAL WELL DEPTH (FT, BGS):** 88

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

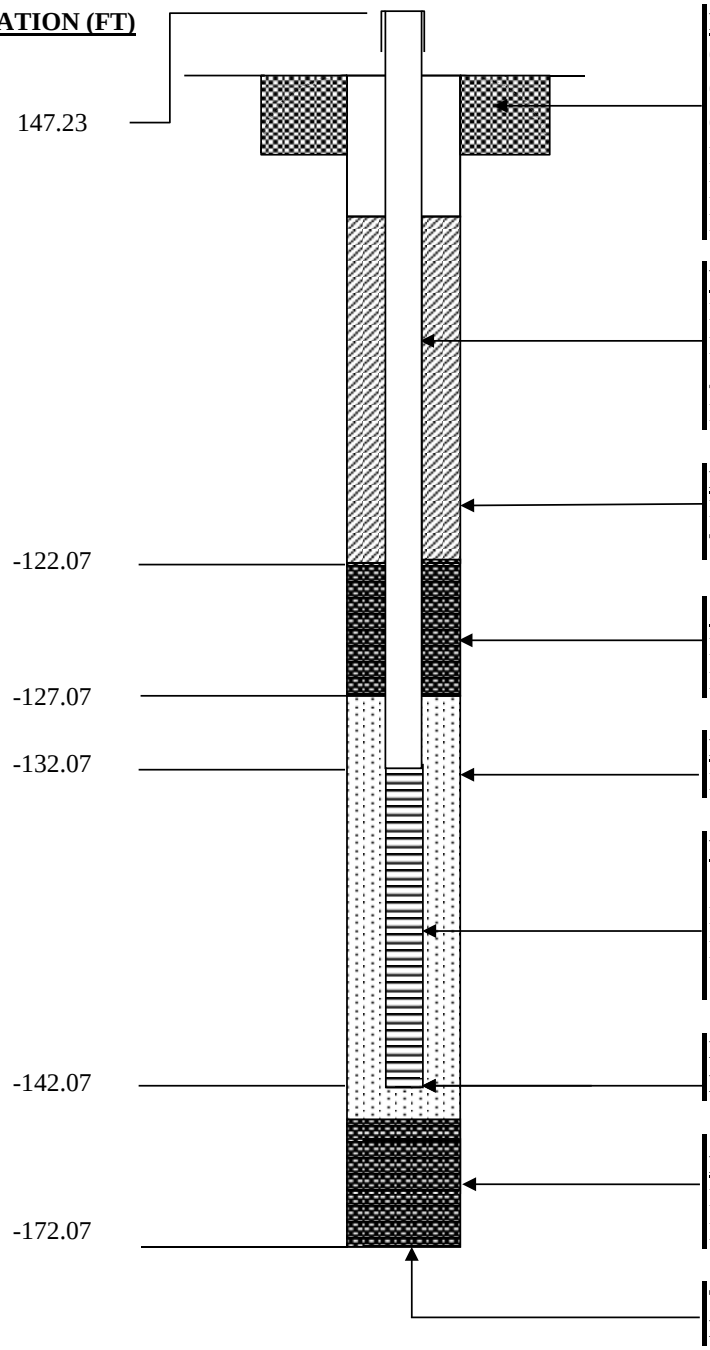


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**77.73 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**66.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**6 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**88 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**88 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-28D-287**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	1/5/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	1/11/2009
DRILLING METHOD:	Sonic			**DRILLER:**	M.Bond
NORTHING (FT):	219275.3	**GS ELEVATION (FT):**	144.93	**INSPECTOR:**	M.Werth, E&E, Inc.
EASTING (FT):	1109274.1	**WATER LEVEL (FT, BTOC):**	66.16	**TOTAL WELL DEPTH (FT, BGS):**	287

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

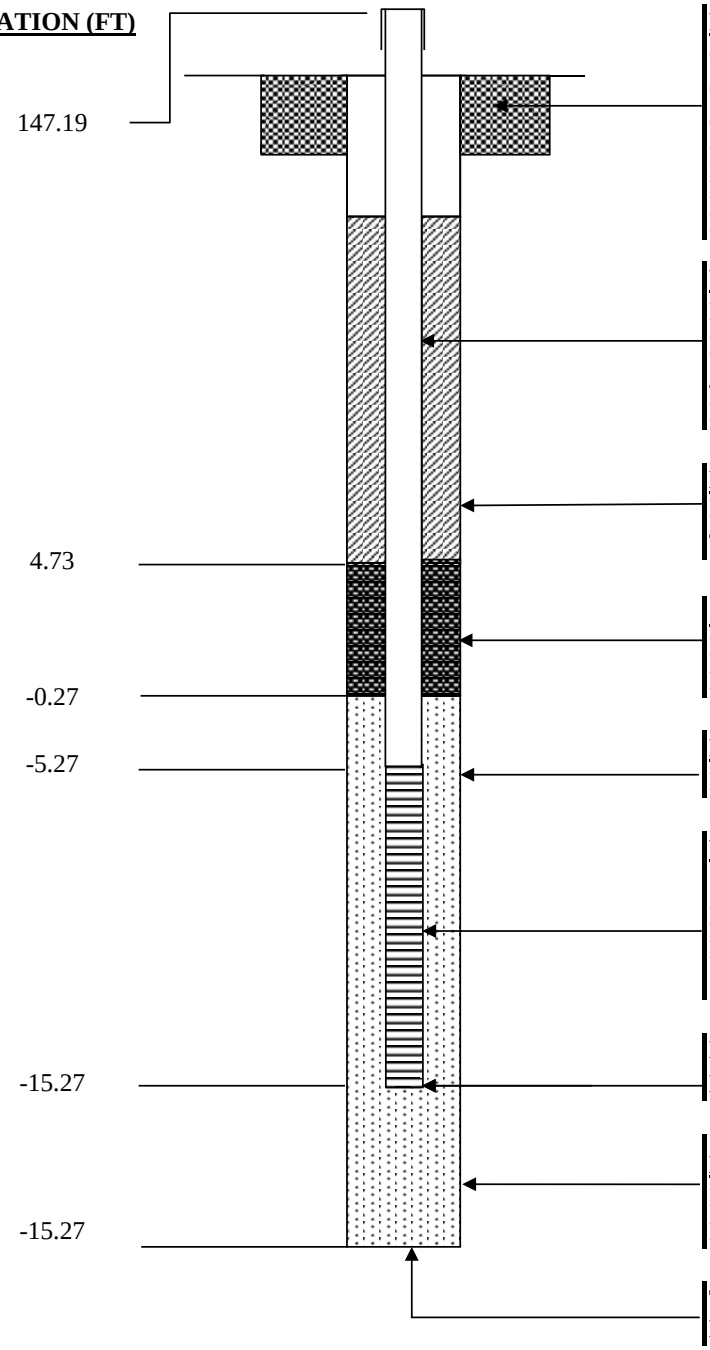


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**279.3 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**269 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 17 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**287 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Bentonite Pellets (Backfill) / 28 feet**
MATERIAL / THICKNESS	
TOTAL DEPTH OF BOREHOLE	**317 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-28I-160**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	1/14/2009
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	1/19/2009
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	N/A
NORTHING (FT):	219263.7	**GS ELEVATION (FT):**	144.73	**INSPECTOR:**	T.Bennette, CDM
EASTING (FT):	1109270.2	**WATER LEVEL (FT, BTOC):**	66.14	**TOTAL WELL DEPTH (FT, BGS):**	160

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

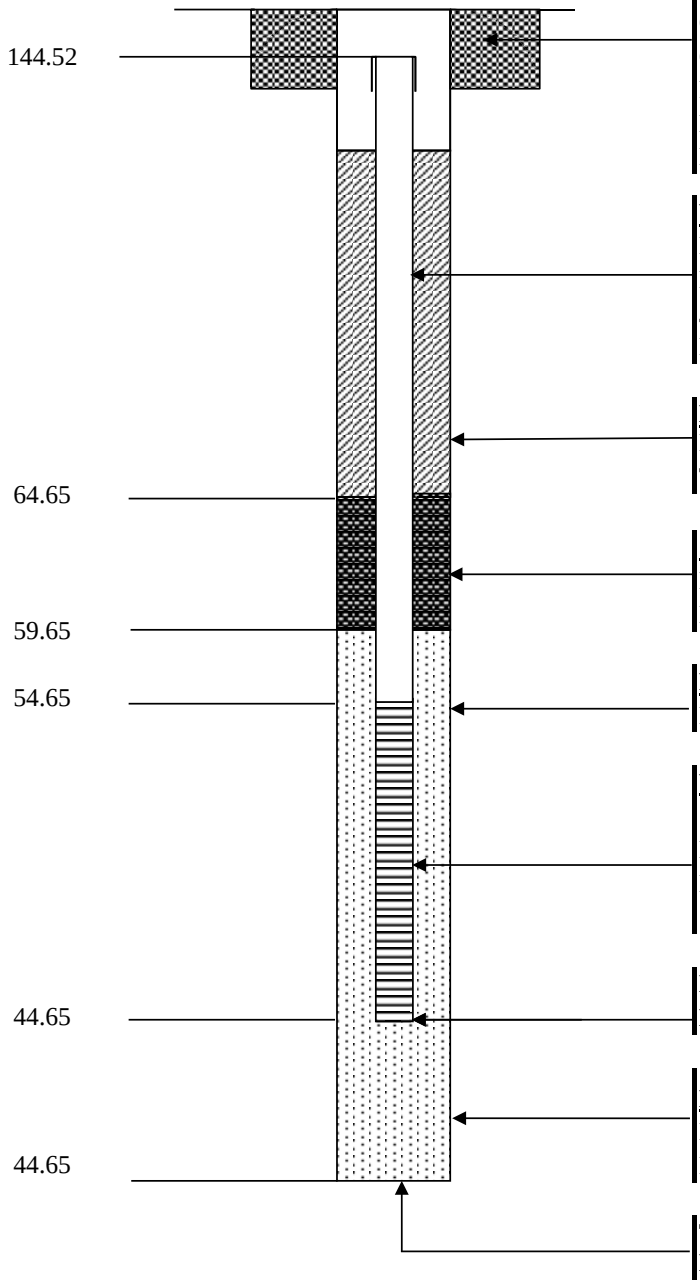


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**150 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**140.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#01 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**160 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**160 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-28S-100**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	1/14/2009
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	1/19/2009
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	N/A
NORTHING (FT):	219267.1	**GS ELEVATION (FT):**	144.65	**INSPECTOR:**	T.Bennette, CDM
EASTING (FT):	1109279.9	**WATER LEVEL (FT, BTOC):**	63.49	**TOTAL WELL DEPTH (FT, BGS):**	100

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

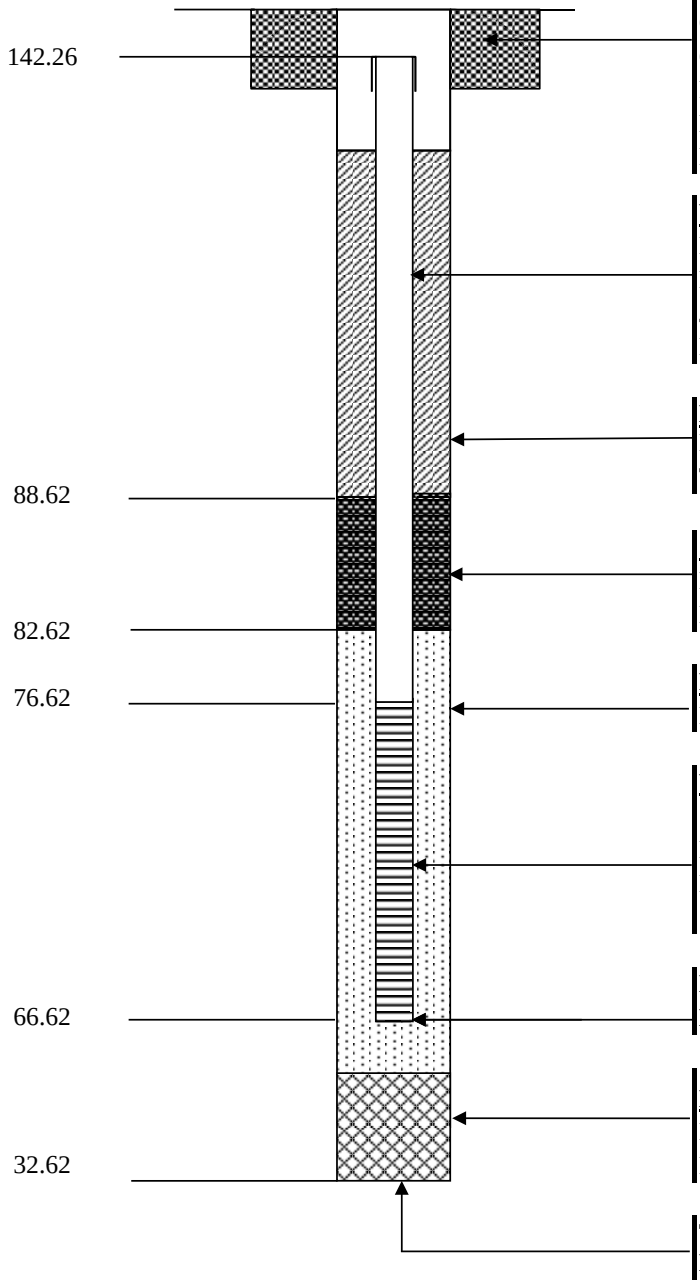


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**89.69 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**79.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#01 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**100 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**100 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-29S-76**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	2/19/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	2/20/2009
DRILLING METHOD:	Sonic			**DRILLER:**	F.Lavoie
NORTHING (FT):	219106.1	**GS ELEVATION (FT):**	142.62	**INSPECTOR:**	M.Werth, E&E, Inc.
EASTING (FT):	1109090.2	**WATER LEVEL (FT, BTOC):**	61.37	**TOTAL WELL DEPTH (FT, BGS):**	76

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**65.64 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**53.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 20.5 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **76 feet**

BOTTOM SEAL / BACKFILL

MATERIAL / THICKNESS	**Formation Collapse / 29.5 feet**
MATERIAL / THICKNESS	

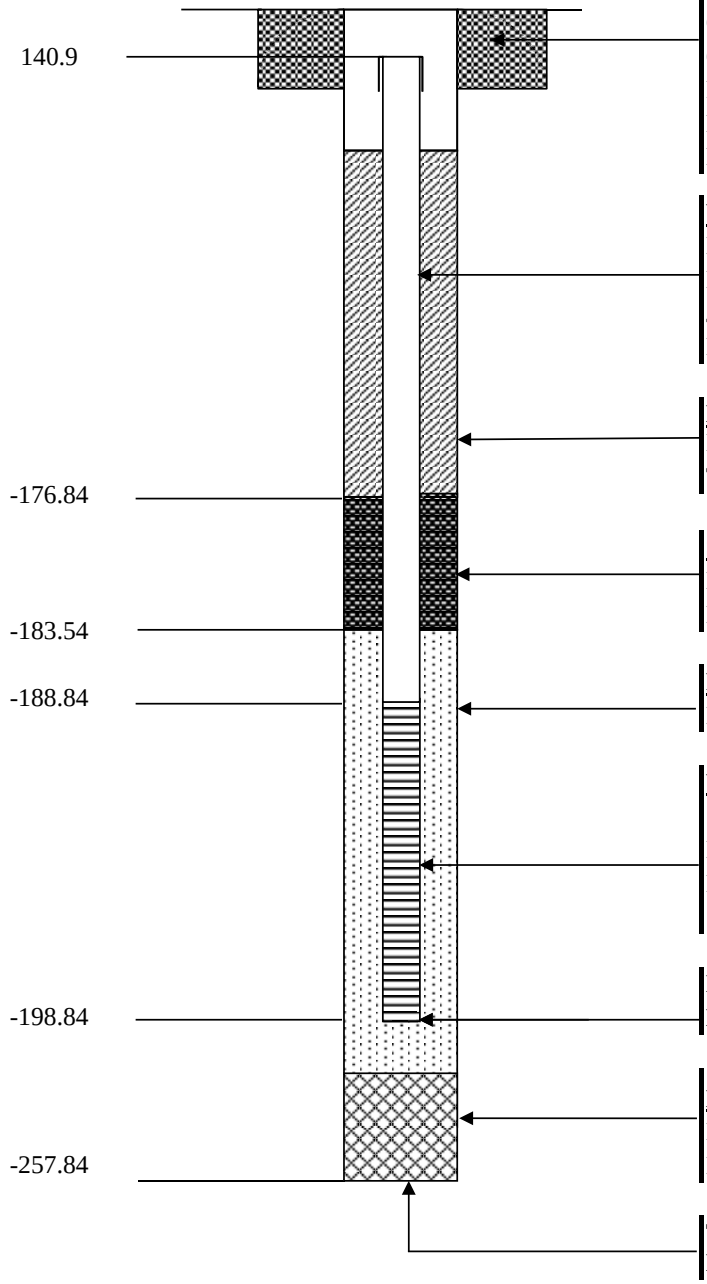
TOTAL DEPTH OF BOREHOLE — **110 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-30D-340**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	2/19/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	2/26/2009
DRILLING METHOD:	Sonic			**DRILLER:**	M. Bond
NORTHING (FT):	218955.7	**GS ELEVATION (FT):**	141.16	**INSPECTOR:**	B. Cole, E&E, Inc.
EASTING (FT):	1108779.7	**WATER LEVEL (FT, BTOC):**	60.65	**TOTAL WELL DEPTH (FT, BGS):**	340

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**329.74 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**317.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 7 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 35 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **340 feet**

BOTTOM SEAL / BACKFILL

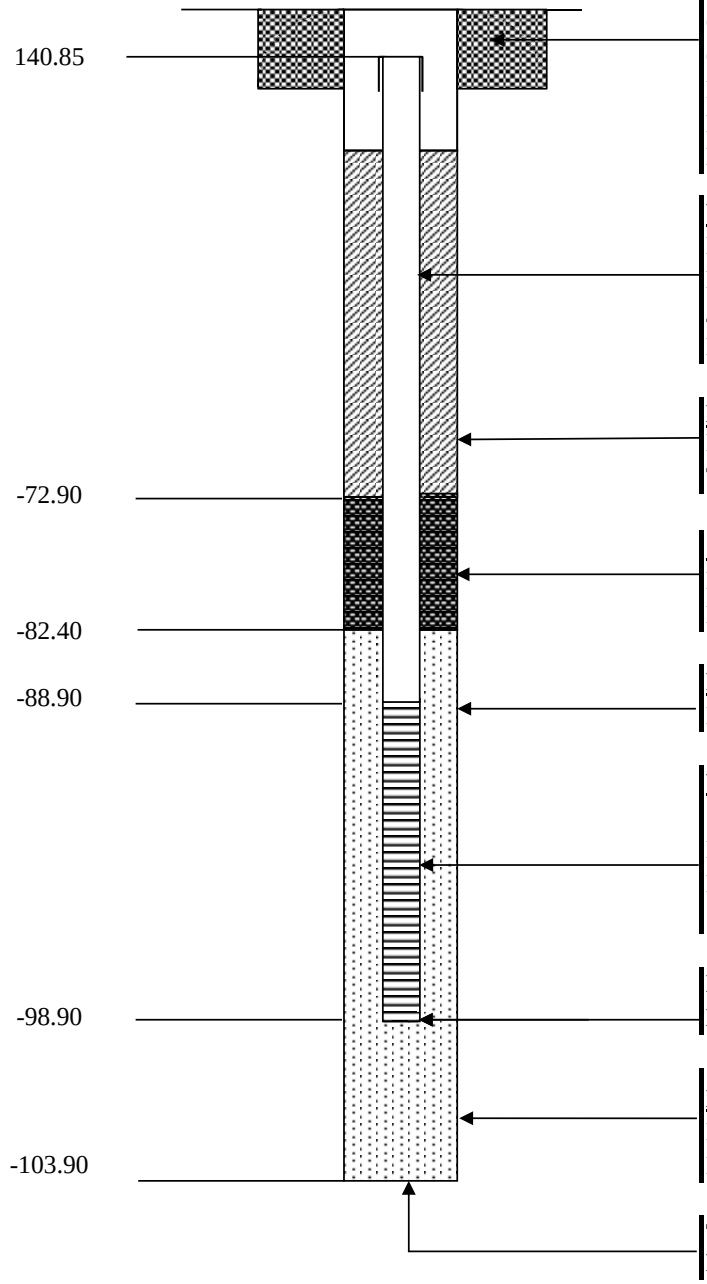
MATERIAL / THICKNESS	**Formation Collapse / 39 feet**
MATERIAL / THICKNESS	

TOTAL DEPTH OF BOREHOLE — **399 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-30I-240**
CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	1/20/2010
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	1/29/2010
DRILLING METHOD:	Sonic			**DRILLER:**	G. Pech
NORTHING (FT):	218958.2	**GS ELEVATION (FT):**	141.10	**INSPECTOR:**	P. Connelly, CDM
EASTING (FT):	1108787.8	**WATER LEVEL (FT, BTOC):**	60.2	**TOTAL WELL DEPTH (FT, BGS):**	240

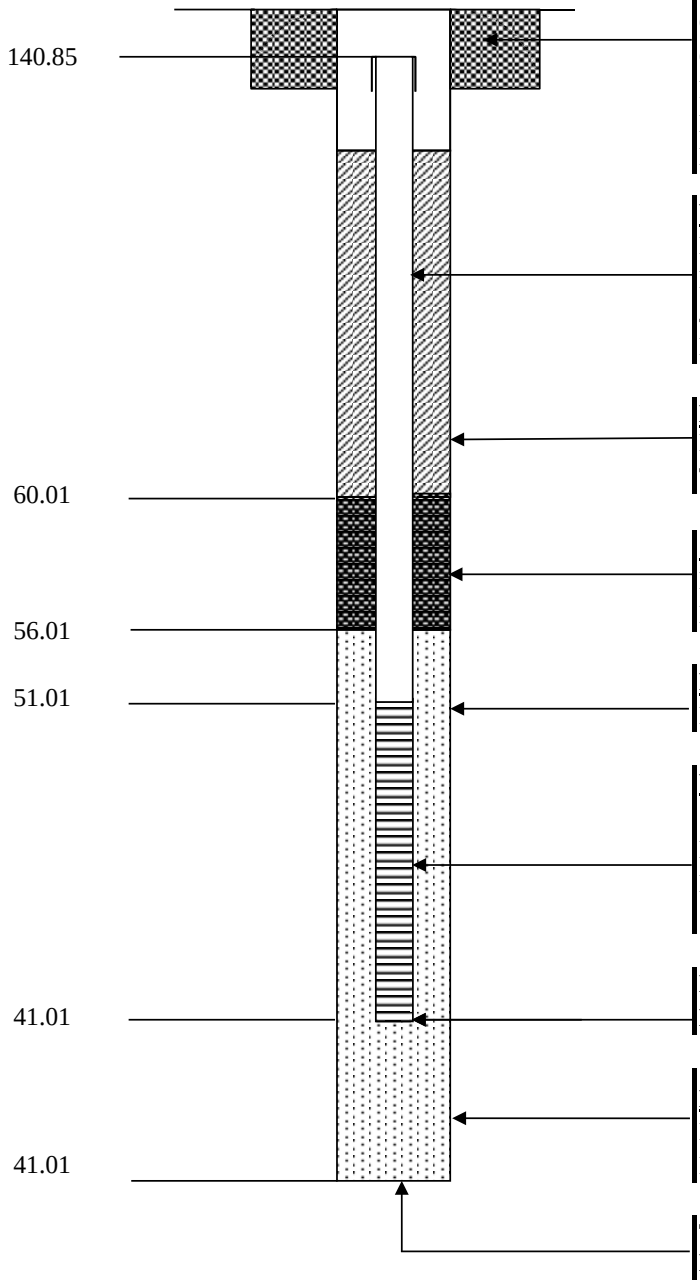
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**299.75 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**213.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 9.5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 21.5 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**240 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**245 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-30S-100
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	2/21/2010
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	2/22/2010
DRILLING METHOD:	Sonic	**DRILLER:**	N/A
NORTHING (FT):	218954.0	**GS ELEVATION (FT):** 141.01	**INSPECTOR:** T. Bennett, CDM
EASTING (FT):	1108771.9	**WATER LEVEL (FT, BTOC):** 60.20	**TOTAL WELL DEPTH (FT, BGS):** 100

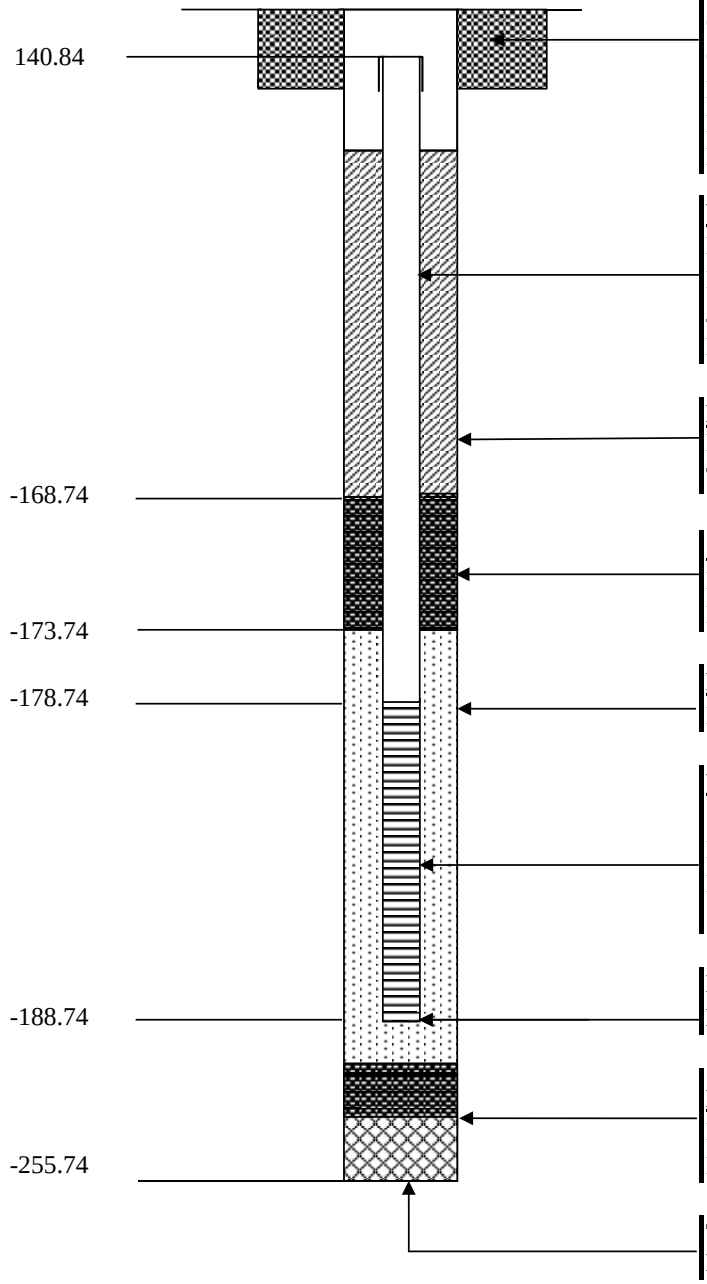
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**89.84 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**80.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**100 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**100 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-31D-330**
CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	2/9/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	2/13/2009
DRILLING METHOD:	Sonic			**DRILLER:**	M. Bond
NORTHING (FT):	218997	**GS ELEVATION (FT):**	141.26	**INSPECTOR:**	B. Cole, E&E, Inc.
EASTING (FT):	1108997.4	**WATER LEVEL (FT, BTOC):**	60.63	**TOTAL WELL DEPTH (FT, BGS):**	330

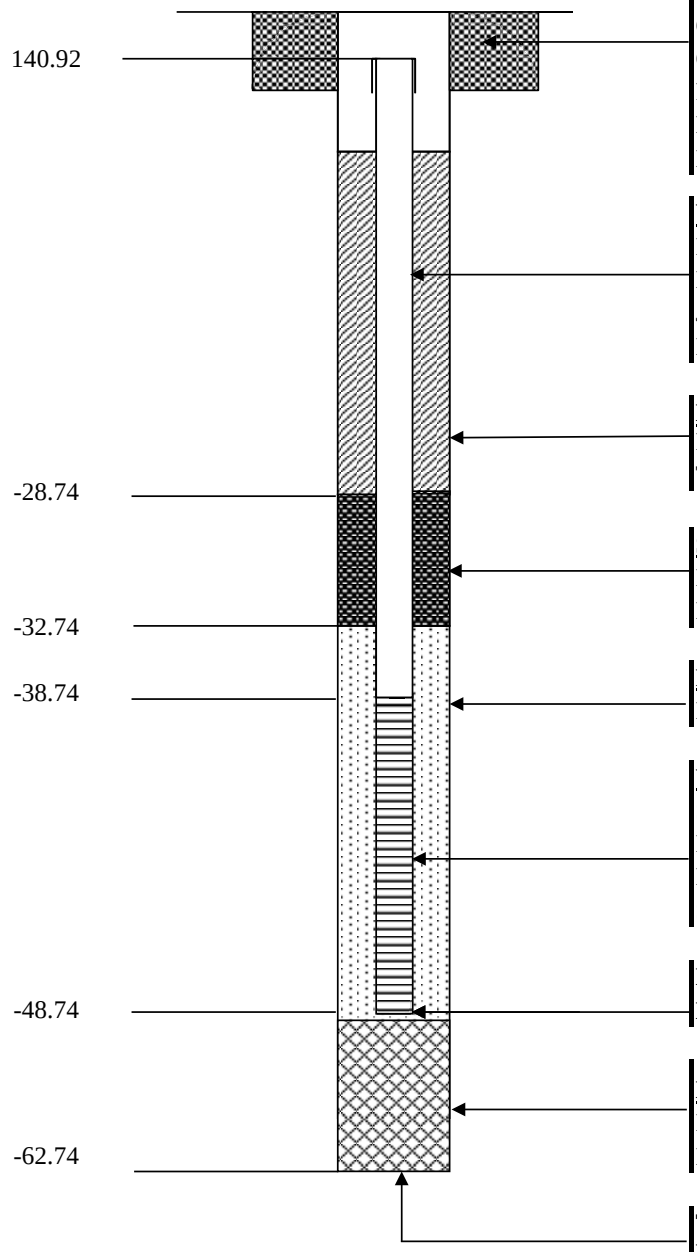
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**309.58 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**309.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 20 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**330 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Bentonite Chips / 32 feet**
MATERIAL / THICKNESS	**Formation Collapse / 30 feet**
TOTAL DEPTH OF BOREHOLE	**397 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram		WELL NO.: MW-31I-190
CLIENT: USACE Kansas City District			**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Coring FUSRAP			**DATE STARTED:** 2/10/2010
DRILLING CONTRACTOR: Miller Drilling			**DATE FINISHED:** 2/20/2010
DRILLING METHOD: Sonic			**DRILLER:** C. Boyd
NORTHING (FT): 218998.6	**GS ELEVATION (FT):** 141.26		**INSPECTOR:** C. Buerkle, CDM
EASTING (FT): 1109004.4	**WATER LEVEL (FT, BTOC):** 60.14		**TOTAL WELL DEPTH (FT, BGS):** 190

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

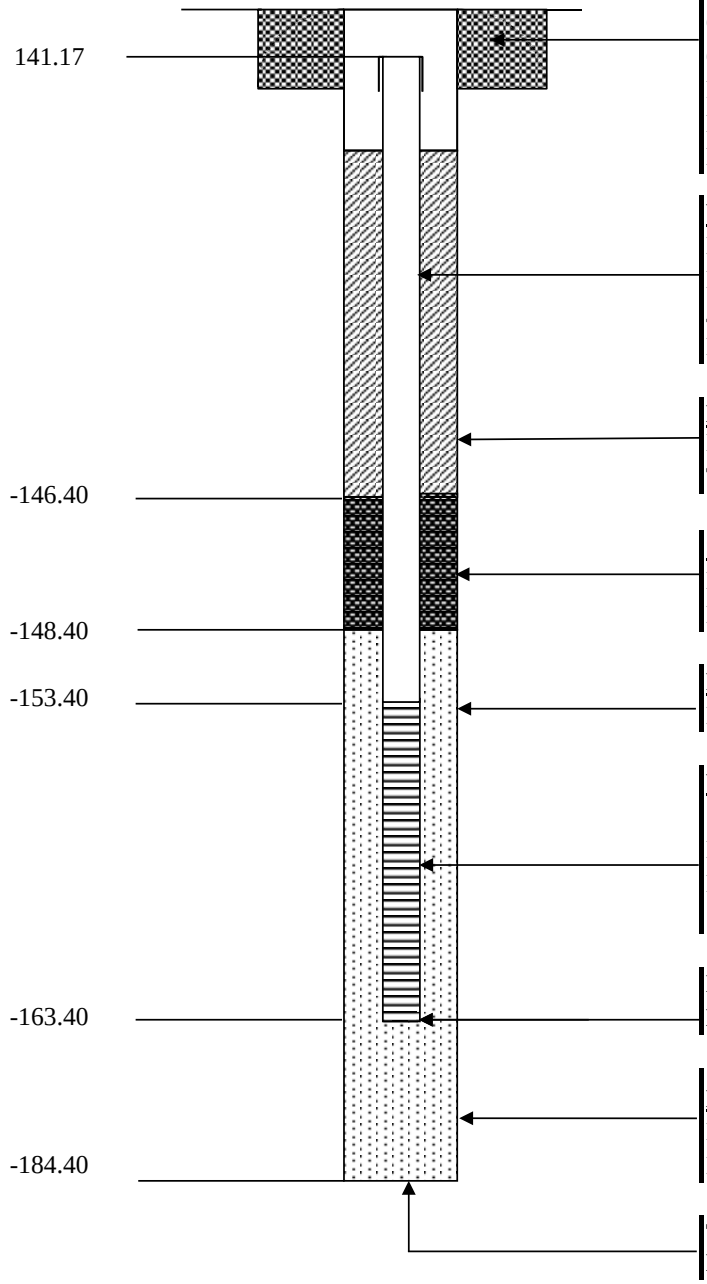


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**179.66 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**169.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**190 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 14 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**204 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-32D-305**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	2/10/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	2/18/2009
DRILLING METHOD:	Sonic			**DRILLER:**	G. Sealey
NORTHING (FT):	219079.8	**GS ELEVATION (FT):**	141.60	**INSPECTOR:**	M. Werth, E&E, Inc.
EASTING (FT):	1109291.1	**WATER LEVEL (FT, BTOC):**	60.90	**TOTAL WELL DEPTH (FT, BGS):**	305

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

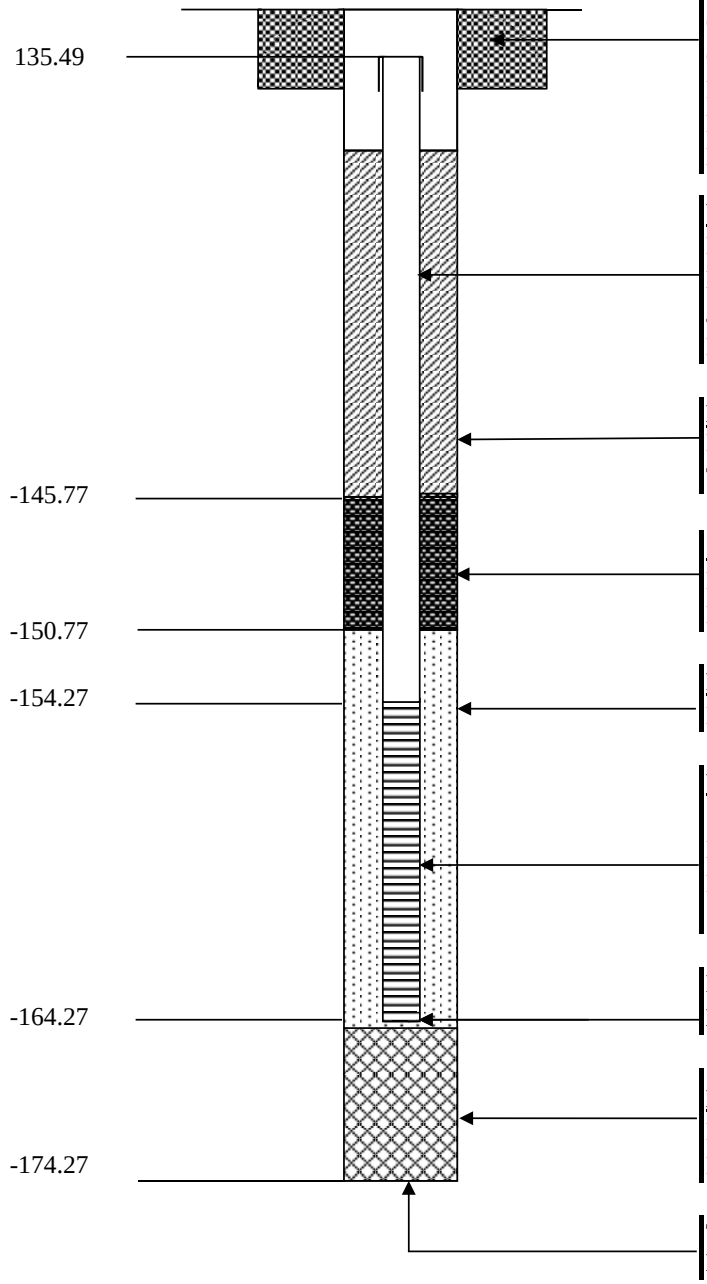


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**294.57 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**287.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 2 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 36 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**305 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**326 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-33D-300**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	1/30/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	2/10/2009
DRILLING METHOD:	Sonic			**DRILLER:**	G. Sealey
NORTHING (FT):	219266.0	**GS ELEVATION (FT):**	135.73	**INSPECTOR:**	M. Werth, E&E, Inc.
EASTING (FT):	1109481.2	**WATER LEVEL (FT, BTOC):**	54.96	**TOTAL WELL DEPTH (FT, BGS):**	300

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

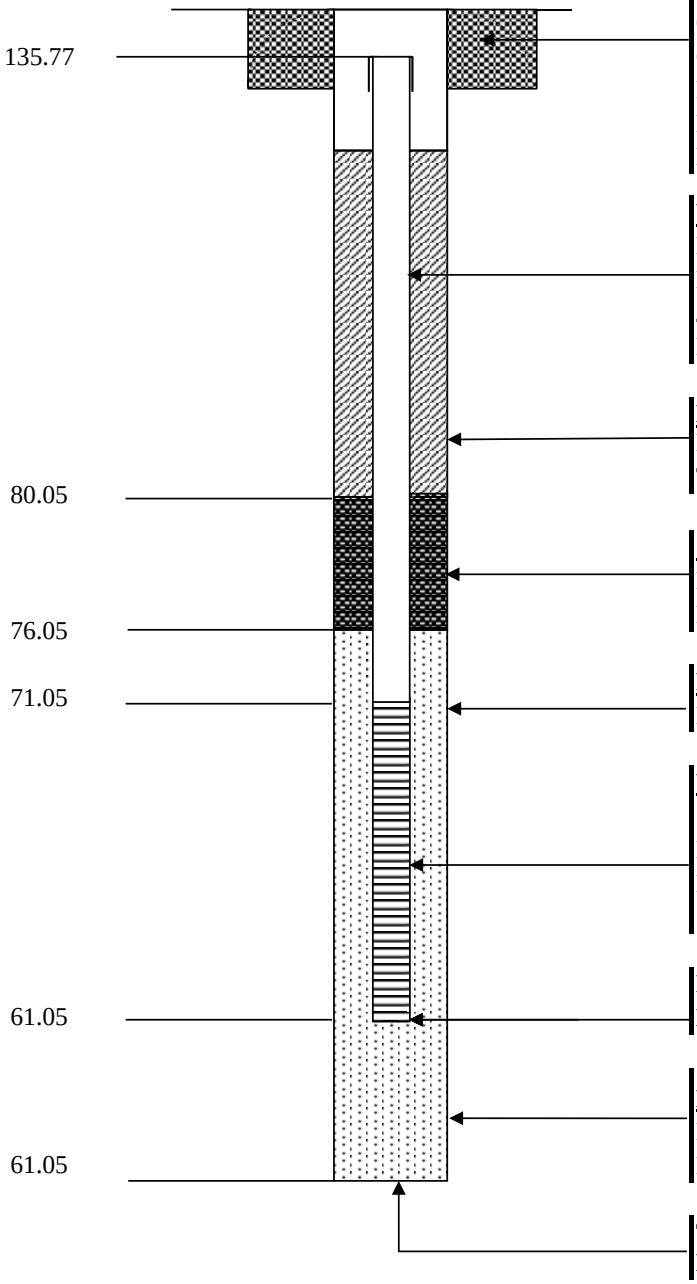


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**289.76 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**281 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 13.5 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**300 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 10 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**310 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-33S-75**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	3/6/2010
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	3/7/2010
DRILLING METHOD:	Sonic			**DRILLER:**	C. Boyd
NORTHING (FT):	219259.6	**GS ELEVATION (FT):**	136.05	**INSPECTOR:**	C. Buerkle, CDM
EASTING (FT):	1109471.7	**WATER LEVEL (FT, BTOC):**	54.65	**TOTAL WELL DEPTH (FT, BGS):**	75

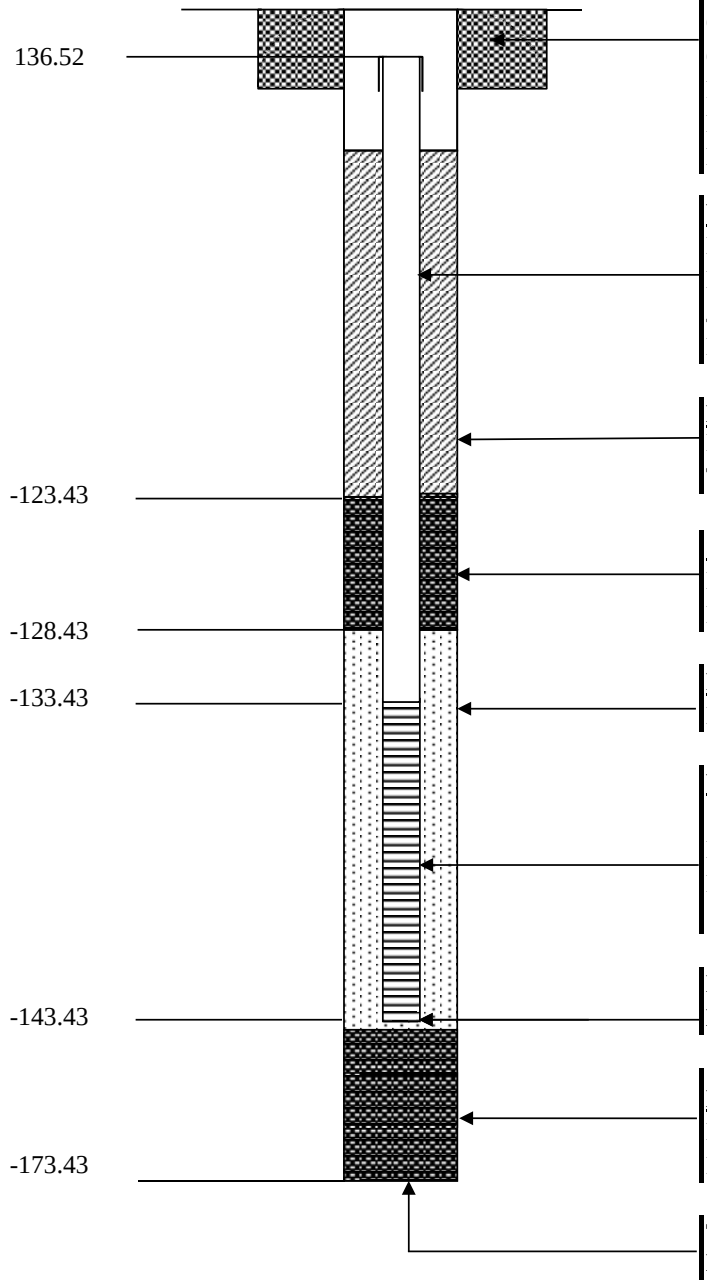
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**64.72 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**55.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**75 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**75 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-34D-280**
CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	1/30/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	2/4/2009
DRILLING METHOD:	Sonic			**DRILLER:**	M. Bond
NORTHING (FT):	219167.7	**GS ELEVATION (FT):**	136.57	**INSPECTOR:**	S. Craig, E&E, Inc.
EASTING (FT):	1109702.7	**WATER LEVEL (FT, BTOC):**	55.32	**TOTAL WELL DEPTH (FT, BGS):**	280

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

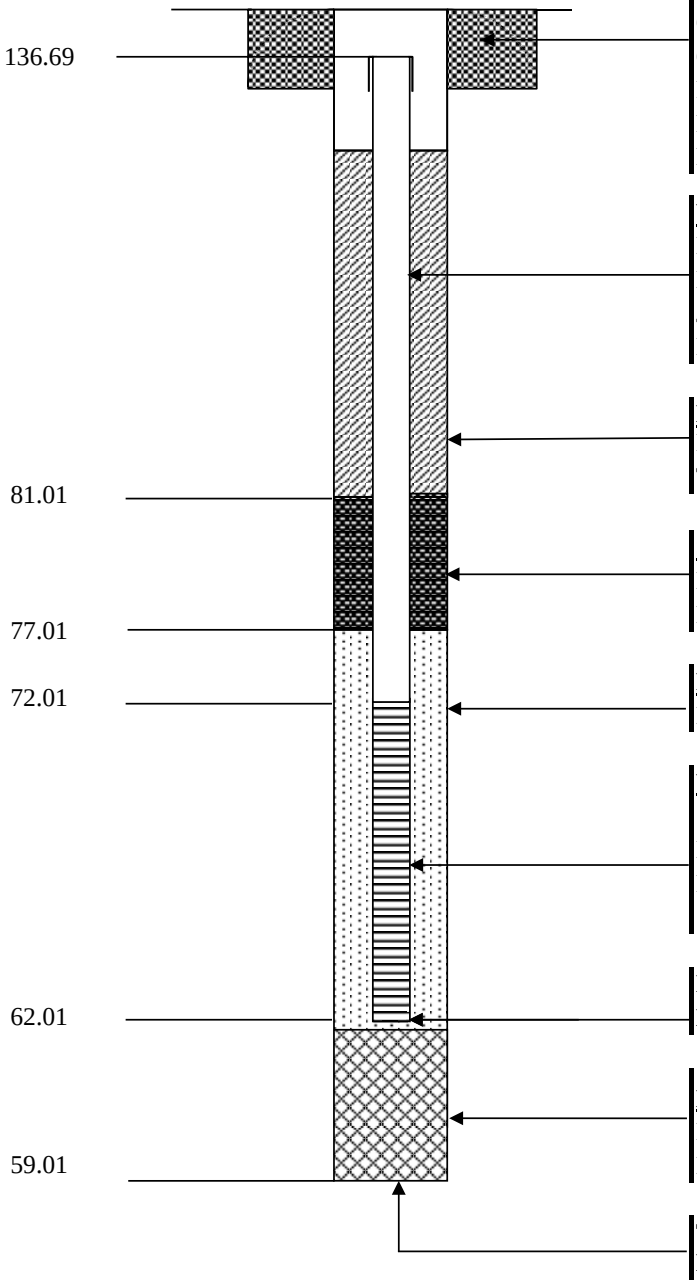


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**N/A**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**269.95 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**259.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**280 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Bentonite Chips / 30 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**310 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-34S-75**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	3/4/2010
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	3/5/2010
DRILLING METHOD:	Sonic			**DRILLER:**	C. Boyd
NORTHING (FT):	219165.7	**GS ELEVATION (FT):**	137.01	**INSPECTOR:**	C. Buerkle, CDM
EASTING (FT):	1109692.8	**WATER LEVEL (FT, BTOC):**	55.44	**TOTAL WELL DEPTH (FT, BGS):**	75

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

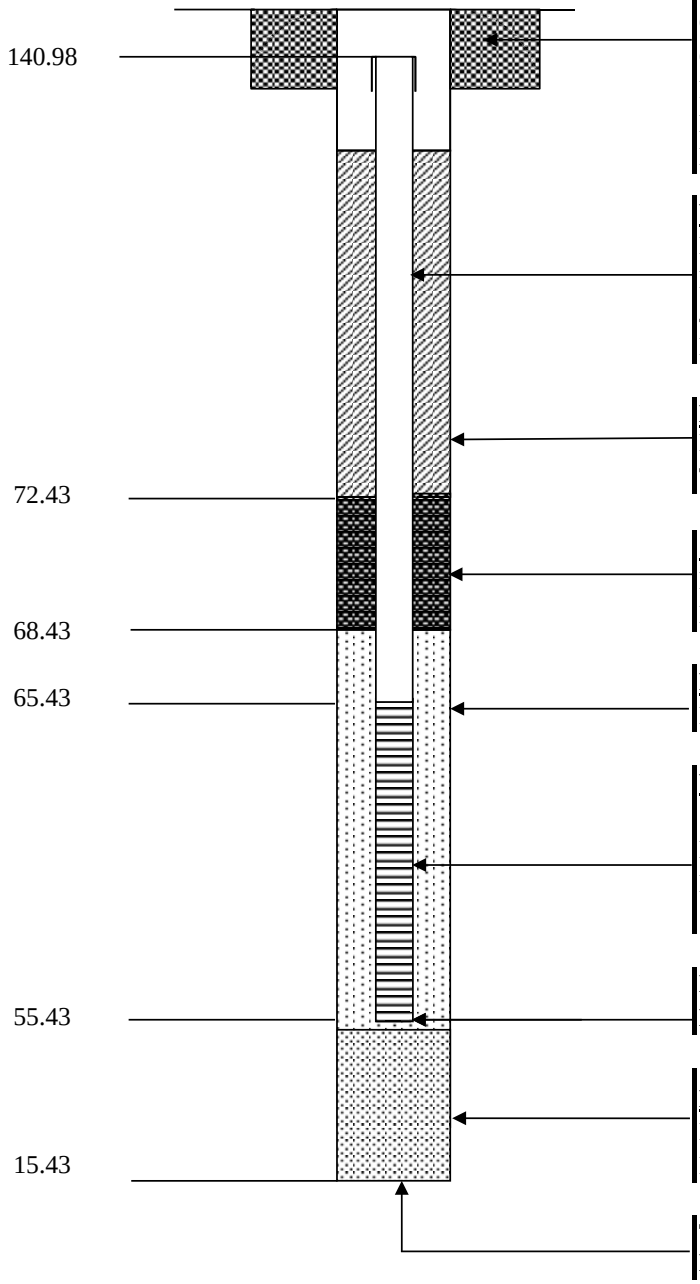


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**64.68 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**55.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**75 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 3 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**78 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-39S-86**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	12/20/2009
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	12/22/2009
DRILLING METHOD:	Sonic			**DRILLER:**	M. Mclean
NORTHING (FT):	218962.3	**GS ELEVATION (FT):**	141.43	**INSPECTOR:**	B. Cole, E&E, Inc.
EASTING (FT):	1108816.0	**WATER LEVEL (FT, BTOC):**	60.31	**TOTAL WELL DEPTH (FT, BGS):**	86

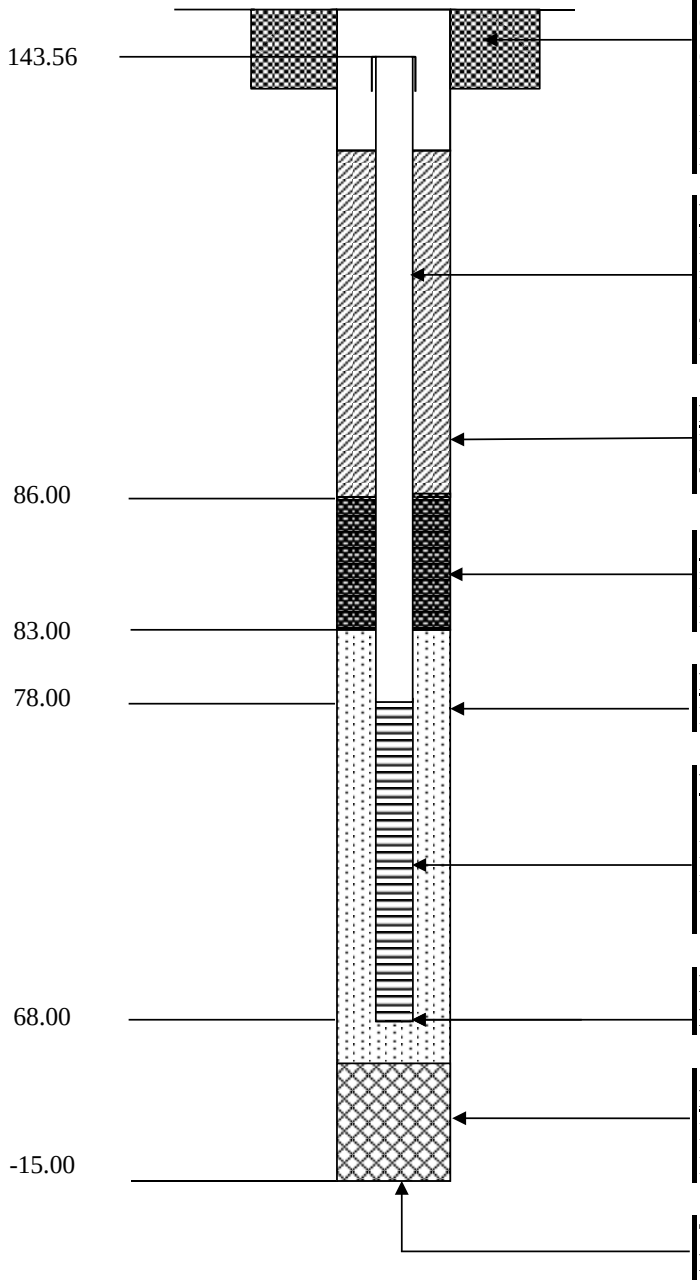
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**75.55 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**68.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 13 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**86 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#1 Sand (Seal) / 40 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**126 feet**
DIAMETER OF BOREHOLE	**6 inches**

	Well Construction Diagram	WELL NO.:	MW-41S-76
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	12/8/2009
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	1/4/2010
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	N/A
NORTHING (FT):	219576.1	**GS ELEVATION (FT):** 144.00	**INSPECTOR:** T.Bennett, CDM
EASTING (FT):	1109279.4	**WATER LEVEL (FT, BTOC):** 62.48	**TOTAL WELL DEPTH (FT, BGS):** 76

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

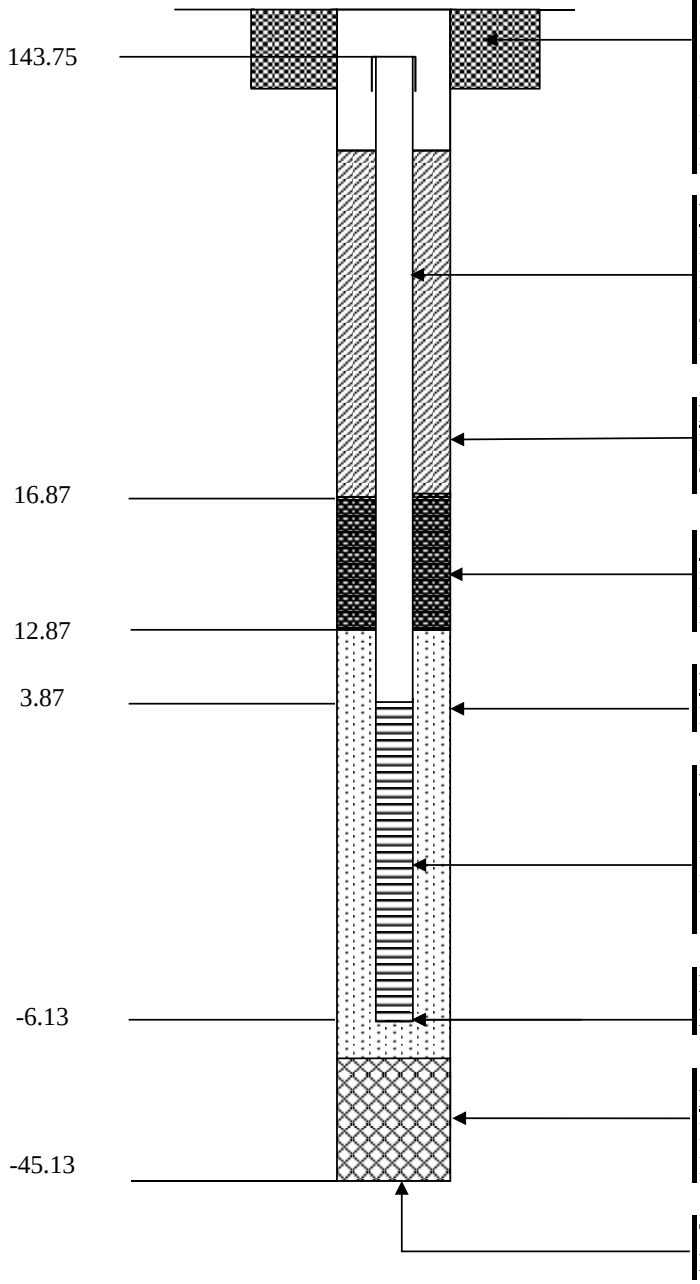


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**66.56 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**57.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 18 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**76 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 80 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**159 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-42I-150**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	12/16/2009
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	1/14/2010
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	C.Boyd
NORTHING (FT):	219570.7	**GS ELEVATION (FT):**	143.87	**INSPECTOR:**	S.Britch, CDM
EASTING (FT):	1109384.1	**WATER LEVEL (FT, BTOC):**	62.59	**TOTAL WELL DEPTH (FT, BGS):**	150

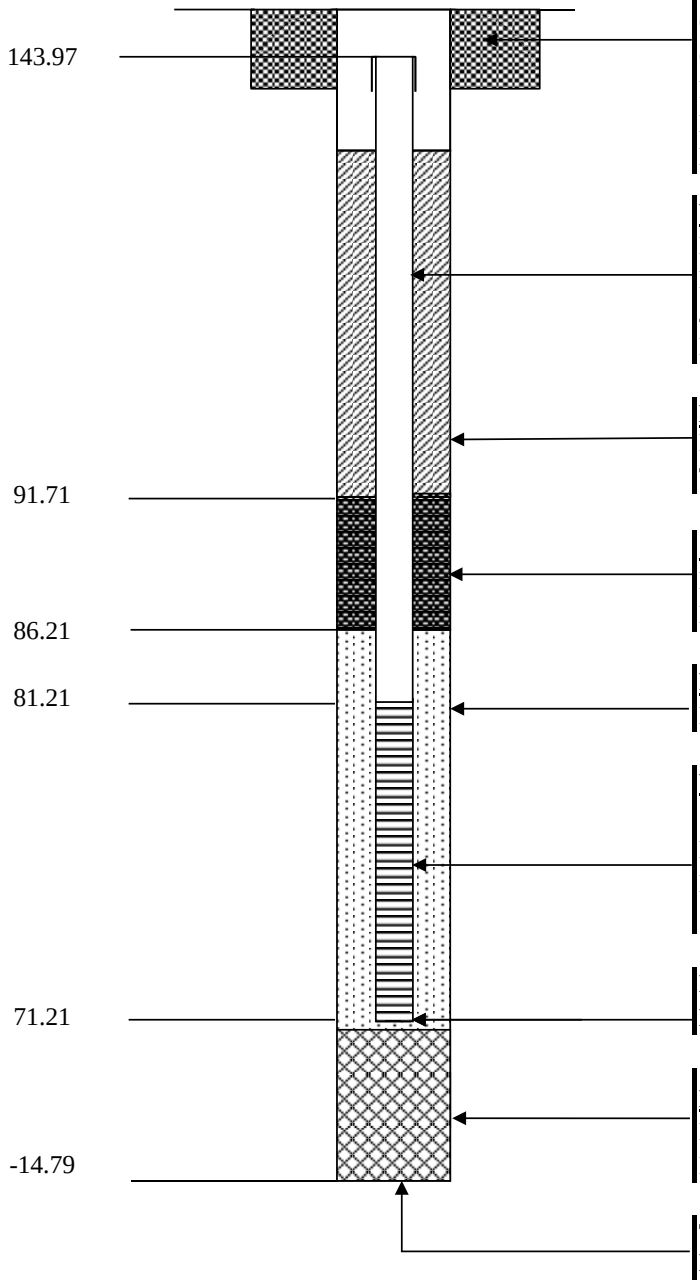
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**139.88 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**126.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 19 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**150 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 39 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**189 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-43S-73
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	12/15/2009
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	1/6/2010
DRILLING METHOD: Rotary Sonic		**DRILLER:**	N/A
NORTHING (FT): 219515.4	**GS ELEVATION (FT):** 144.21	**INSPECTOR:**	S.Britch, CDM
EASTING (FT): 1109327.8	**WATER LEVEL (FT, BTOC):** 62.91	**TOTAL WELL DEPTH (FT, BGS):**	73

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**63 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**51.76 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5.5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#1 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **73 feet**

BOTTOM SEAL / BACKFILL

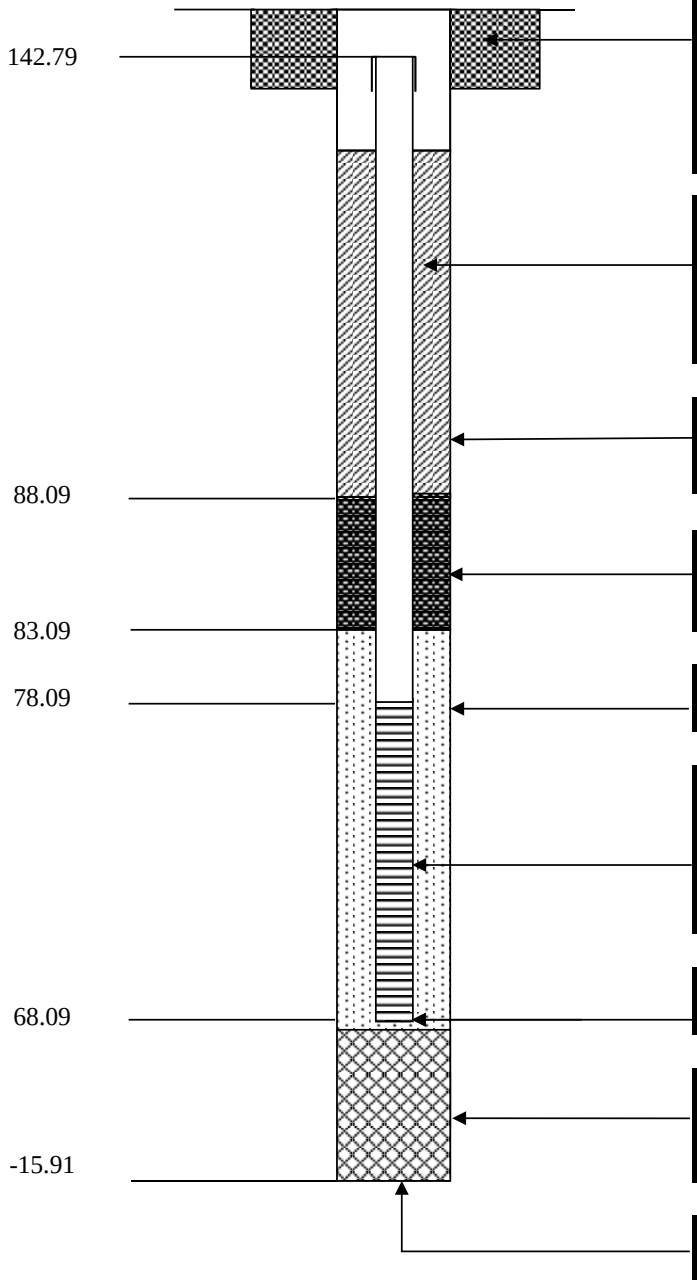
MATERIAL / THICKNESS	**Formation Collapse / 86 feet**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **159 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-44S-75**
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	1/20/2010
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	1/26/2010
DRILLING METHOD: Rotary Sonic		**DRILLER:**	N/A
NORTHING (FT): 219302.8	**GS ELEVATION (FT):** 143.09	**INSPECTOR:**	T.Bennett, CDM
EASTING (FT): 1108970.6	**WATER LEVEL (FT, BTOC):** 61.81	**TOTAL WELL DEPTH (FT, BGS):**	75

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**64.70 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**54.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#1 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **75 feet**

BOTTOM SEAL / BACKFILL

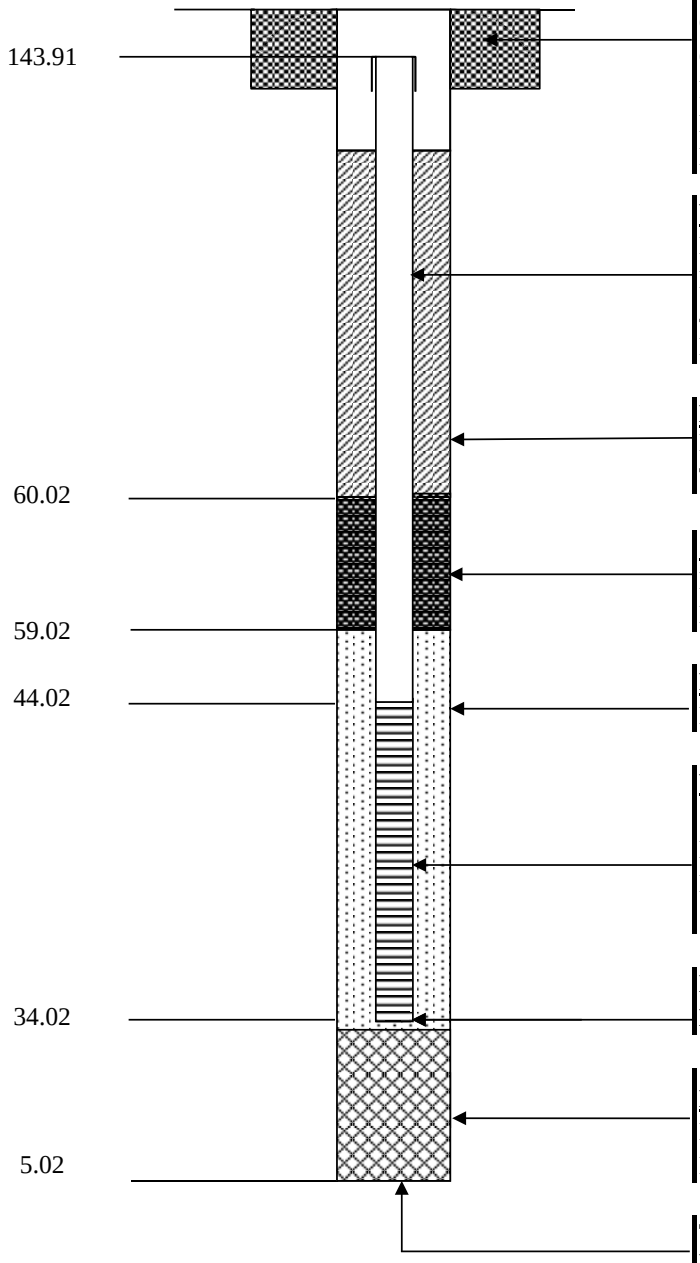
MATERIAL / THICKNESS	**Formation Collapse / 84 feet**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **159 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-49S-110
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	2/22/2010
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	3/2/2010
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	N/A
NORTHING (FT):	219338.7	**GS ELEVATION (FT):** 144.02	**INSPECTOR:** T.Bennett, CDM
EASTING (FT):	1108812.8	**WATER LEVEL (FT, BTOC):** 62.95	**TOTAL WELL DEPTH (FT, BGS):** 110

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

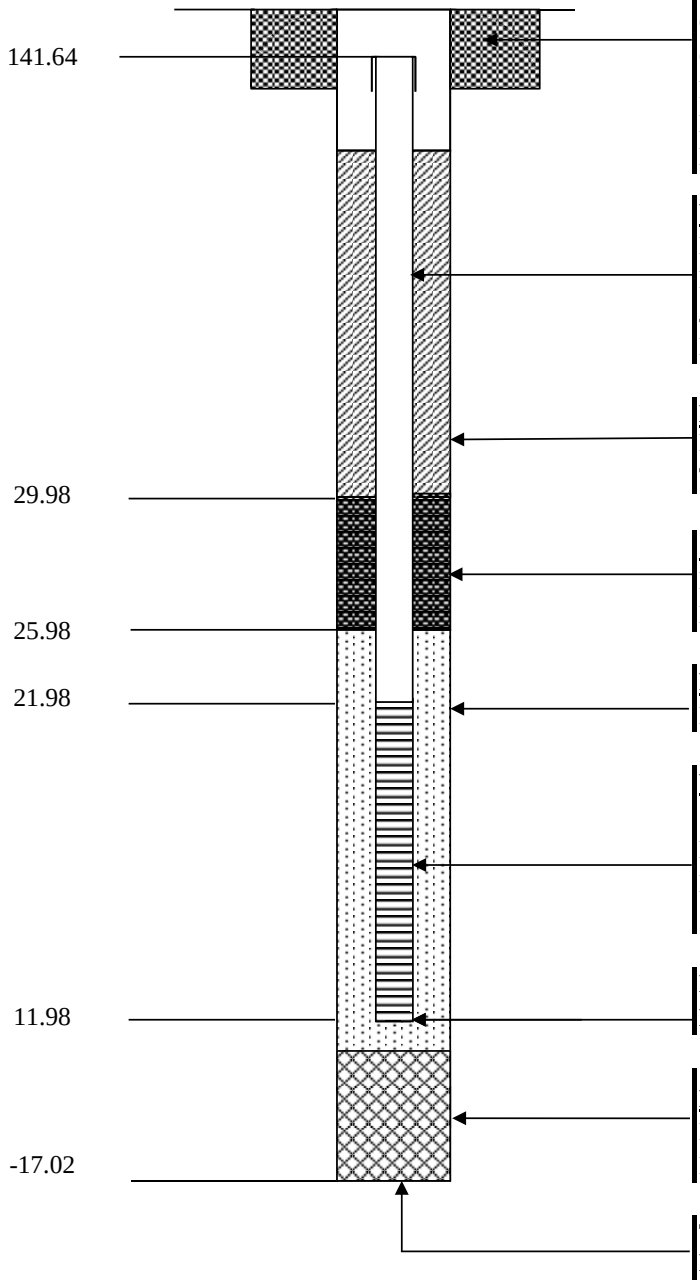


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**99.89 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**83.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 1 foot**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 25 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**110 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 29 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**139 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-50I-130**

CLIENT:	USACE Kansas City District			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP			**DATE STARTED:**	2/4/2010
DRILLING CONTRACTOR:	Miller Drilling			**DATE FINISHED:**	2/17/2010
DRILLING METHOD:	Rotary Sonic			**DRILLER:**	C.Boyd
NORTHING (FT):	219197.5	**GS ELEVATION (FT):**	141.98	**INSPECTOR:**	C.Buerkle, CDM
EASTING (FT):	1108903.9	**WATER LEVEL (FT, BTOC):**	60.75	**TOTAL WELL DEPTH (FT, BGS):**	130

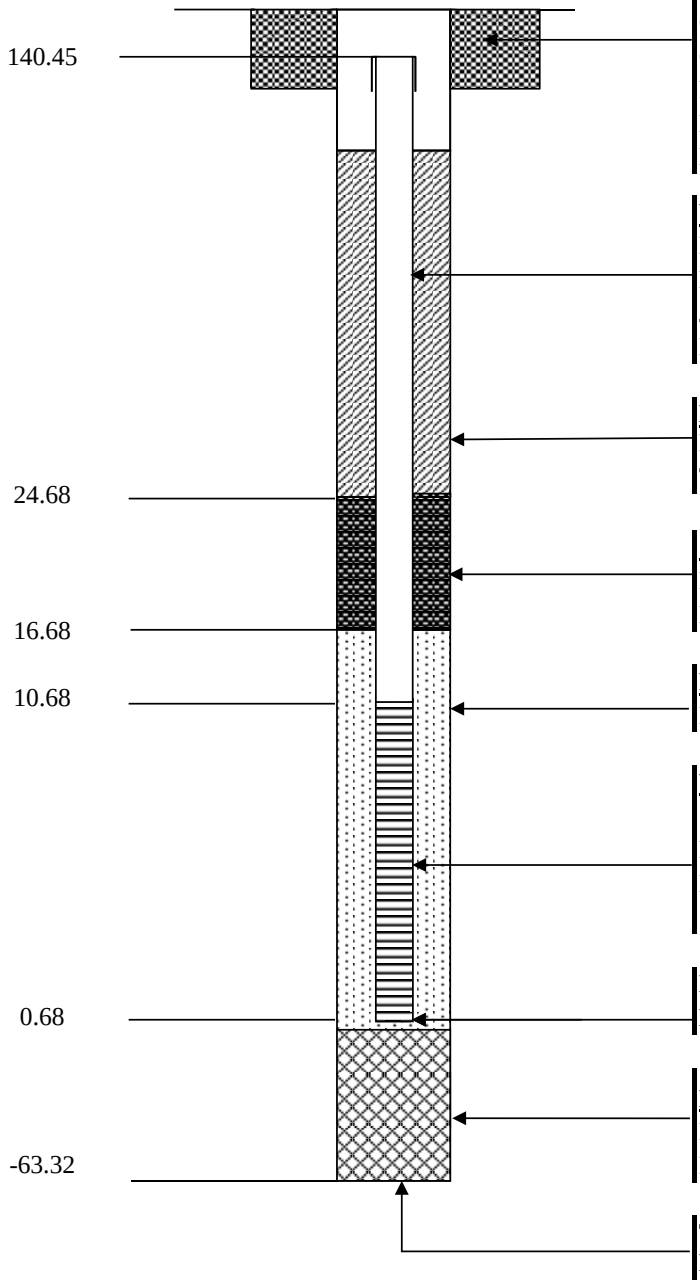
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**119.66 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**111.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 24 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**130 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 19 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**159 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-51I-140**
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	2/4/2010
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	2/17/2010
DRILLING METHOD: Rotary Sonic		**DRILLER:**	G.Pech
NORTHING (FT): 219015.4	**GS ELEVATION (FT):** 140.68	**INSPECTOR:**	P.Connelly, CDM
EASTING (FT): 1109095.1	**WATER LEVEL (FT, BTOC):** 59.65	**TOTAL WELL DEPTH (FT, BGS):**	140

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**130.67 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**115.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 8 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#1 Sand / 16 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL **140 feet**

BOTTOM SEAL / BACKFILL

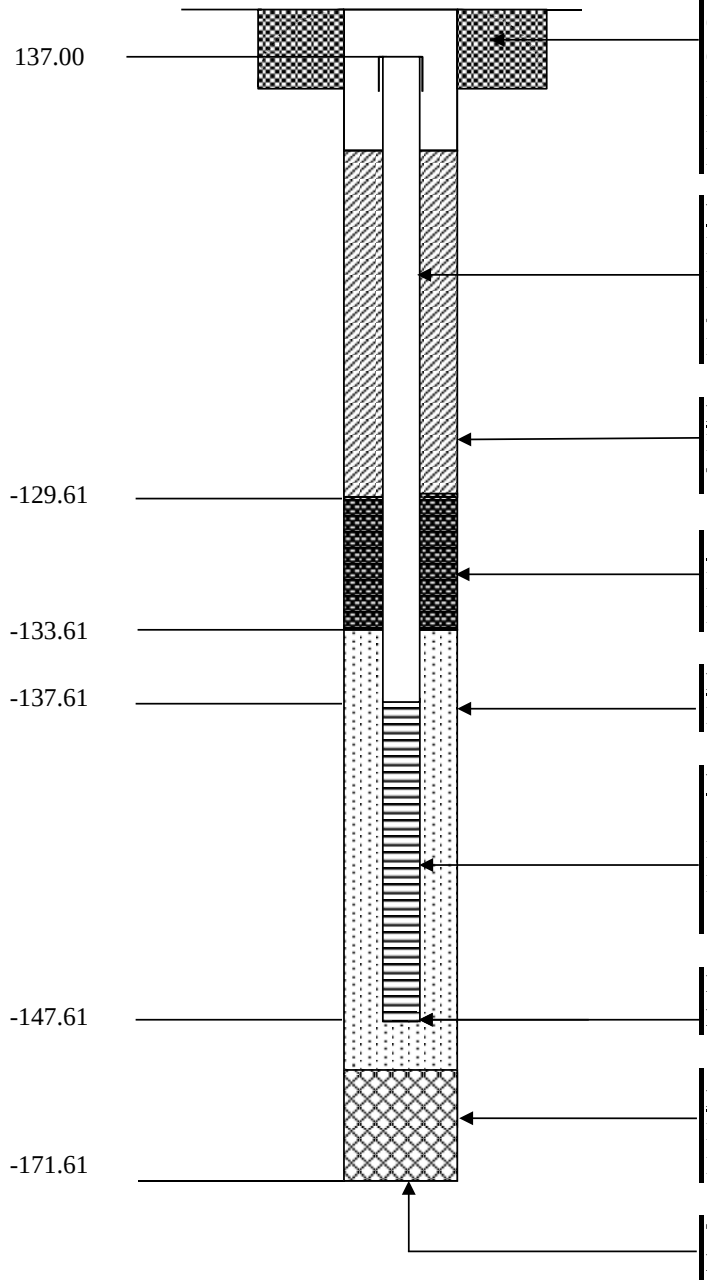
MATERIAL / THICKNESS	**Formation Colapse / 64 feet**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE **204 feet**

DIAMETER OF BOREHOLE **8 inches**

	Well Construction Diagram	WELL NO.:	MW-52D-285
CLIENT:	USACE Kansas City District	**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Coring FUSRAP	**DATE STARTED:**	2/16/2010
DRILLING CONTRACTOR:	Miller Drilling	**DATE FINISHED:**	2/24/2010
DRILLING METHOD:	Rotary Sonic	**DRILLER:**	G.Pech
NORTHING (FT):	219148.6	**GS ELEVATION (FT):** 137.39	**INSPECTOR:** P.Connelly, CDM
EASTING (FT):	1109567.2	**WATER LEVEL (FT, BTOC):** 56.62	**TOTAL WELL DEPTH (FT, BGS):** 285

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**274.61 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**266.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#01 Sand / 14 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **285 feet**

BOTTOM SEAL / BACKFILL

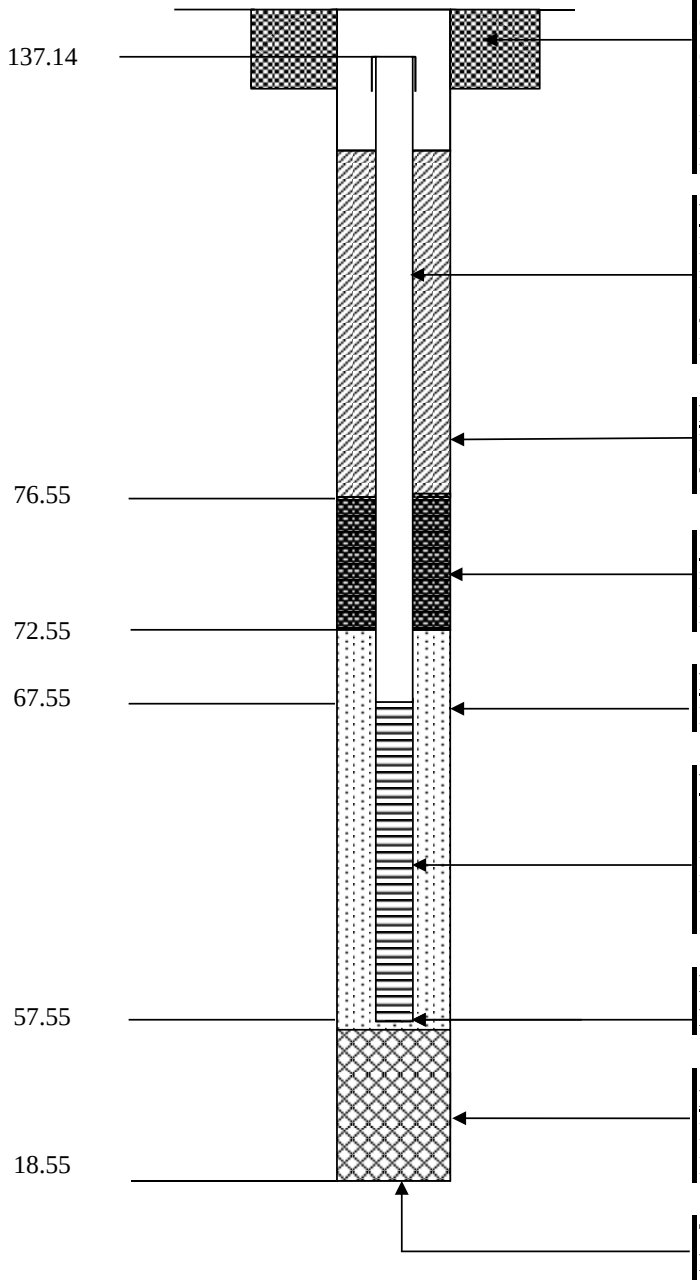
MATERIAL / THICKNESS	**Formation Collapse / 24 feet**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **309 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-53S-80
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	2/16/2010
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	2/24/2010
DRILLING METHOD: Rotary Sonic		**DRILLER:**	G.Pech
NORTHING (FT): 219129.6	**GS ELEVATION (FT):** 137.55	**INSPECTOR:**	P.Connelly, CDM
EASTING (FT): 1109462.4	**WATER LEVEL (FT, BTOC):** 56.04	**TOTAL WELL DEPTH (FT, BGS):**	80

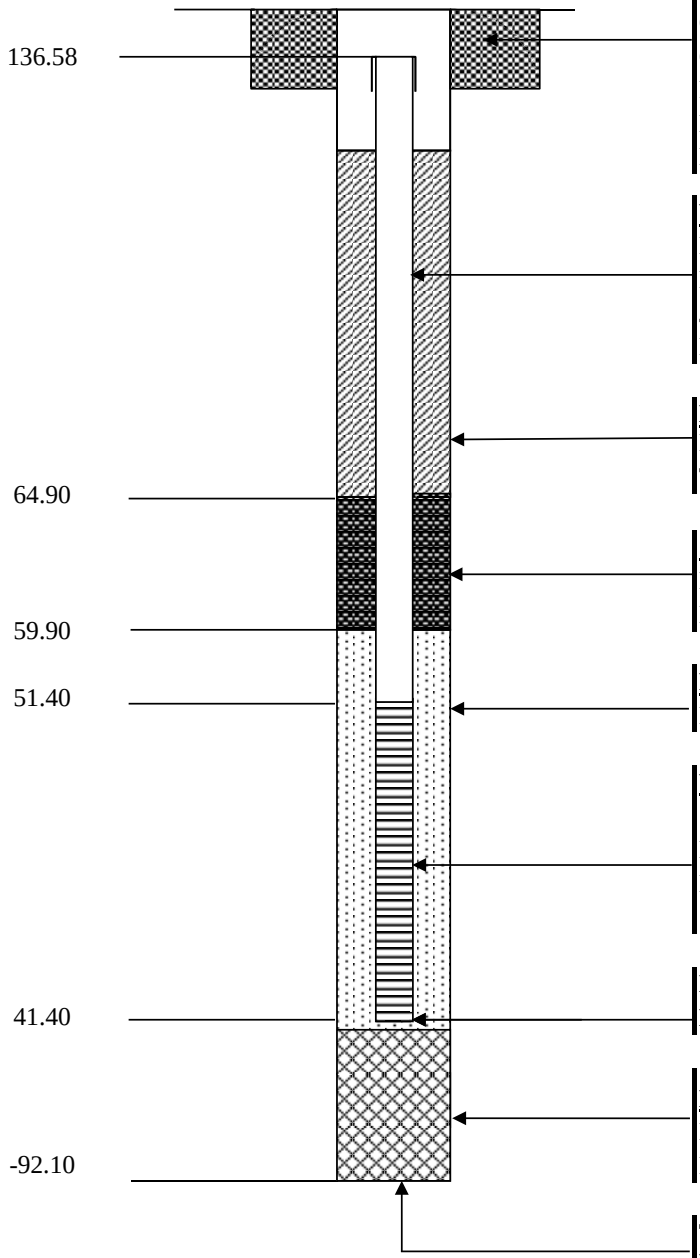
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**69.6 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**60.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#1 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**80 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 39 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**119 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-55S-96**
CLIENT: USACE Kansas City District		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Coring FUSRAP		**DATE STARTED:**	3/9/2010
DRILLING CONTRACTOR: Miller Drilling		**DATE FINISHED:**	4/1/2010
DRILLING METHOD: Rotary Sonic		**DRILLER:**	P.Mazurek
NORTHING (FT): 219559.8	**GS ELEVATION (FT):** 136.90	**INSPECTOR:**	C.Buerkle, CDM
EASTING (FT): 1109452.6	**WATER LEVEL (FT, BTOC):** 55.35	**TOTAL WELL DEPTH (FT, BGS):**	95.5

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**85.18 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**71.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#1 Sand / 18.5 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL **95.5 feet**

BOTTOM SEAL / BACKFILL

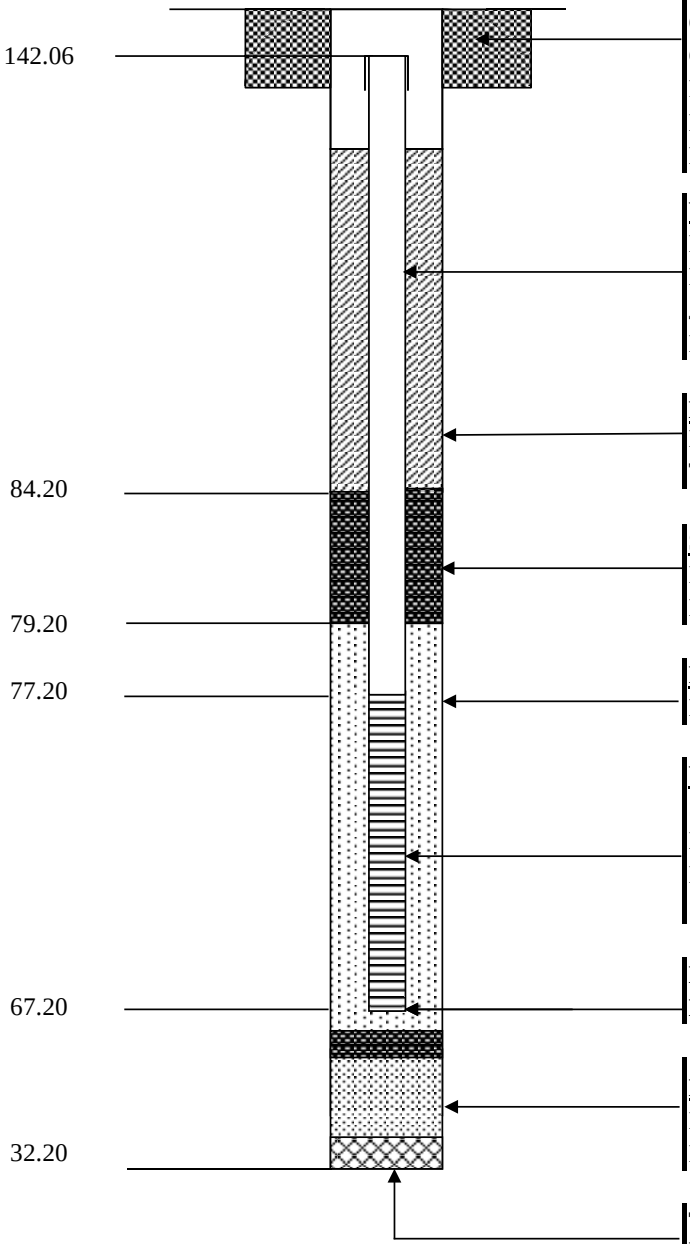
MATERIAL / THICKNESS	**Formation Collapse / 133.5 feet**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE **229 feet**

DIAMETER OF BOREHOLE **8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-58-75**
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	9/29/2014
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	10/2/2014
DRILLING METHOD: Sonic		**DRILLER:**	L. Hunsberger
NORTHING (FT): 219108.3	**GS ELEVATION (FT):** 142.2	**INSPECTOR:**	J. Ganz, Louis Berger
EASTING (FT): 1108737.3	**WATER LEVEL (FT, BTOC):** 65.60	**TOTAL WELL DEPTH (FT, BGS):**	75

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**64.86 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**57.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 3.9 feet**
MATERIAL / THICKNESS	**#00 Sand / 1.1 feet**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 12.5 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **75 feet**

BOTTOM SEAL / BACKFILL

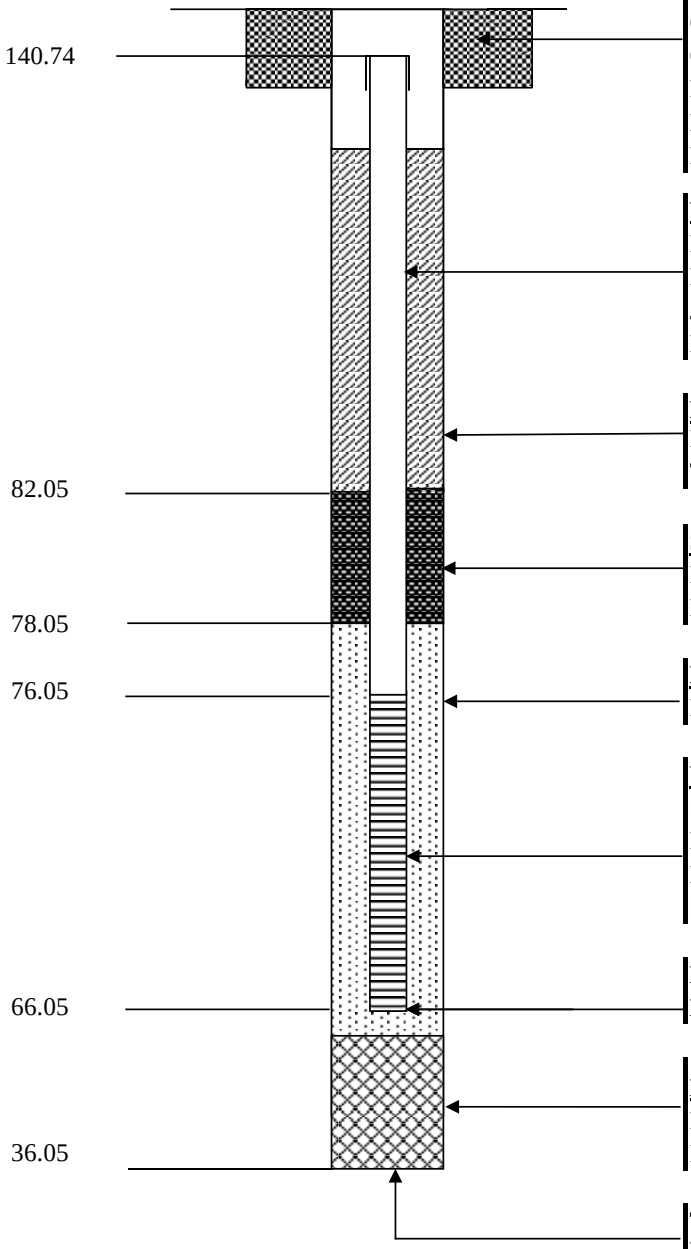
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2.5 feet**
MATERIAL / THICKNESS	**#4 Sand (FilPro) / 22 feet**
	Formation Collapse / 10 feet

TOTAL DEPTH OF BOREHOLE — **110 feet**

DIAMETER OF BOREHOLE — **6 inches**

	Well Construction Diagram	WELL NO.:	MW-59-75
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/4/2014
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	11/5/2014
DRILLING METHOD: Sonic		**DRILLER:**	D. Roberts
NORTHING (FT): 218980.8	**GS ELEVATION (FT):** 141.05	**INSPECTOR:**	T. Dillon, E & E, Inc.
EASTING (FT): 1108928.4	**WATER LEVEL (FT, BTOC):** 63.83	**TOTAL WELL DEPTH (FT, BGS):**	105

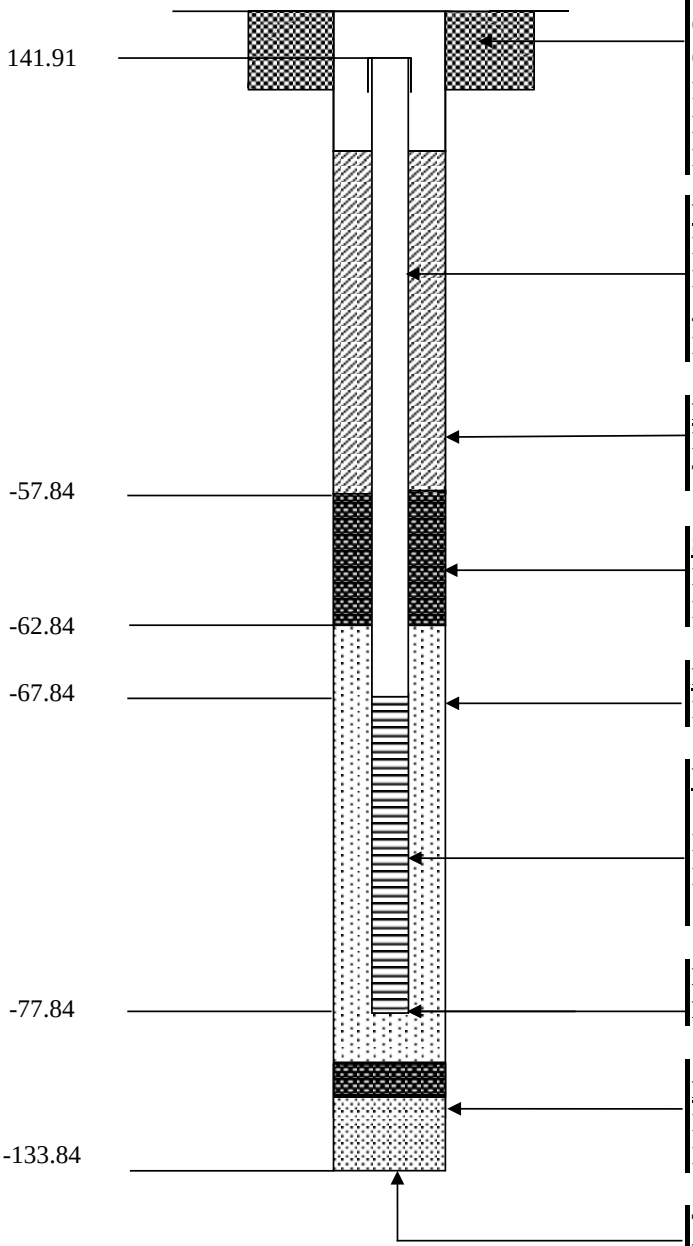
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**64.69 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**58.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 foot**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 13 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**75 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 29 feet**
MATERIAL / THICKNESS	
TOTAL DEPTH OF BOREHOLE	**105 feet**
DIAMETER OF BOREHOLE	**7 inches**

	Well Construction Diagram	WELL NO.:	MW-201-220
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	9/21/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	9/27/2011
DRILLING METHOD: Sonic		**DRILLER:**	M. Bond
NORTHING (FT): 219191.4	**GS ELEVATION (FT):** 142.16	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1108618.4	**WATER LEVEL (FT, BTOC):** 58.80	**TOTAL WELL DEPTH (FT, BGS):**	220

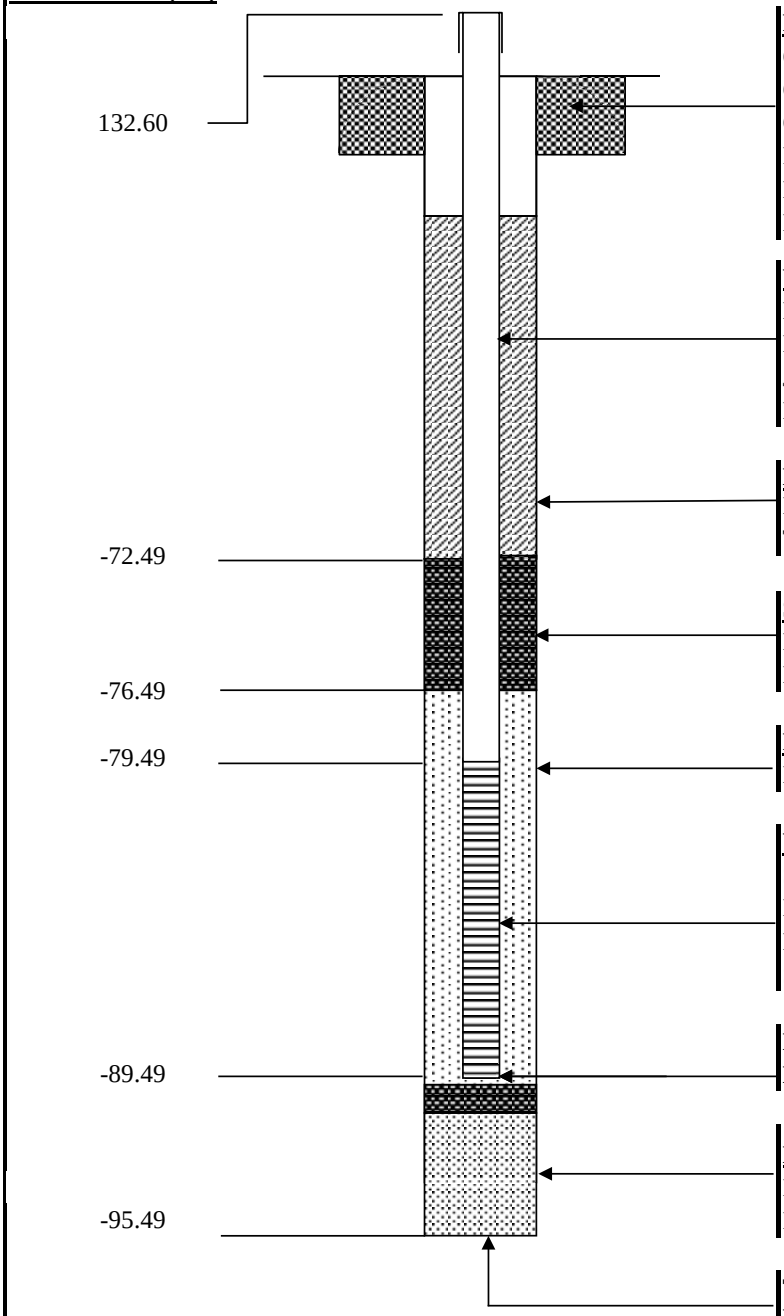
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**209.75 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**199.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 17 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**220 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 3 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 31 feet**
TOTAL DEPTH OF BOREHOLE	**256 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram		**WELL NO.:** **MW-202-220**
CLIENT: USACE			**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP			**DATE STARTED:** 5/29/2012
DRILLING CONTRACTOR: Boart Longyear			**DATE FINISHED:** 5/31/2012
DRILLING METHOD: Sonic			**DRILLER:** J. Sigler
NORTHING (FT): 216977.5	**GS ELEVATION (FT):** 130.51		**INSPECTOR:** V. Gatallin, Louis Berger
EASTING (FT): 1107531.2	**WATER LEVEL (FT, BTOC):** 55.25		**TOTAL WELL DEPTH (FT, BGS):** 220

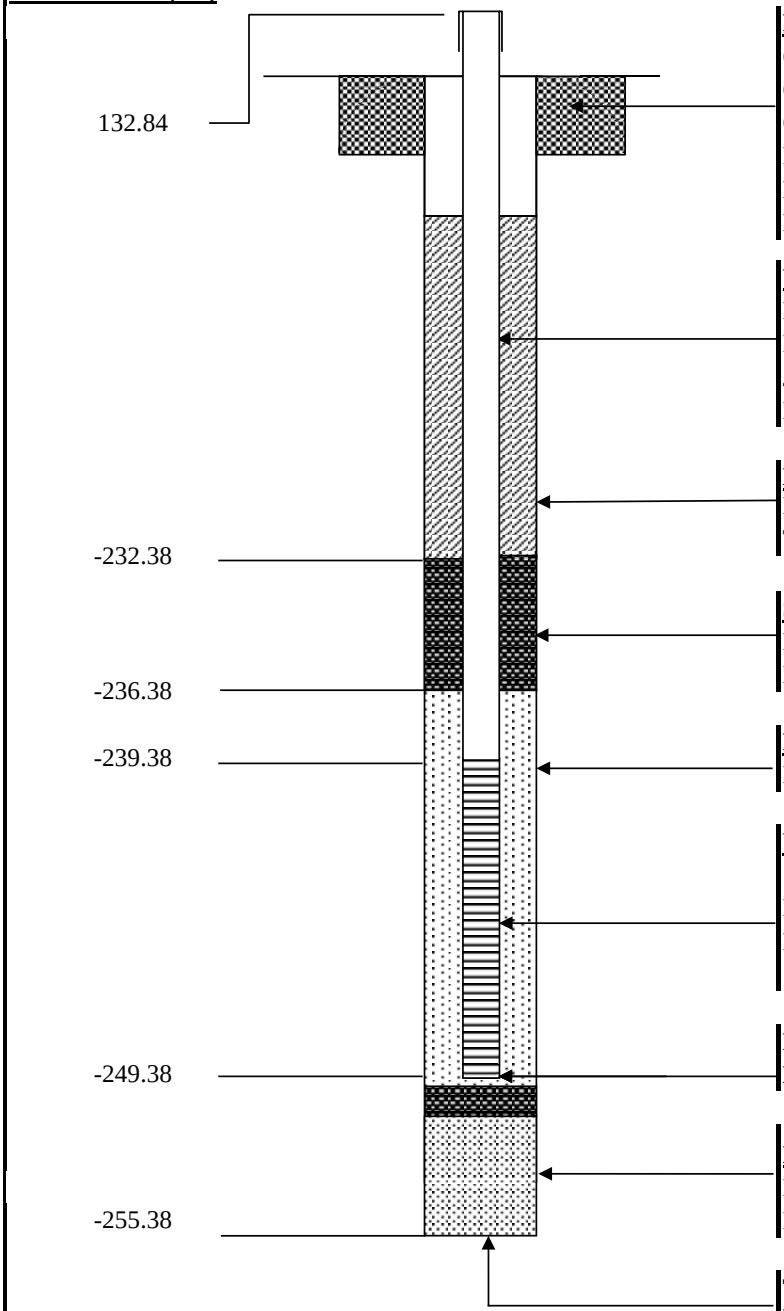
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**2.09 feet (stick-up)**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**212.09 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**204.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 13 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**220 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 1 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 5 feet**
TOTAL DEPTH OF BOREHOLE	**226 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-202-380**
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	5/29/2012
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	6/1/2012
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 216975.9	**GS ELEVATION (FT):** 130.62	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1107545.5	**WATER LEVEL (FT, BTOC):** 55.71	**TOTAL WELL DEPTH (FT, BGS):**	380

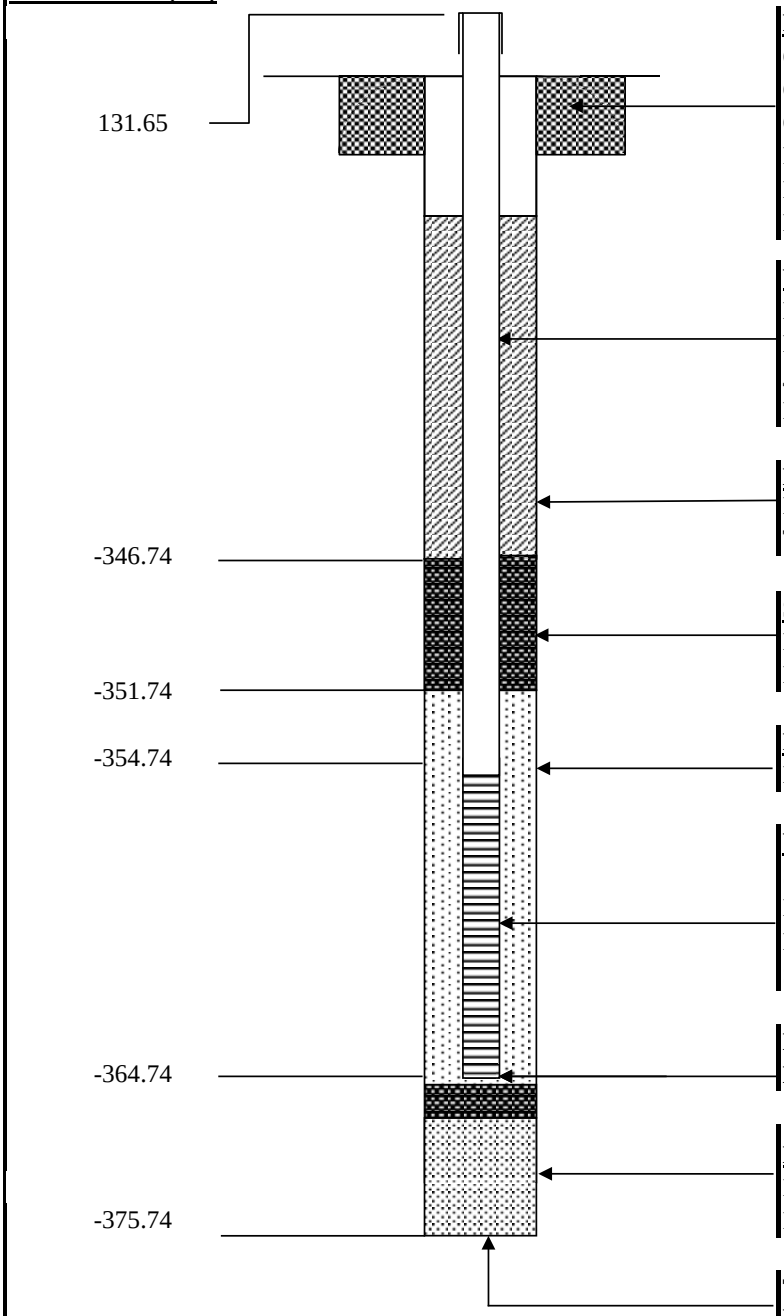
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**3.5 feet**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**2.22 feet (Stick-up)**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**372.22 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**364.72 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 13 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**380 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 1 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 5 feet**
TOTAL DEPTH OF BOREHOLE	**386 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram		**WELL NO.:** **MW-202-495**
CLIENT: USACE			**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP			**DATE STARTED:** 5/9/2012
DRILLING CONTRACTOR: Boart Longyear			**DATE FINISHED:** 5/29/2012
DRILLING METHOD: Sonic			**DRILLER:** J. Sigler
NORTHING (FT): 216965.5	**GS ELEVATION (FT):** 130.26		**INSPECTOR:** V. Gatallin, Louis Berger
EASTING (FT): 1107540.2	**WATER LEVEL (FT, BTOC):** 55.92		**TOTAL WELL DEPTH (FT, BGS):** 495

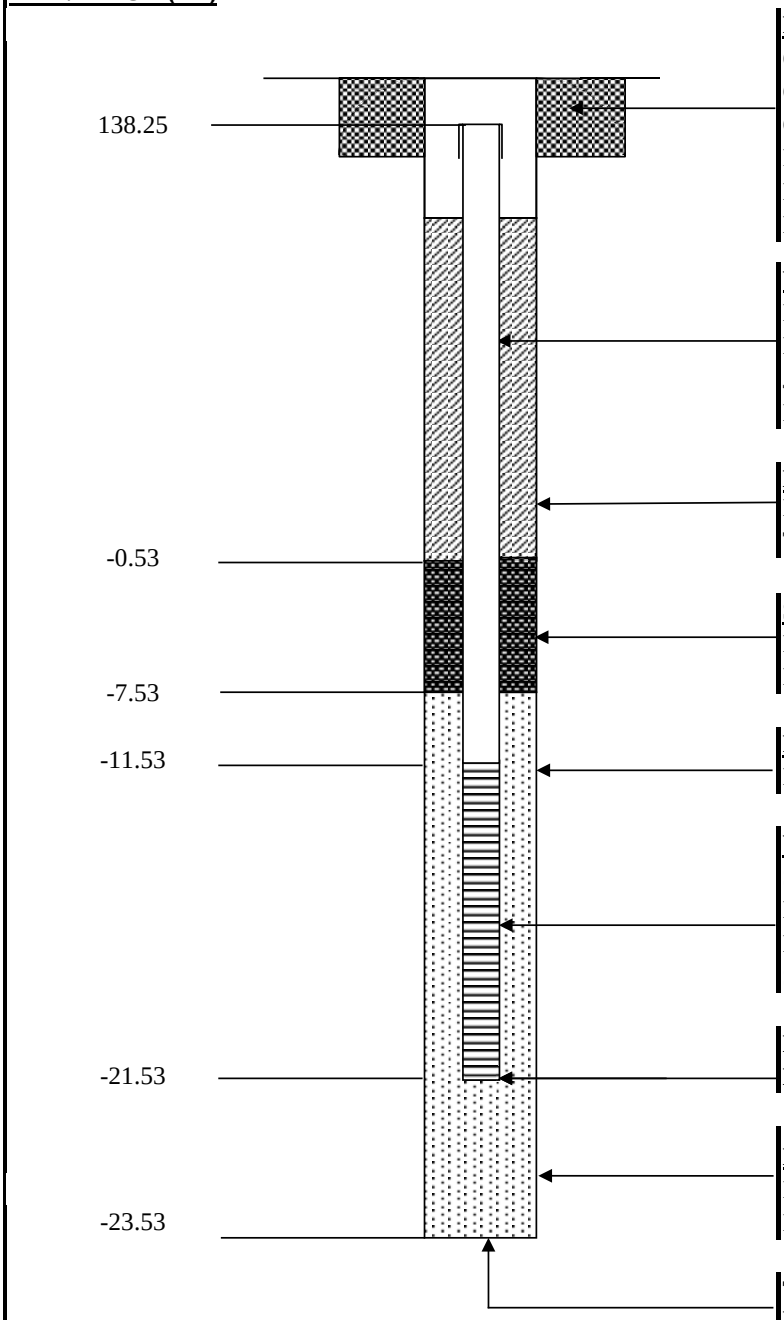
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**1.39 feet (Stickup)**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**486.39 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**477.89 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 13 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**495 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 1 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 10 feet**
TOTAL DEPTH OF BOREHOLE	**506 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-203-160**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	11/3/2011
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	11/3/2011
DRILLING METHOD:	Sonic			**DRILLER:**	J. Sigler
NORTHING (FT):	218332.7	**GS ELEVATION (FT):**	138.47	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT):	1108611.5	**WATER LEVEL (FT, BTOC):**	56.60	**TOTAL WELL DEPTH (FT, BGS):**	160

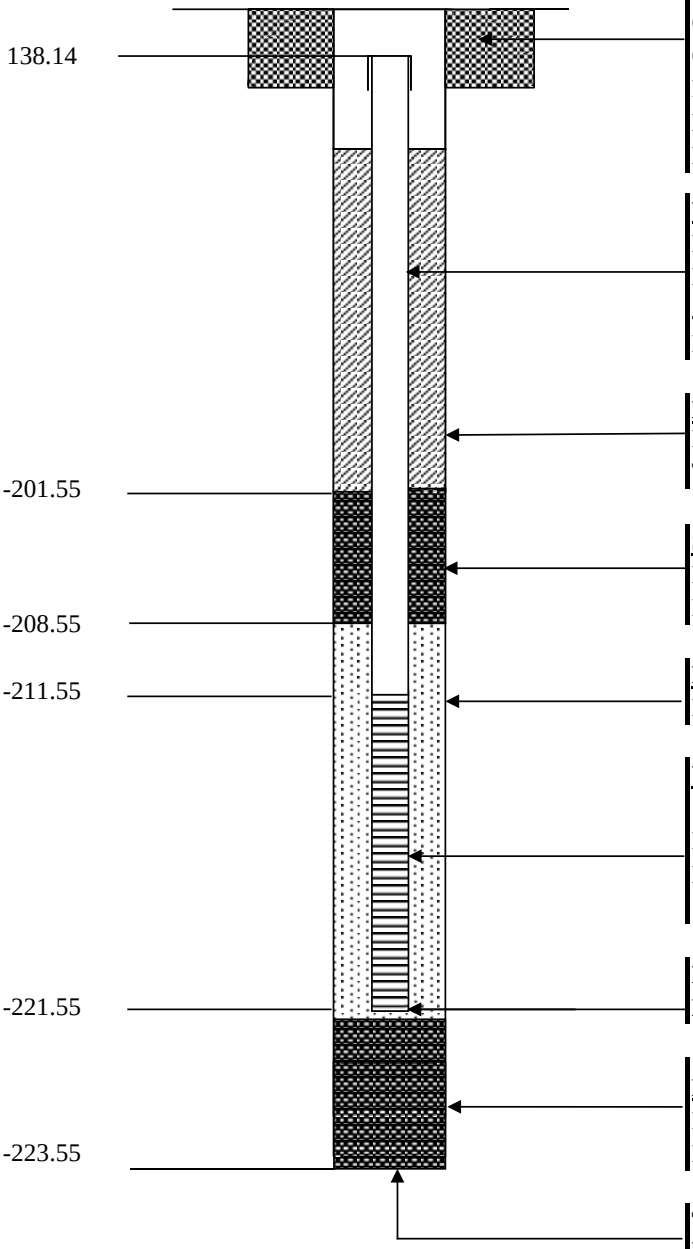
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**149.78 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**138.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**160 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**162 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-203-360
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/1/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	11/3/2011
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 218330.6615	**GS ELEVATION (FT):** 138.45	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1108603.472	**WATER LEVEL (FT, BTOC):** 57.76	**TOTAL WELL DEPTH (FT, BGS):**	360

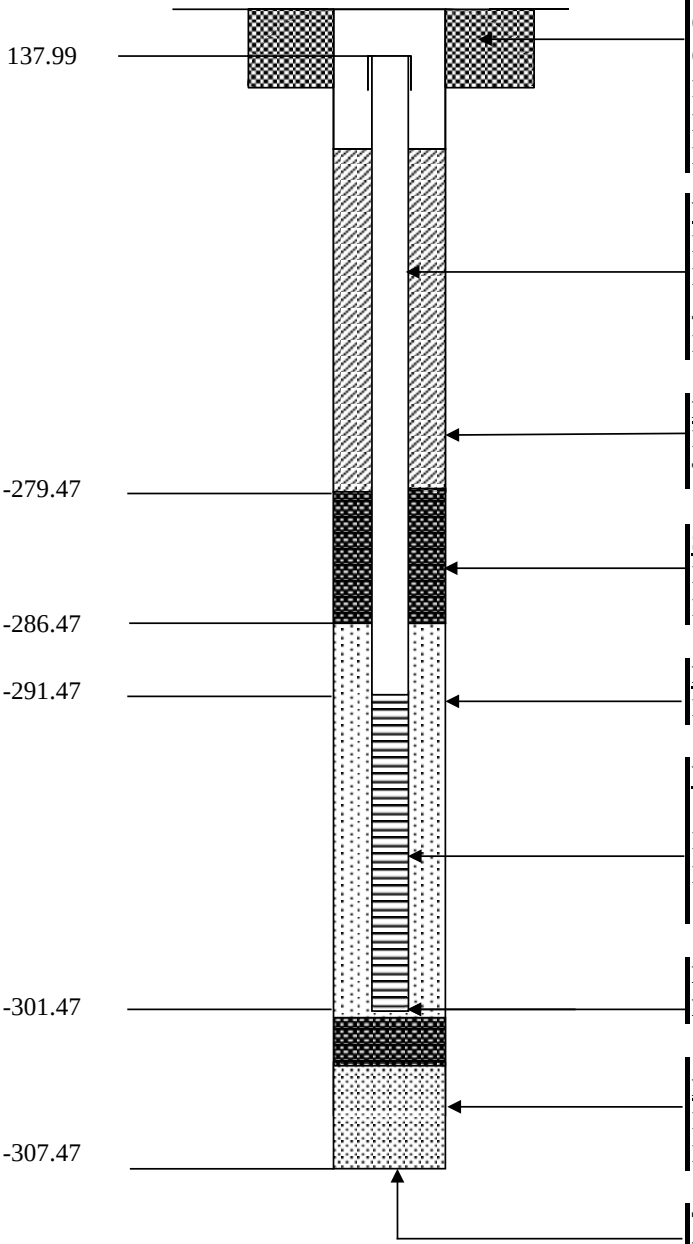
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**3.5 feet**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**349.69 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**339.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 13 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**360 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**362 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-203-440**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	10/20/2011
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	10/31/2011
DRILLING METHOD:	Sonic			**DRILLER:**	R. Kotulan
NORTHING (FT):	218328.5	**GS ELEVATION (FT):**	138.53	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT):	1108595.9	**WATER LEVEL (FT, BTOC):**	57.41	**TOTAL WELL DEPTH (FT, BGS):**	440

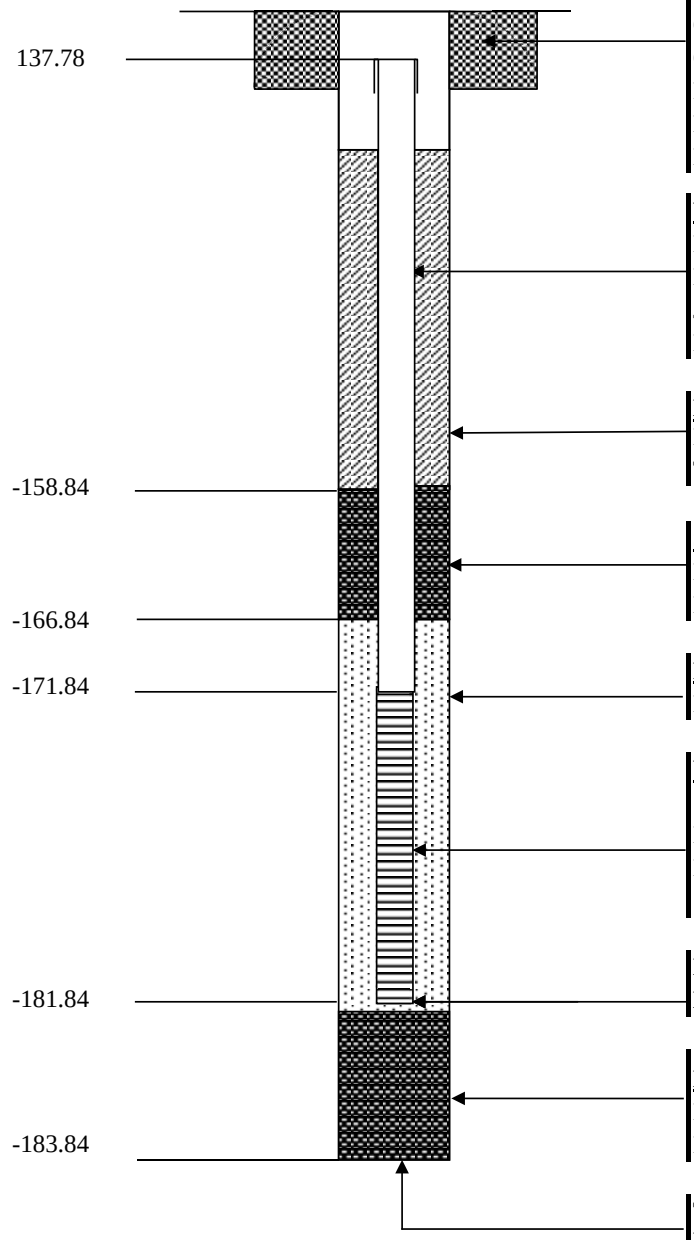
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**429.46 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**417 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**440 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 4 feet**
TOTAL DEPTH OF BOREHOLE	**446 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-204-320
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	12/13/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	12/15/2011
DRILLING METHOD: Sonic		**DRILLER:**	R. Kotulan
NORTHING (FT): 218239.5625	**GS ELEVATION (FT):** 138.16	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1108873.183	**WATER LEVEL (FT, BTOC):** 58.24	**TOTAL WELL DEPTH (FT, BGS):**	320

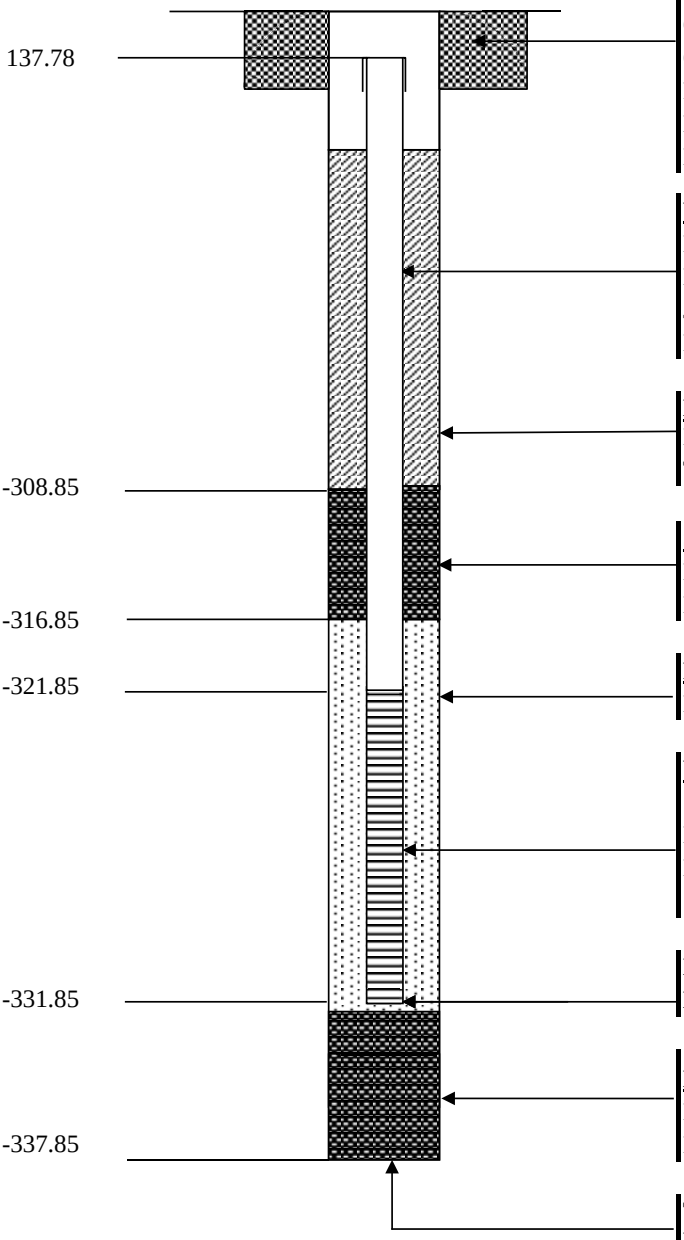
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**309.62 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**296.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4.5 feet**
MATERIAL / THICKNESS	**#00 Sand / 3.5 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**320 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**322 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-204-470
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/30/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	12/13/2011
DRILLING METHOD: Sonic		**DRILLER:**	R. Kotulan
NORTHING (FT): 218240.0	**GS ELEVATION (FT):** 138.15	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1108881.6	**WATER LEVEL (FT, BTOC):** 58.50	**TOTAL WELL DEPTH (FT, BGS):**	470

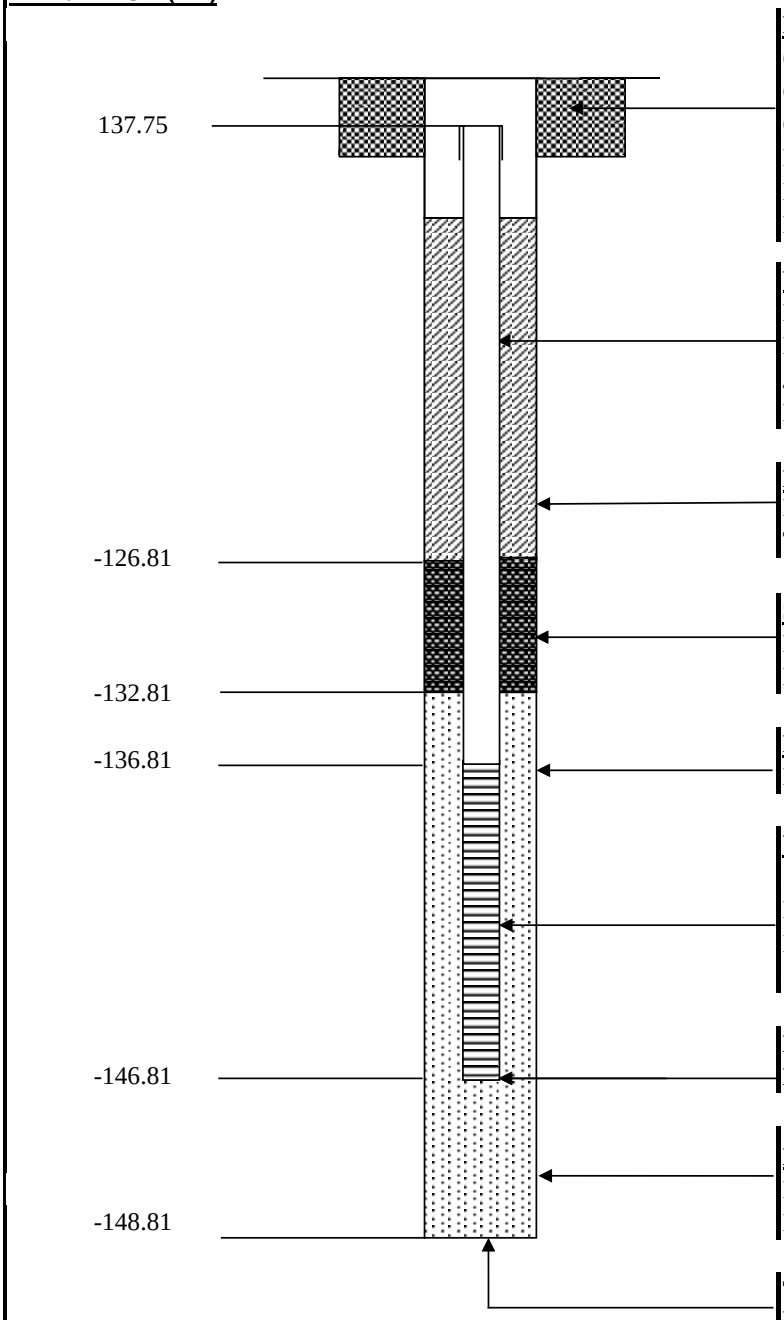
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**459.63 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**446.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4.5 feet**
MATERIAL / THICKNESS	**#00 Sand / 3.5 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**470 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand / 6 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**476 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-205-285**
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/20/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	11/23/2011
DRILLING METHOD: Sonic		**DRILLER:**	M. Osterberg
NORTHING (FT): 218264.7	**GS ELEVATION (FT):** 138.19	**INSPECTOR:**	J. Ganz, Louis Berger
EASTING (FT): 1109119.3	**WATER LEVEL (FT, BTOC):** 60.77	**TOTAL WELL DEPTH (FT, BGS):**	285

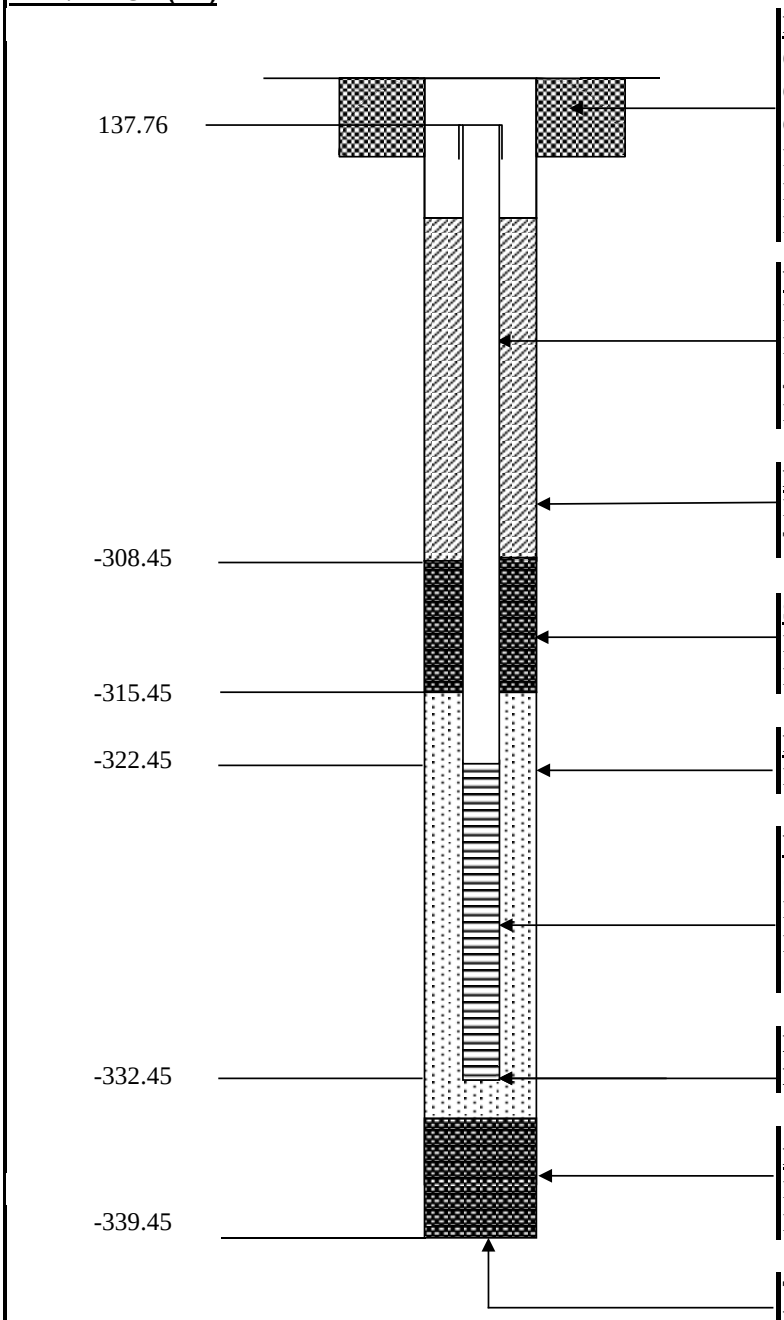
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**5 feet**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**274.56 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**264.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**285 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**287 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-205-470**
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/14/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	11/28/2011
DRILLING METHOD: Sonic		**DRILLER:**	M. Osterberg
NORTHING (FT): 218271.0784	**GS ELEVATION (FT):** 137.76	**INSPECTOR:**	M. Werth, E&E, Inc.
EASTING (FT): 1109110.318	**WATER LEVEL (FT, BTOC):** 57.86	**TOTAL WELL DEPTH (FT, BGS):**	470

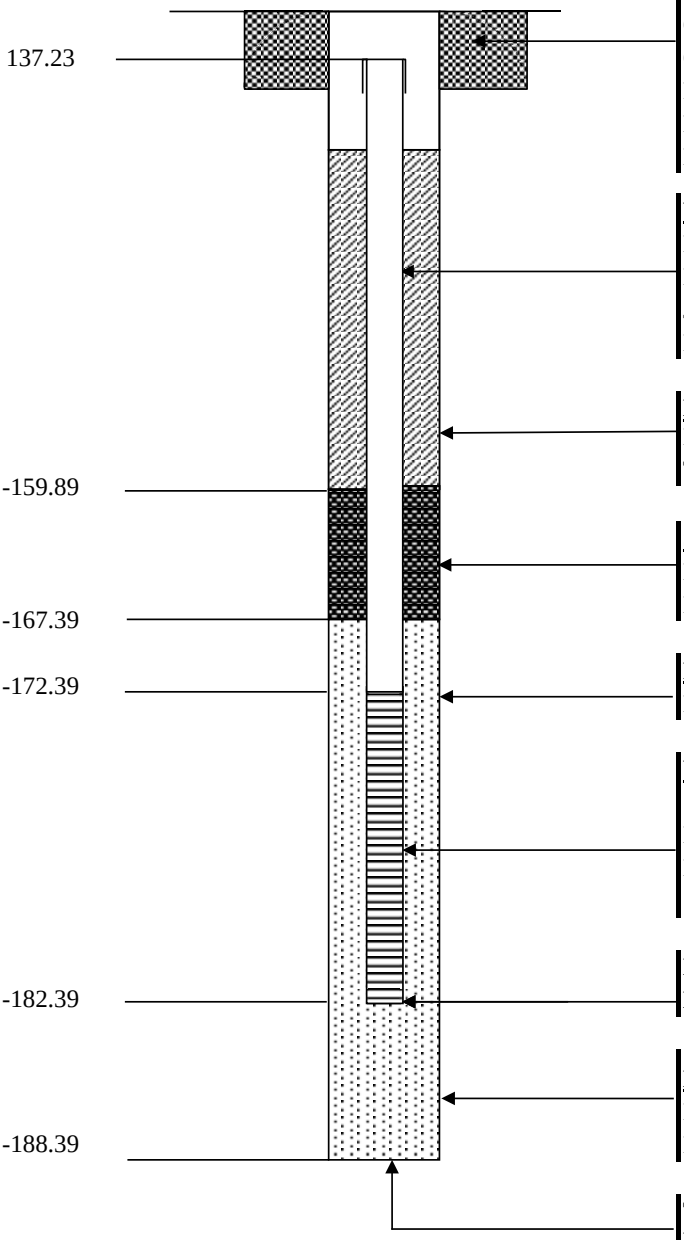
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**464 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**449.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 7 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**470 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand / 5 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**477 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-206-320
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/28/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	11/29/2011
DRILLING METHOD: Sonic		**DRILLER:**	R. Kotulan
NORTHING (FT): 218266.4	**GS ELEVATION (FT):** 137.61	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1109382.4	**WATER LEVEL (FT, BTOC):** 60.32	**TOTAL WELL DEPTH (FT, BGS):**	320

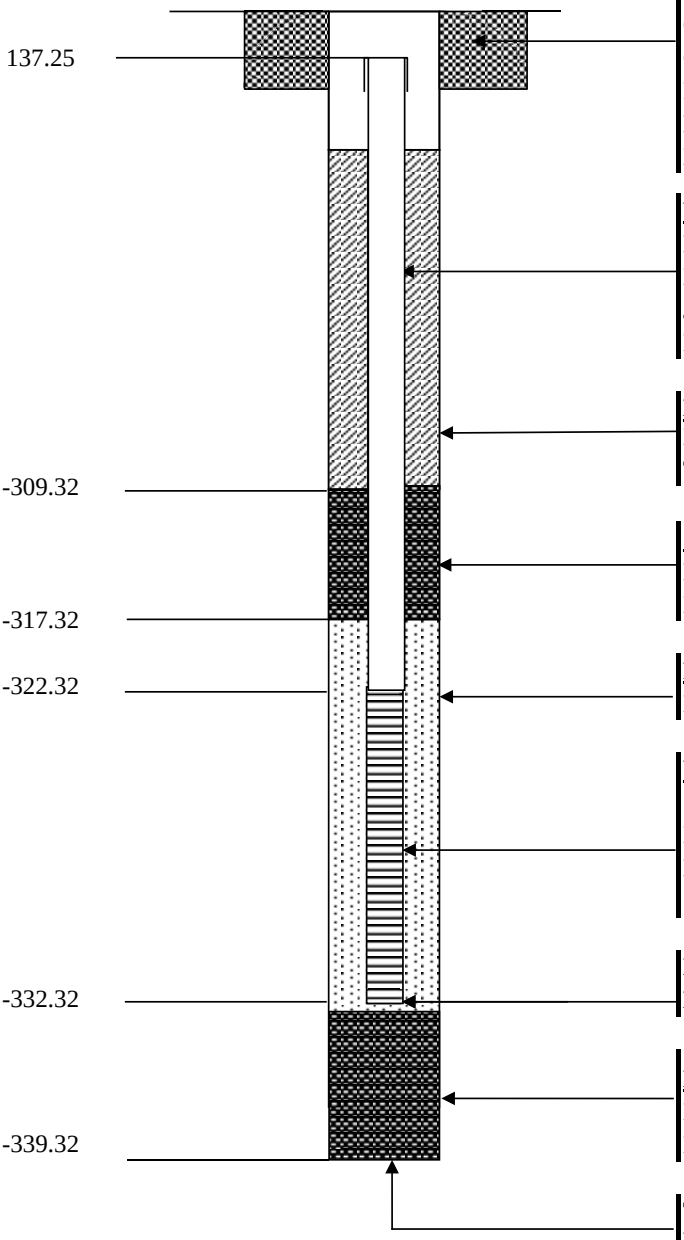
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**309.62 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**297 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4.5 feet**
MATERIAL / THICKNESS	**#00 Sand / 3 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 21 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**320 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**326 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-206-470
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/14/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	11/22/2011
DRILLING METHOD: Sonic		**DRILLER:**	R. Kotulan
NORTHING (FT): 218266.4	**GS ELEVATION (FT):** 137.68	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1109389.7	**WATER LEVEL (FT, BTOC):** 61.47	**TOTAL WELL DEPTH (FT, BGS):**	470

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**459.57 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**446.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 4.5 feet**
MATERIAL / THICKNESS	**#00 Sand / 3.5 feet**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **470 feet**

BOTTOM SEAL / BACKFILL

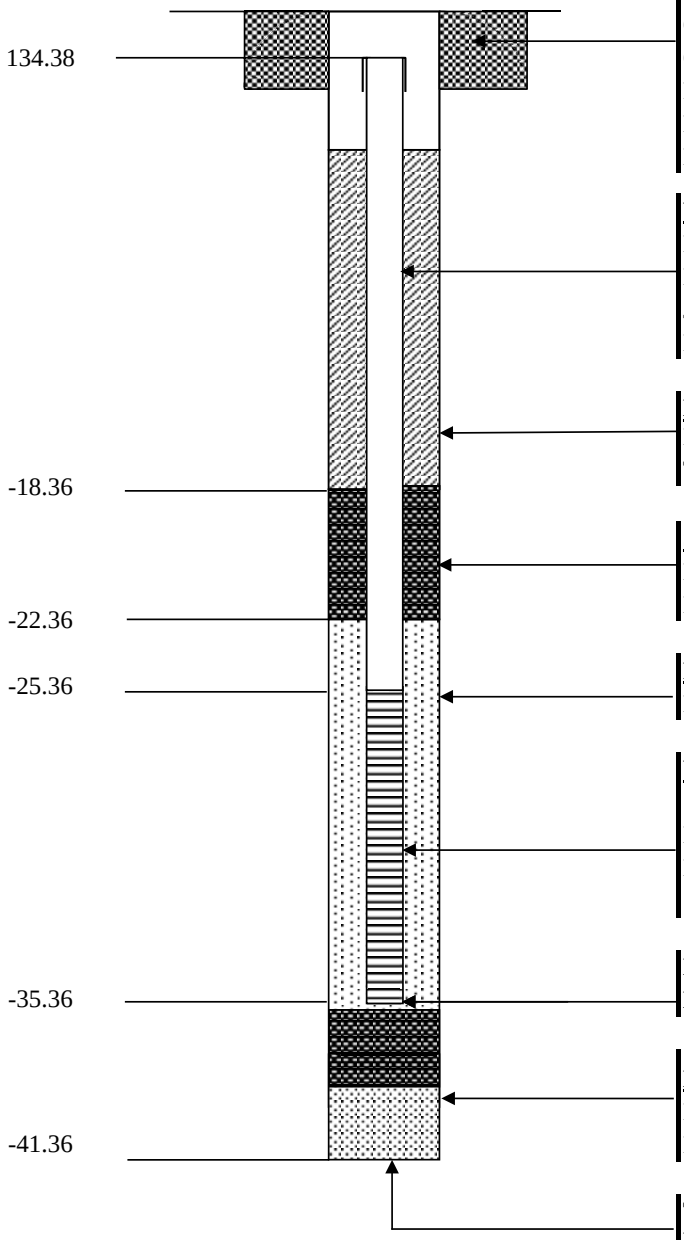
MATERIAL / THICKNESS	**#00 Sand / 7 feet**
MATERIAL / THICKNESS	**N/A**

TOTAL DEPTH OF BOREHOLE — **477 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-207-170
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	5/7/2012
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	5/8/2012
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 217975.4	**GS ELEVATION (FT):** 134.64	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1109760.1	**WATER LEVEL (FT, BTOC):** 55.07	**TOTAL WELL DEPTH (FT, BGS):**	170

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**159.74 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**152.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 13 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **170 feet**

BOTTOM SEAL / BACKFILL

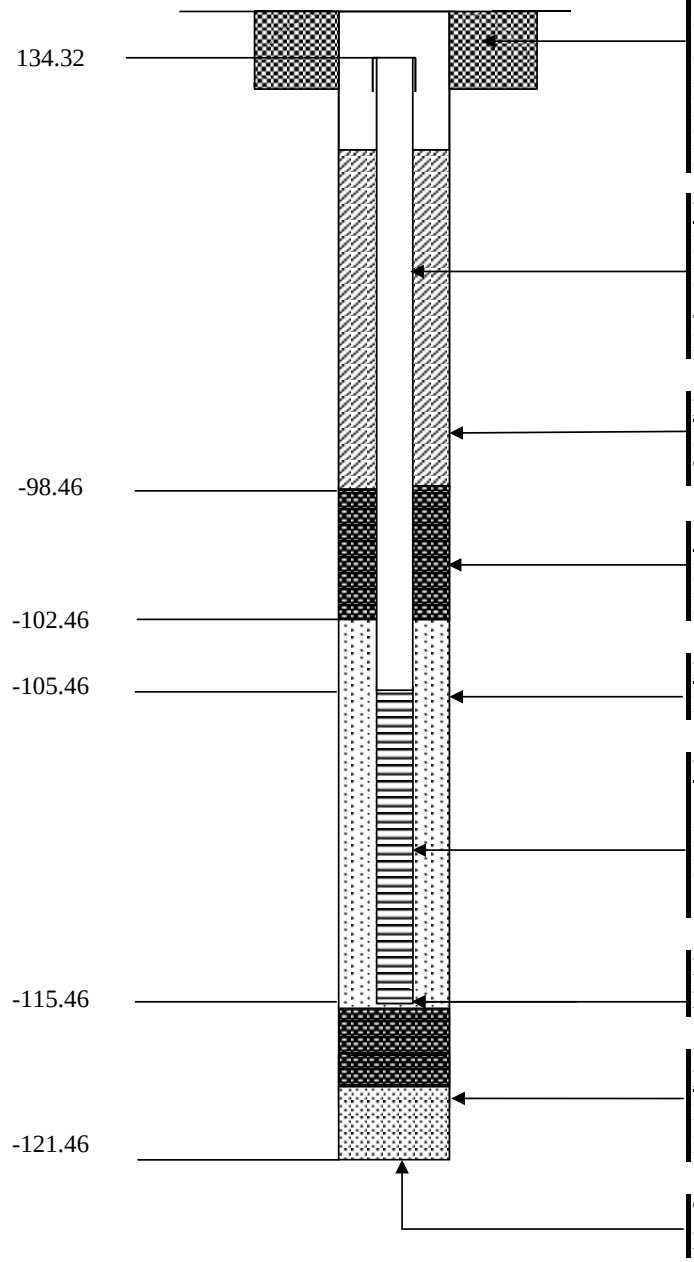
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 4 feet**

TOTAL DEPTH OF BOREHOLE — **176 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-207-250**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	5/2/2012
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	5/4/2012
DRILLING METHOD:	Sonic			**DRILLER:**	J. Sigler
NORTHING (FT):	217965.6	**GS ELEVATION (FT):**	134.54	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT):	1109758.9	**WATER LEVEL (FT, BTOC):**	55.63	**TOTAL WELL DEPTH (FT, BGS):**	250

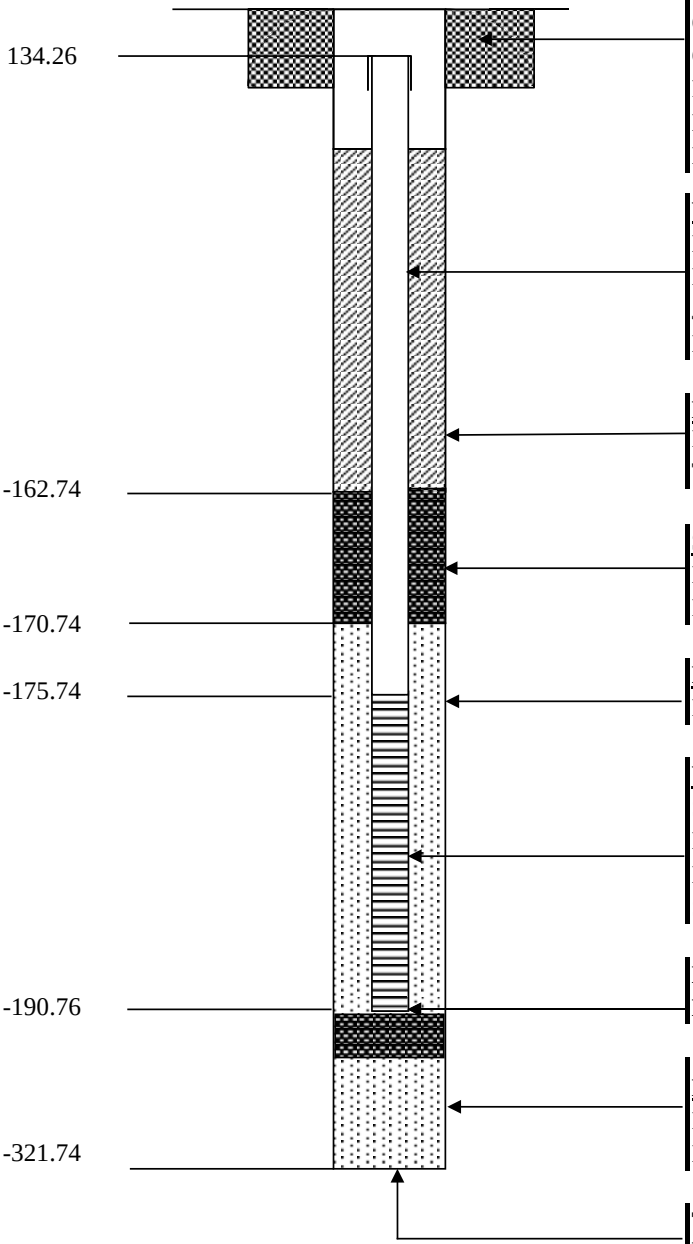
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**239.78 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**232.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 13 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**250 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 4 feet**
TOTAL DEPTH OF BOREHOLE	**256 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-207-320**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	4/16/2012
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	5/2/2012
DRILLING METHOD:	Sonic			**DRILLER:**	J. Sigler
NORTHING (FT):	217956.1169	**GS ELEVATION (FT):**	134.26	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT):	1109757.495	**WATER LEVEL (FT, BTOC):**	55.72	**TOTAL WELL DEPTH (FT, BGS):**	320

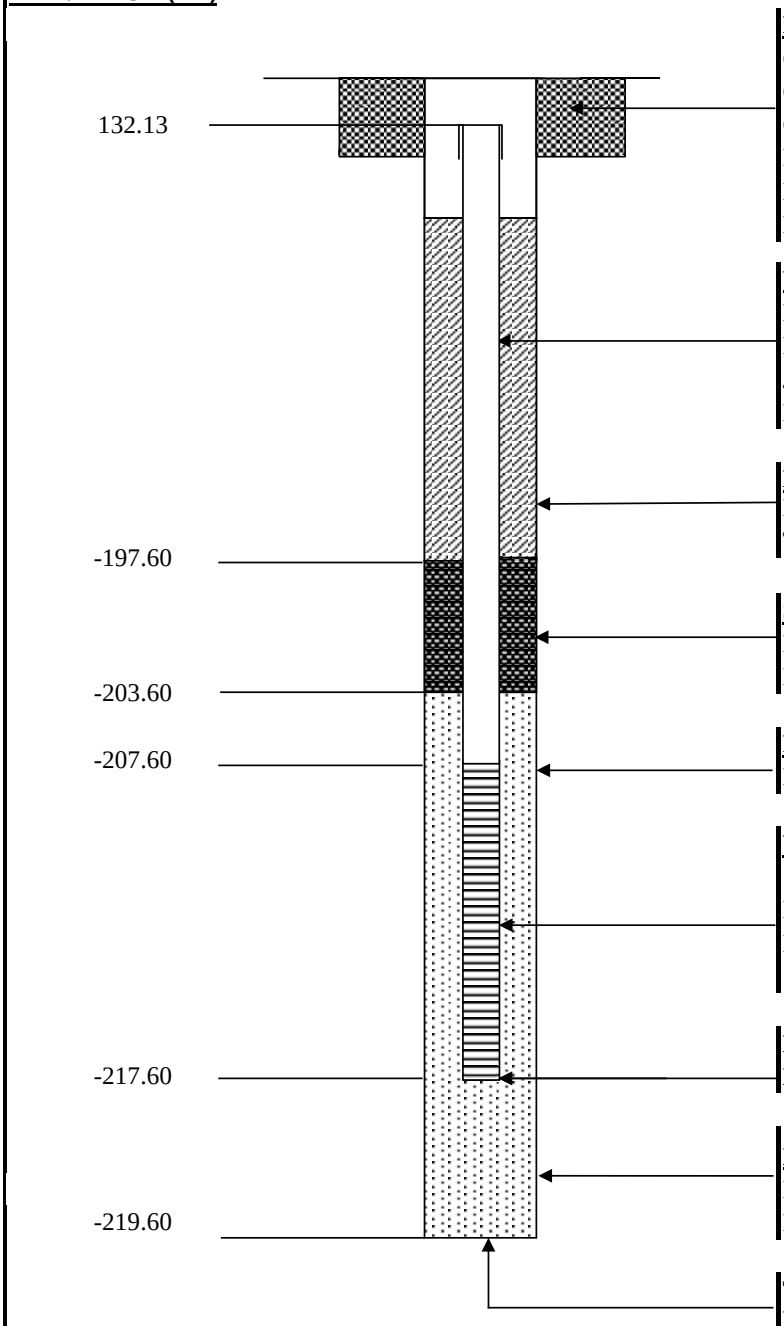
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**310 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**296.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 3 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**320 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 134 feet**
TOTAL DEPTH OF BOREHOLE	**456 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-208-350**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	12/8/2011
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	12/12/2011
DRILLING METHOD:	Sonic			**DRILLER:**	M. Osterberg
NORTHING (FT):	217304.6	**GS ELEVATION (FT):**	132.40	**INSPECTOR:**	M. Werth, E&E, Inc.
EASTING (FT):	1108933.3	**WATER LEVEL (FT, BTOC):**	56.31	**TOTAL WELL DEPTH (FT, BGS):**	350

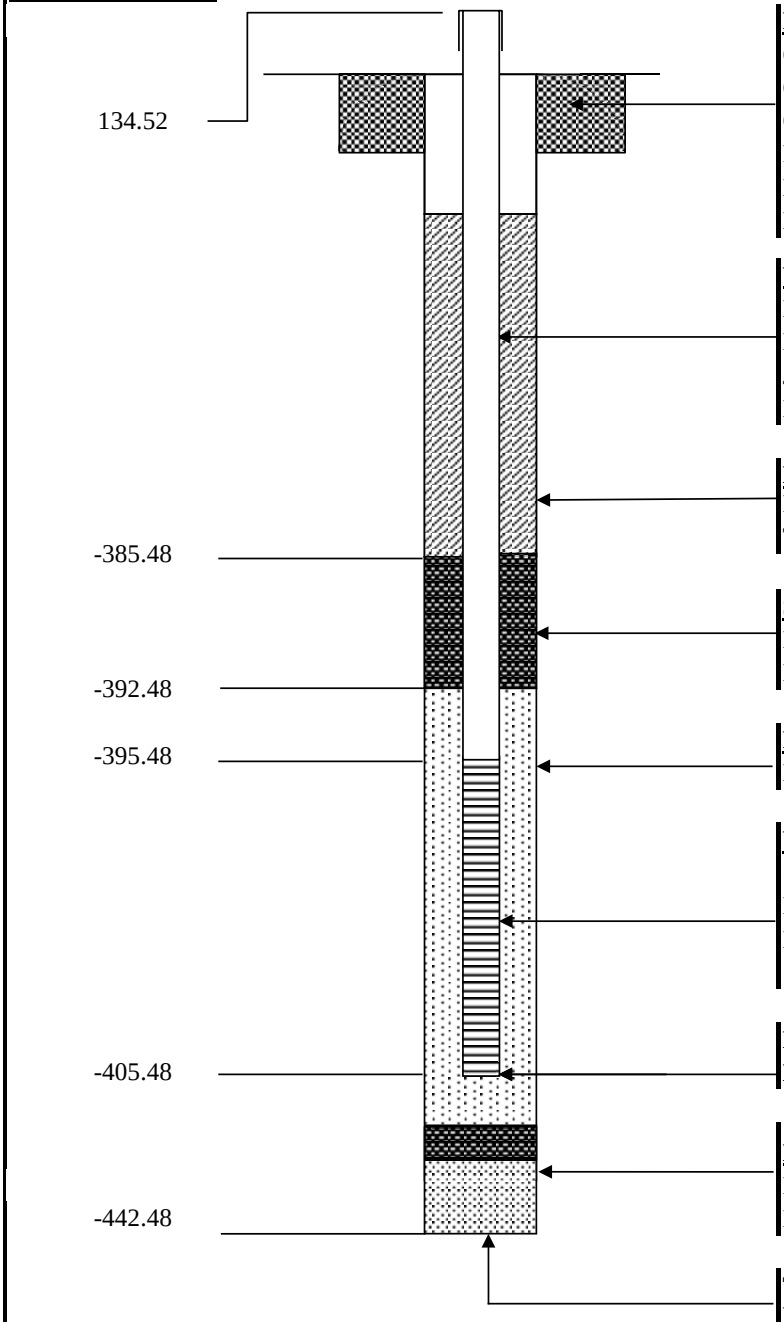
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**339.73 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**329.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**350 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**352 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-208-540
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/28/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	12/19/2011
DRILLING METHOD: Sonic		**DRILLER:**	M.Osterberg
NORTHING (FT): 217294.7017	**GS ELEVATION (FT):** 132.37	**INSPECTOR:**	M. Werth, E&E, Inc.
EASTING (FT): 1108929.306	**WATER LEVEL (FT, BTOC):** 57.25	**TOTAL WELL DEPTH (FT, BGS):**	540

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**2.15 feet (stick-up)**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**534 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**519.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**#00 Sand / 3 feet**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **540 feet**

BOTTOM SEAL / BACKFILL

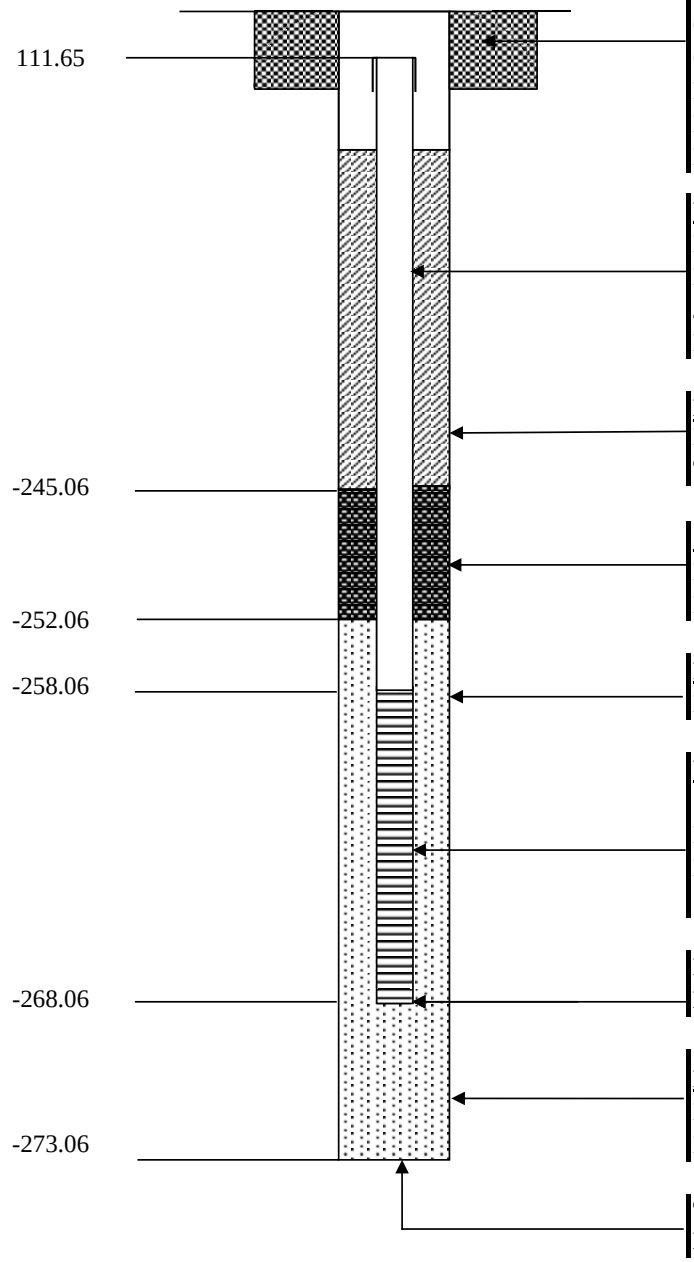
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 13 feet**

TOTAL DEPTH OF BOREHOLE — **557 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-209-380
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	9/28/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	10/2/2011
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 214438.3	**GS ELEVATION (FT):** 111.94	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1108045.9	**WATER LEVEL (FT, BTOC):** 37.11	**TOTAL WELL DEPTH (FT, BGS):**	380

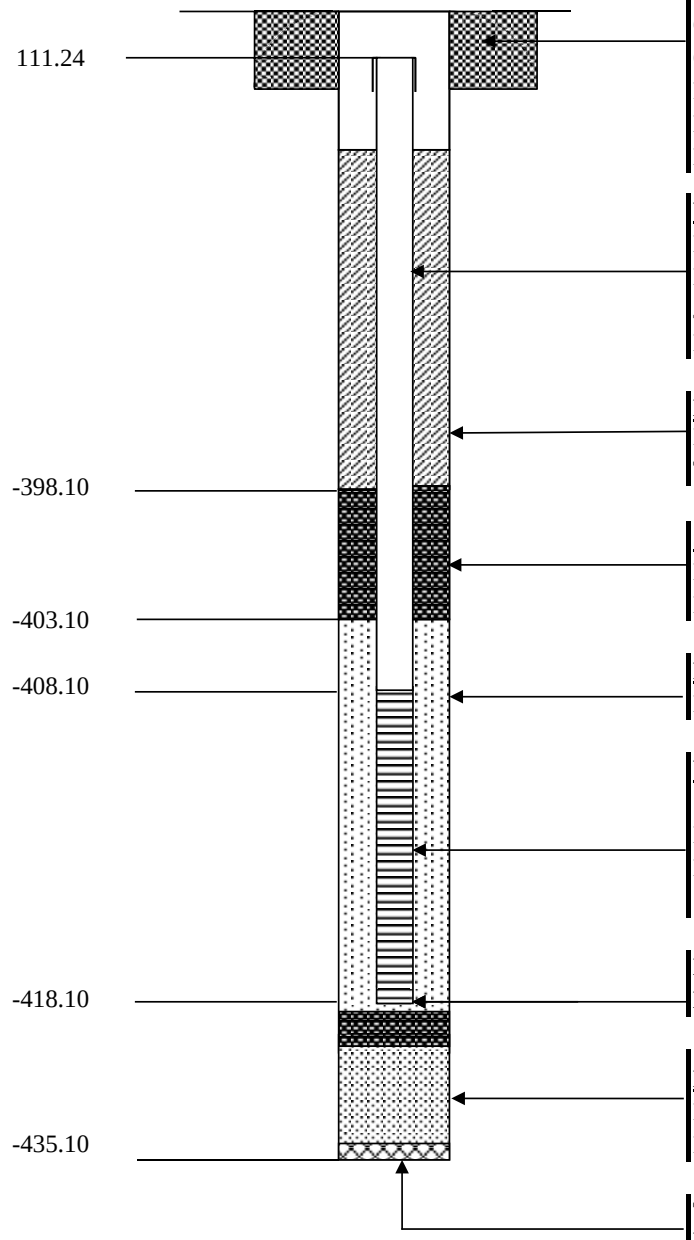
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**369.71 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**356.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 21 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**380 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**385 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-209-530
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	9/9/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	9/11/2011
DRILLING METHOD: Sonic		**DRILLER:**	M. Osterberg
NORTHING (FT): 214446.4	**GS ELEVATION (FT):** 111.90	**INSPECTOR:**	M. Werth, E&E, Inc.
EASTING (FT): 1108044.4	**WATER LEVEL (FT, BTOC):** 37.91	**TOTAL WELL DEPTH (FT, BGS):**	530

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**519.34 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**509.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 15 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **530 feet**

BOTTOM SEAL / BACKFILL

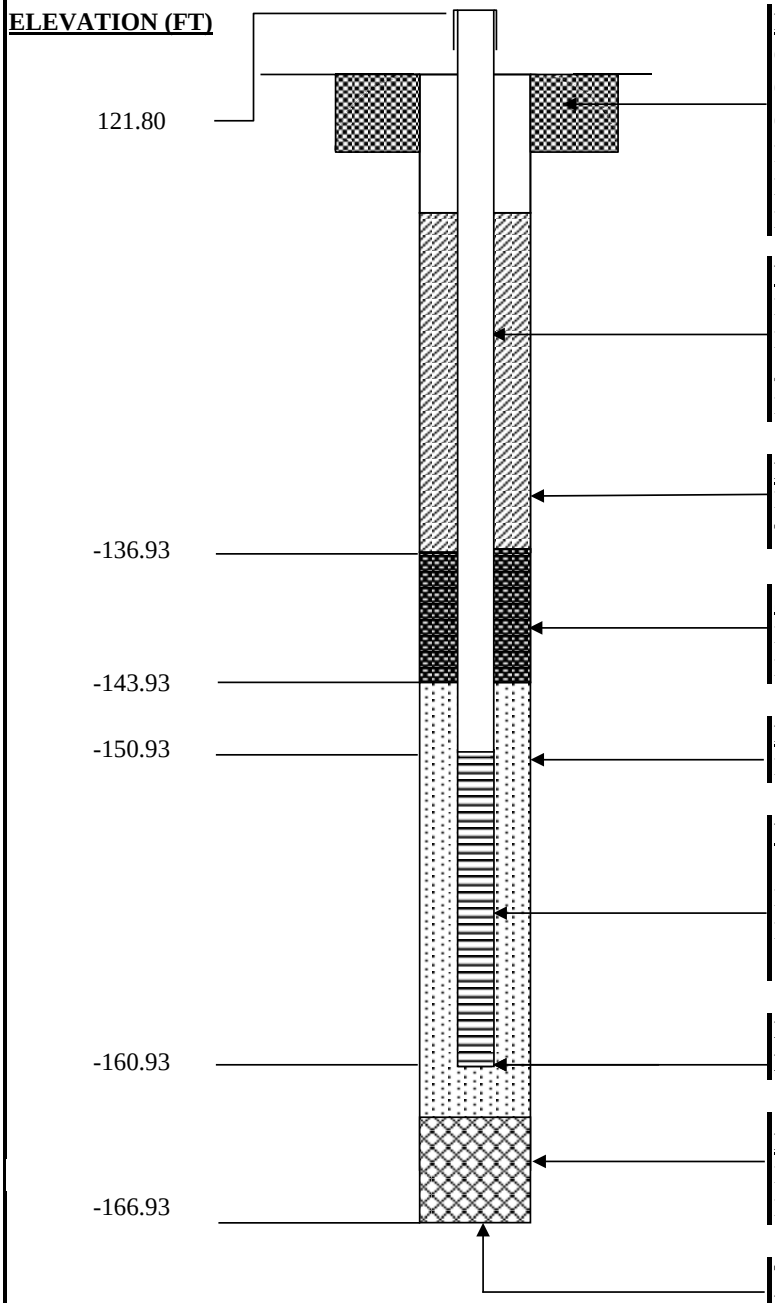
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 Sand (Backfill) / 11 feet**
	Formation ColLapse / 4 feet

TOTAL DEPTH OF BOREHOLE — **547 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	WELL NO.:	MW-210-280
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	10/13/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	10/18/2011
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 215941.0	**GS ELEVATION (FT):** 119.07	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1109142.1	**WATER LEVEL (FT, BTOC):** 44.03	**TOTAL WELL DEPTH (FT, BGS):**	280

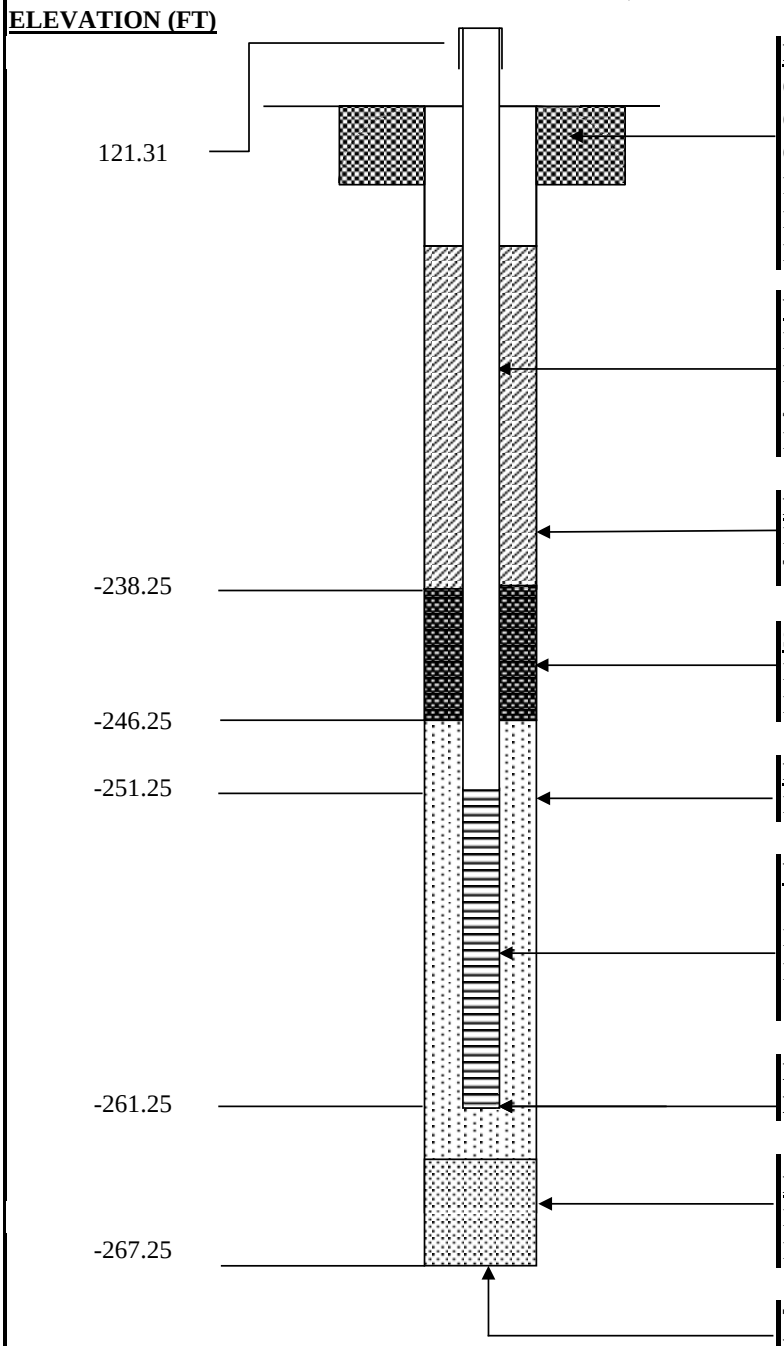
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**2.73 feet (stickup)**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**272.73 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**258.23 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4 feet**
MATERIAL / THICKNESS	**#00 Sand / 3 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 17 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**280 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formatoin Colapse / 6 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**286 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-210-380**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	10/10/2011
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	10/12/2011
DRILLING METHOD:	Sonic			**DRILLER:**	J. Sigler
NORTHING (FT):	215946.4915	**GS ELEVATION (FT):**	118.75	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT):	1109133.935	**WATER LEVEL (FT, BTOC):**	43.57	**TOTAL WELL DEPTH (FT, BGS):**	380

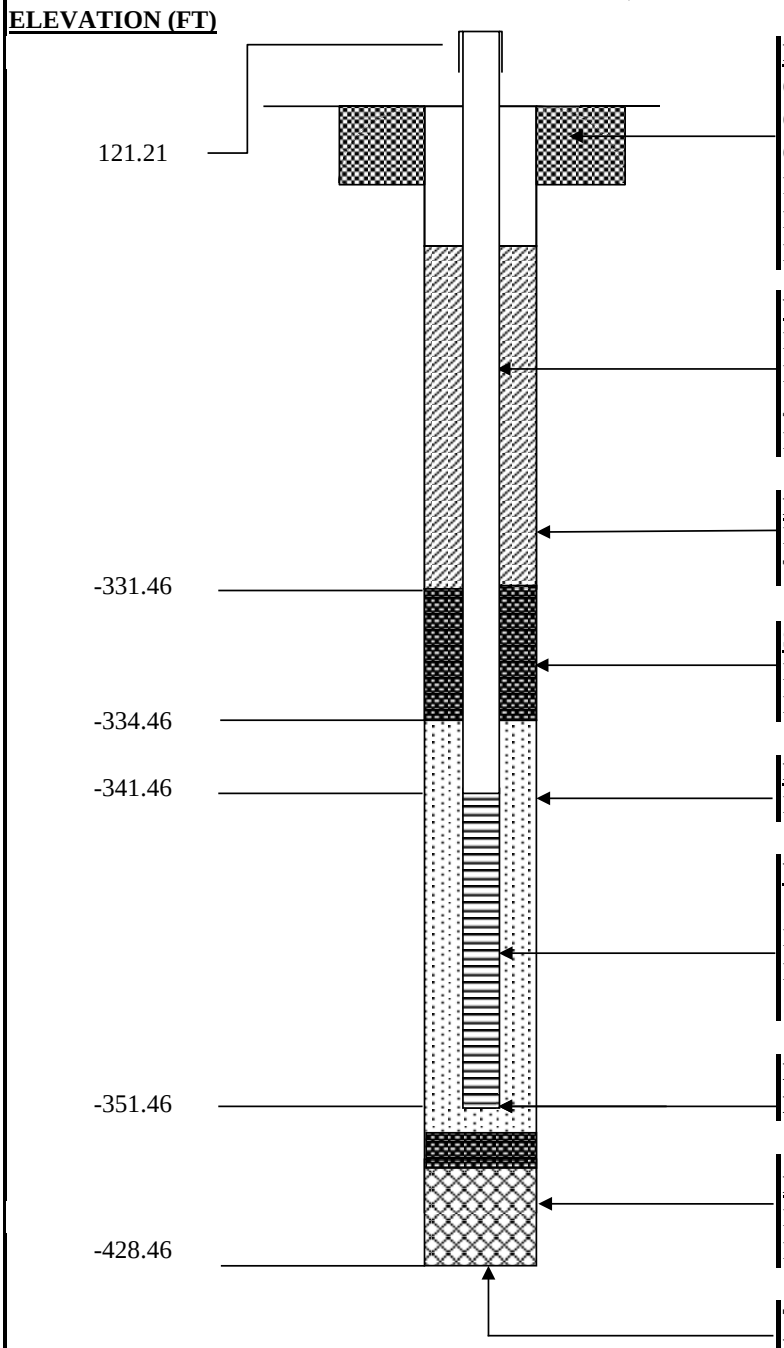
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**2.56 feet (stick-up)**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**372.56 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**359.06 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4.5 feet**
MATERIAL / THICKNESS	**#00 Sand / 3.5 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**380 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#1 Sand / 5 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**386 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-210-470**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	9/22/2011
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	10/6/2011
DRILLING METHOD:	Sonic			**DRILLER:**	M. Osterberg
NORTHING (FT):	215942.8	**GS ELEVATION (FT):**	118.54	**INSPECTOR:**	M. Werth, E&E
EASTING (FT):	1109130.8	**WATER LEVEL (FT, BTOC):**	44.17	**TOTAL WELL DEPTH (FT, BGS):**	470

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**2.67 feet (stick-up)**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**462.67 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**452.17 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**N/A**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 17 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **470 feet**

BOTTOM SEAL / BACKFILL

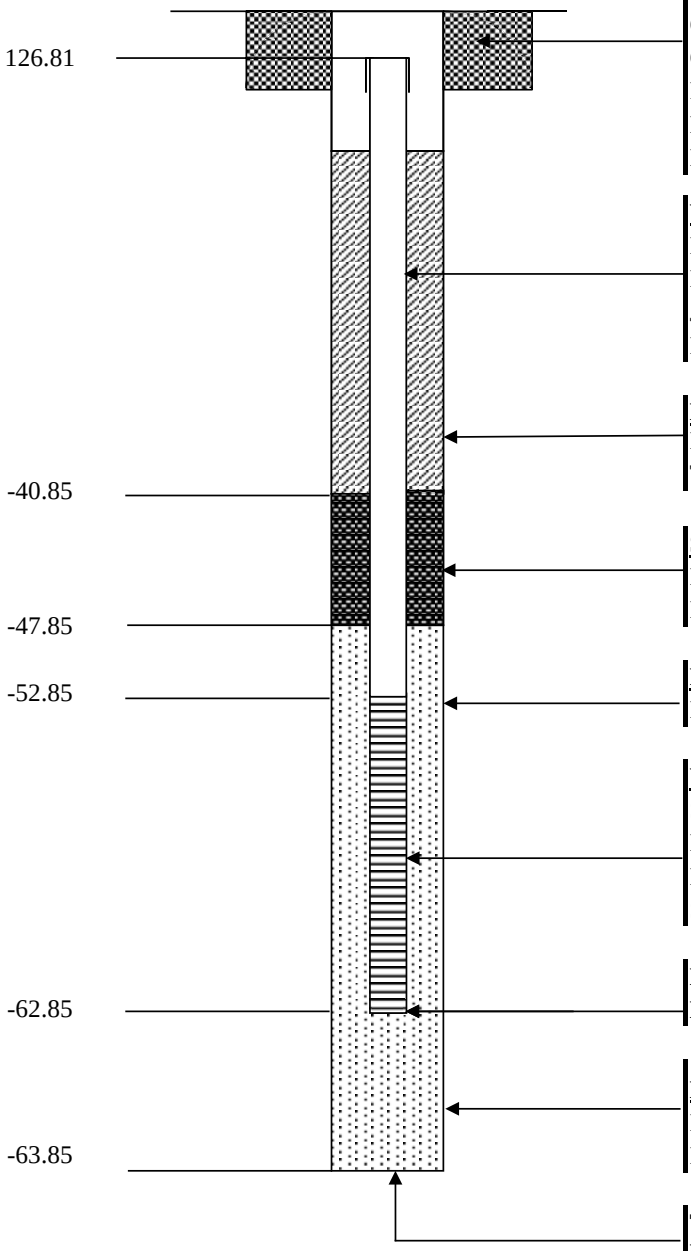
MATERIAL / THICKNESS	**#00 Sand (Seal) / 3 feet**
MATERIAL / THICKNESS	**Formation Colapse / 74 feet**

TOTAL DEPTH OF BOREHOLE — **547 feet**

DIAMETER OF BOREHOLE — **8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-211-190**
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	9/16/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	9/20/2011
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 215654.9	**GS ELEVATION (FT):** 127.15	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1110823.7	**WATER LEVEL (FT, BTOC):** 49.32	**TOTAL WELL DEPTH (FT, BGS):**	190

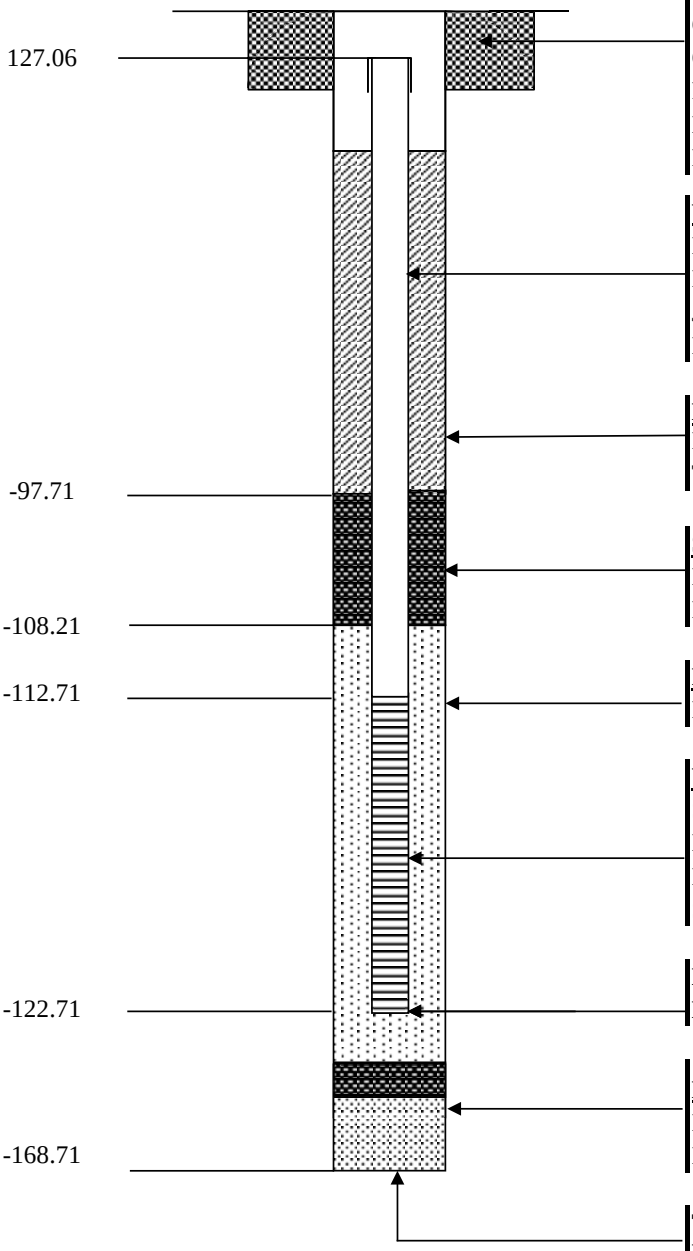
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**179.66 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**167.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**190 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**N/A**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**191 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-211-250**
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	9/12/2011
DRILLING CONTRACTOR: Boart Longyear		**DATE FINISHED:**	9/14/2011
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 215650.9	**GS ELEVATION (FT):** 127.29	**INSPECTOR:**	V. Gatallin, Louis Berger
EASTING (FT): 1110809.4	**WATER LEVEL (FT, BTOC):** 49.51	**TOTAL WELL DEPTH (FT, BGS):**	250

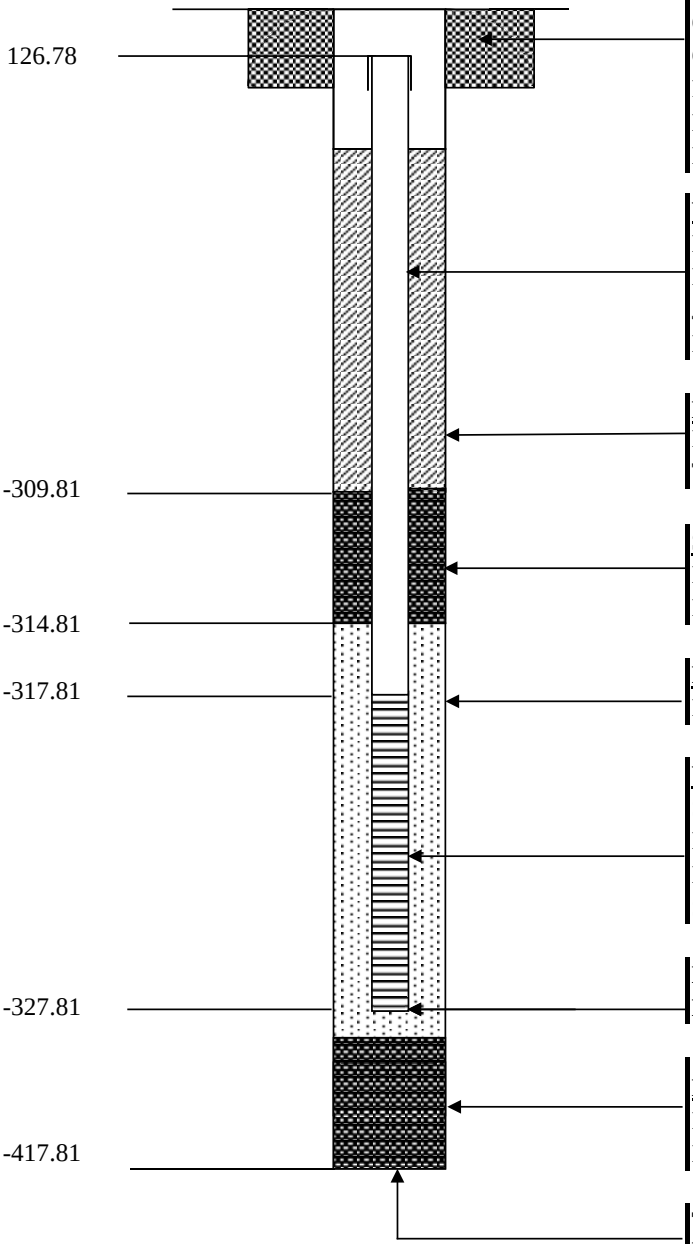
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**239.77 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**224.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 5.5 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16.5 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**250 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 42 feet**
TOTAL DEPTH OF BOREHOLE	**296 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-211-455**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	7/21/2011
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	8/9/2011
DRILLING METHOD:	Sonic			**DRILLER:**	M. Osterberg
NORTHING (FT):	215651.7	**GS ELEVATION (FT):**	127.19	**INSPECTOR:**	N. Walton, Louis Berger
EASTING (FT):	1110816.6	**WATER LEVEL (FT, BTOC):**	50.23	**TOTAL WELL DEPTH (FT, BGS):**	455

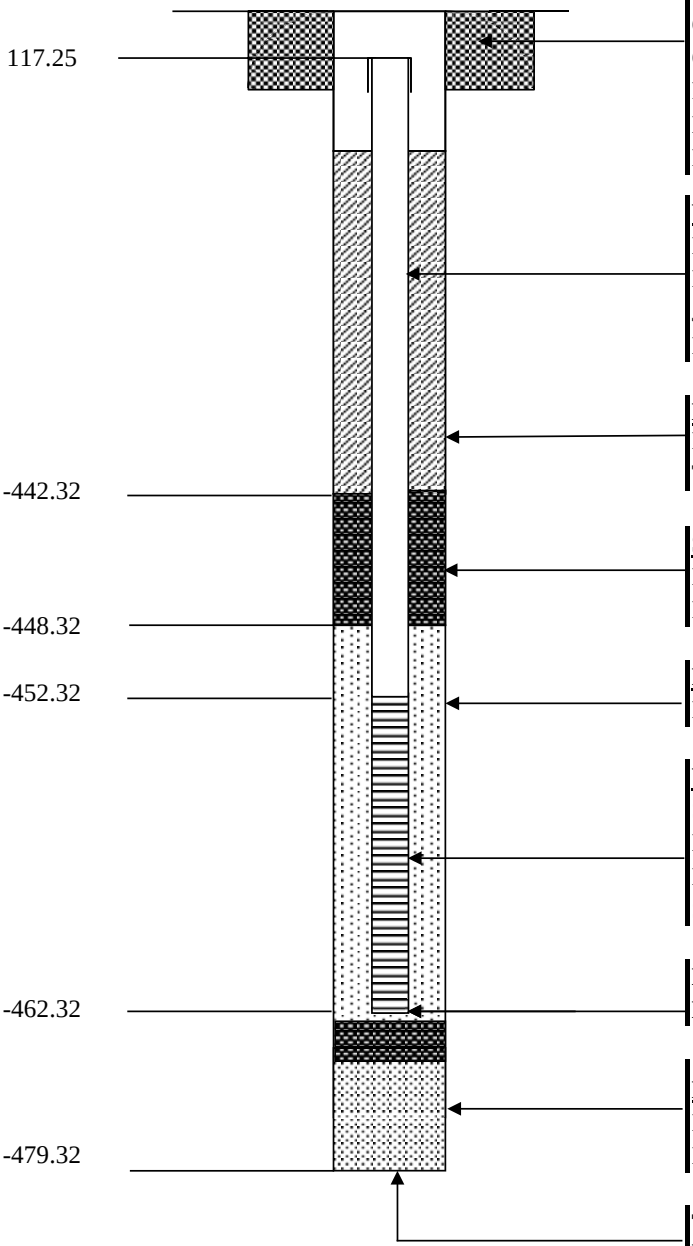
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**444.59 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**436.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 15 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**455 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand / 88 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**545 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-212-580**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	10/11/2011
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	10/28/2011
DRILLING METHOD:	Sonic			**DRILLER:**	M. Osterberg
NORTHING (FT):	213720.887	**GS ELEVATION (FT):**	117.68	**INSPECTOR:**	M. Werth, E&E, Inc.
EASTING (FT):	1108176.108	**WATER LEVEL (FT, BTOC):**	44.28	**TOTAL WELL DEPTH (FT, BGS):**	580

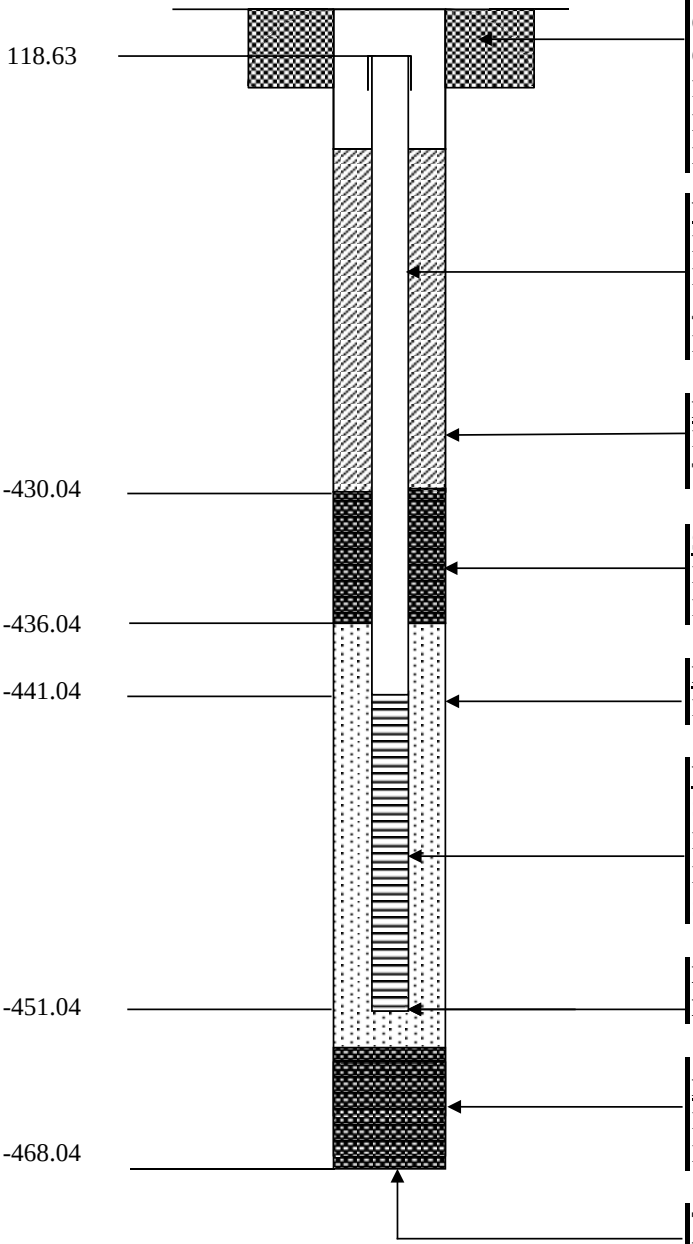
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**569.59 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**559.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 14 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**580 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 3 feet**
MATERIAL / THICKNESS	**#1 (Backfill) / 14 feet**
TOTAL DEPTH OF BOREHOLE	**597 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram			**WELL NO.:**	**MW-213-570**
CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	6/29/2011
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	7/21/2011
DRILLING METHOD:	Sonic			**DRILLER:**	S. DuBois
NORTHING (FT):	213681.1	**GS ELEVATION (FT):**	118.96	**INSPECTOR:**	M. Werth, E&E
EASTING (FT):	1109445.2	**WATER LEVEL (FT, BTOC):**	45.28	**TOTAL WELL DEPTH (FT, BGS):**	570

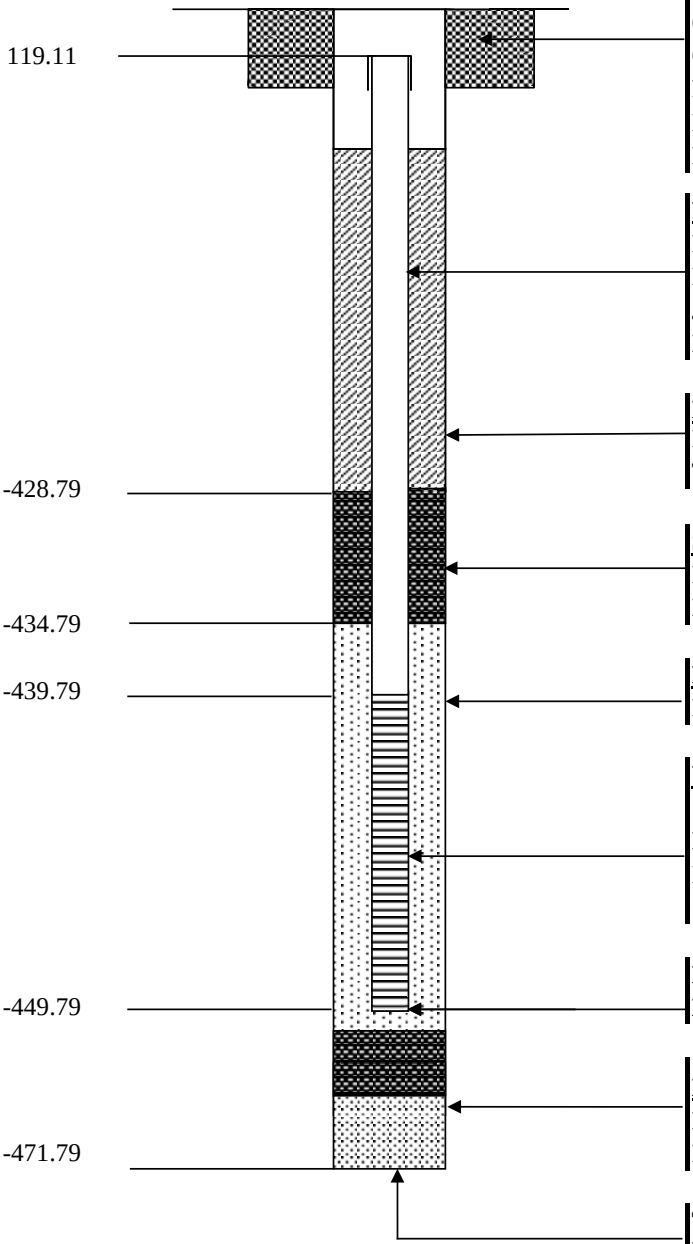
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**559.67 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**548.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**570 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand / 16 feet**
MATERIAL / THICKNESS	**N/A**
TOTAL DEPTH OF BOREHOLE	**587 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram		WELL NO.: MW-214-570
CLIENT: USACE			**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP			**DATE STARTED:** 8/19/2011
DRILLING CONTRACTOR: Boart Longyear			**DATE FINISHED:** 9/16/2011
DRILLING METHOD: Sonic			**DRILLER:** M. Osterberg
NORTHING (FT): 213799.4	**GS ELEVATION (FT):** 120.21		**INSPECTOR:** J. Ganz, Louis Berger
EASTING (FT): 1109841.5	**WATER LEVEL (FT, BTOC):** 44.71		**TOTAL WELL DEPTH (FT, BGS):** 570

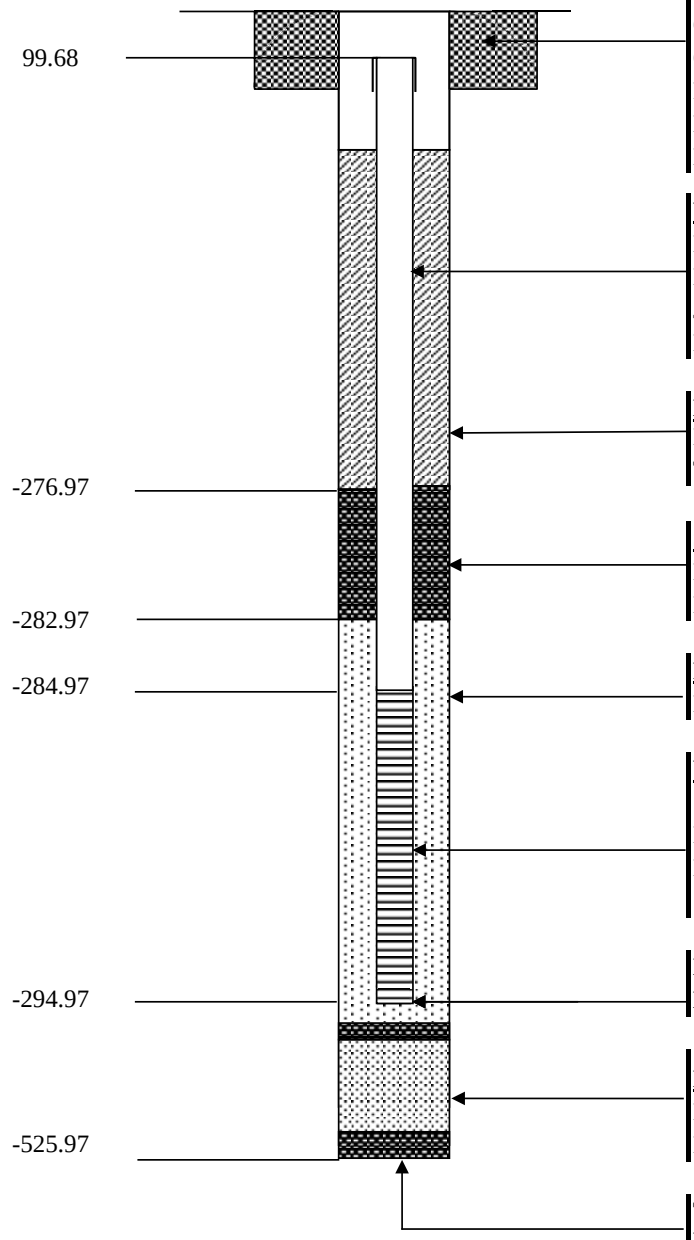
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**558.90 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**547.50 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 17 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**570 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 11 feet**
MATERIAL / THICKNESS	**#1 Sand (Backfill) / 9 feet**
TOTAL DEPTH OF BOREHOLE	**592 feet**
DIAMETER OF BOREHOLE	**8 inches**

	Well Construction Diagram	WELL NO.:	MW-215-395
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	9/3/2014
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	9/24/2014
DRILLING METHOD: Sonic		**DRILLER:**	D. Roberts
NORTHING (FT): 208319.6	**GS ELEVATION (FT):** 100.03	**INSPECTOR:**	T. Dillon, E & E Inc.
EASTING (FT): 1109550.5	**WATER LEVEL (FT, BTOC):** 39.50	**TOTAL WELL DEPTH (FT, BGS):**	395

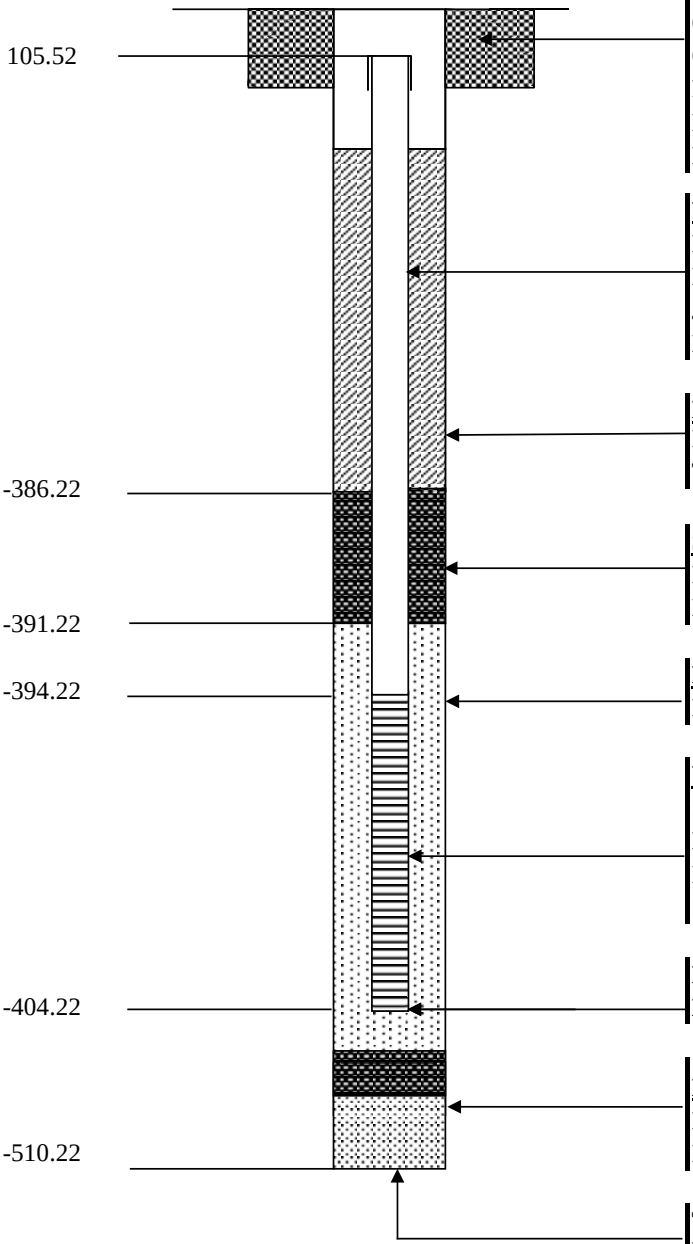
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**384.65 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**376.5**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 14 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**395 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#8 FilPro (Seal) / 1 foot**
MATERIAL / THICKNESS	**#4 FilPro (Backfill) / 206 feet**
	Bentonite Pellets / 22 feet
TOTAL DEPTH OF BOREHOLE	**626 feet**
DIAMETER OF BOREHOLE	**7 inches**

	Well Construction Diagram	WELL NO.:	MW-216-510
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	9/8/2014
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	10/2/2014
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 209727.0	**GS ELEVATION (FT):** 105.78	**INSPECTOR:**	E. Lynch, E & E Inc.
EASTING (FT): 1108145.7	**WATER LEVEL (FT, BTOC):** 38.44	**TOTAL WELL DEPTH (FT, BGS):**	510

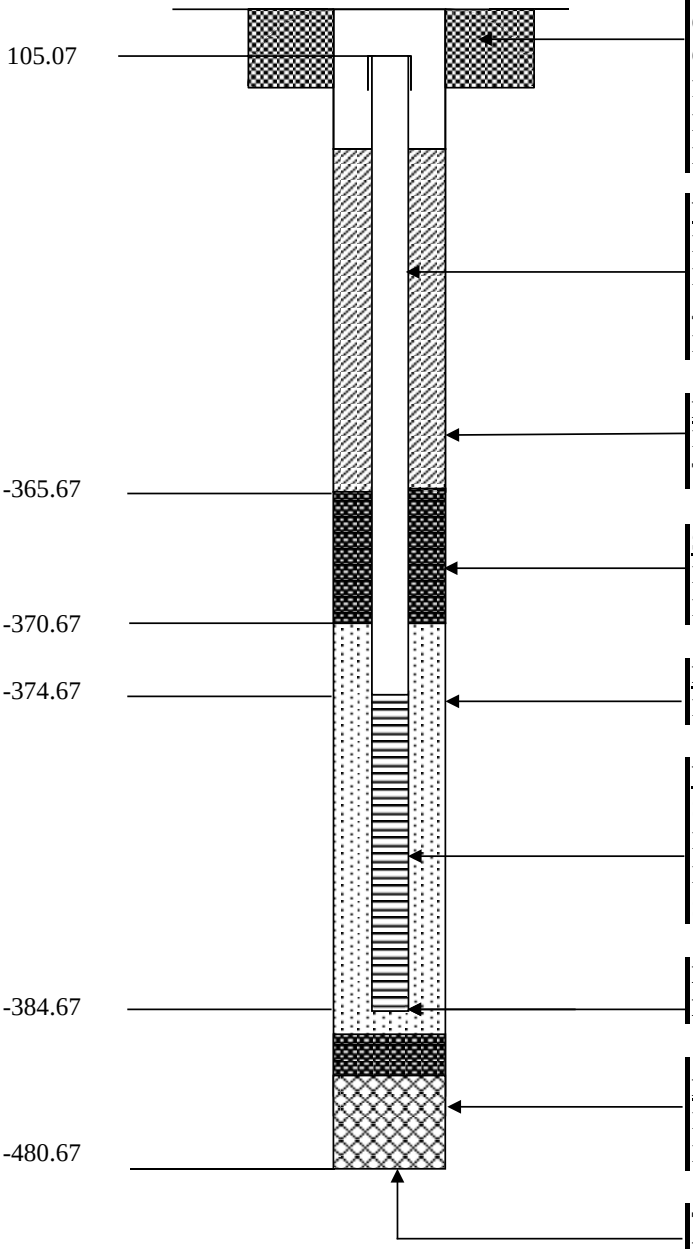
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**499.74 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**491.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#00 Sand / 18 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**510 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#4 FilPro (Seal) / 80 feet**
MATERIAL / THICKNESS	**Bentonite Pellets (Backfill) / 21 feet**
TOTAL DEPTH OF BOREHOLE	**616 feet**
DIAMETER OF BOREHOLE	**7 inches**

	Well Construction Diagram		WELL NO.: MW-217-490
CLIENT: USACE			**PROJECT NO:** 2001764.012.05
PROJECT: Sylvania Corning FUSRAP			**DATE STARTED:** 9/25/2014
DRILLING CONTRACTOR: Cascade			**DATE FINISHED:** 10/15/2014
DRILLING METHOD: Sonic			**DRILLER:** D. Roberts
NORTHING (FT): 208474.1	**GS ELEVATION (FT):** 105.33		**INSPECTOR:** J. Ryne, E & E Inc.
EASTING (FT): 1111184.2	**WATER LEVEL (FT, BTOC):** 41.32		**TOTAL WELL DEPTH (FT, BGS):** 490

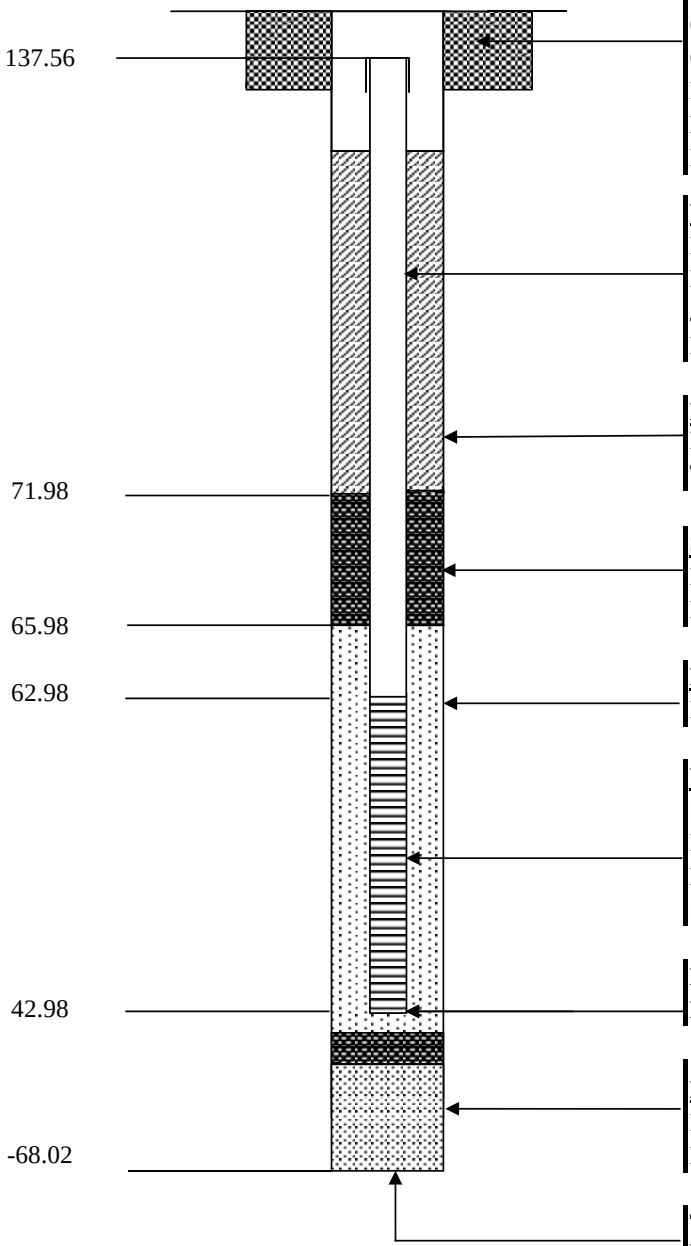
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**479.74 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**470.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 4.5 feet**
MATERIAL / THICKNESS	**#8 FilPro / .5 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 19 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**490 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#3 FilPro (Seal) / 11 feet**
MATERIAL / THICKNESS	**Formation Collapse / 80 feet**
TOTAL DEPTH OF BOREHOLE	**586 feet**
DIAMETER OF BOREHOLE	**7 inches**

	Well Construction Diagram	WELL NO.:	MW-218-95
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	10/3/2014
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	10/10/2014
DRILLING METHOD: Sonic		**DRILLER:**	J. Sigler
NORTHING (FT): 218960.9	**GS ELEVATION (FT):** 137.98	**INSPECTOR:**	T. Dillon, E & E Inc.
EASTING (FT): 1109455.5	**WATER LEVEL (FT, BTOC):** 60.48	**TOTAL WELL DEPTH (FT, BGS):**	95

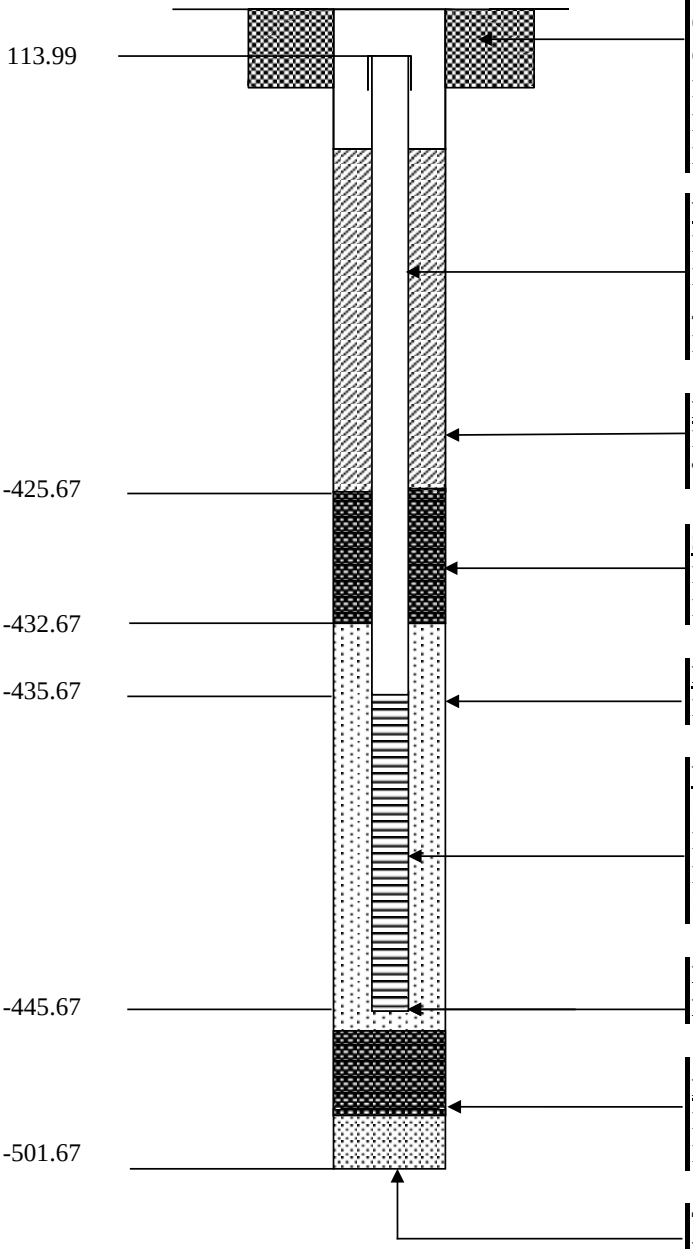
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**74.58 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**65.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 25 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**20 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**95 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 3 feet**
MATERIAL / THICKNESS	**#4 FilPro (Backfill) / 106 feet**
TOTAL DEPTH OF BOREHOLE	**206 feet**
DIAMETER OF BOREHOLE	**7 inches**

	Well Construction Diagram	WELL NO.:	MW-219-560
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	10/16/2014
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	10/30/2014
DRILLING METHOD: Sonic		**DRILLER:**	D. Roberts
NORTHING (FT): 212324.5	**GS ELEVATION (FT):** 114.33	**INSPECTOR:**	T. Dillon, E & E Inc.
EASTING (FT): 1108323.5	**WATER LEVEL (FT, BTOC):** 45.05	**TOTAL WELL DEPTH (FT, BGS):**	560

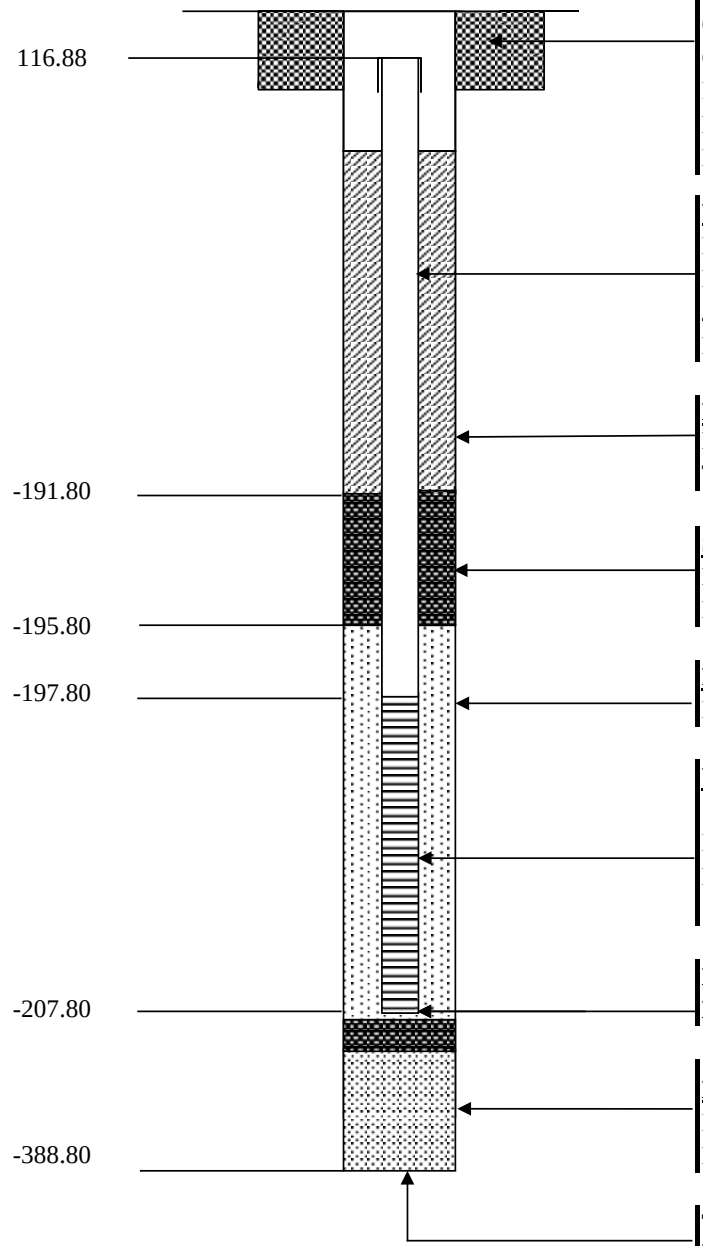
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**549.66 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**539.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 7 feet**
MATERIAL / THICKNESS	**N/A**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 16 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**560 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#3 FilPro (Seal) / 37 feet**
MATERIAL / THICKNESS	**Bentonite Pellets (Backfill) / 16 feet**
TOTAL DEPTH OF BOREHOLE	**616 feet**
DIAMETER OF BOREHOLE	**7 inches**

	Well Construction Diagram	WELL NO.:	MW-220-325
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	11/18/2014
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	12/10/2014
DRILLING METHOD: Sonic		**DRILLER:**	D. Roberts
NORTHING (FT): 215424.8	**GS ELEVATION (FT):** 117.20	**INSPECTOR:**	T. Dillon, E & E Inc.
EASTING (FT): 1108396.6	**WATER LEVEL (FT, BTOC):** 43.39	**TOTAL WELL DEPTH (FT, BGS):**	325

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)

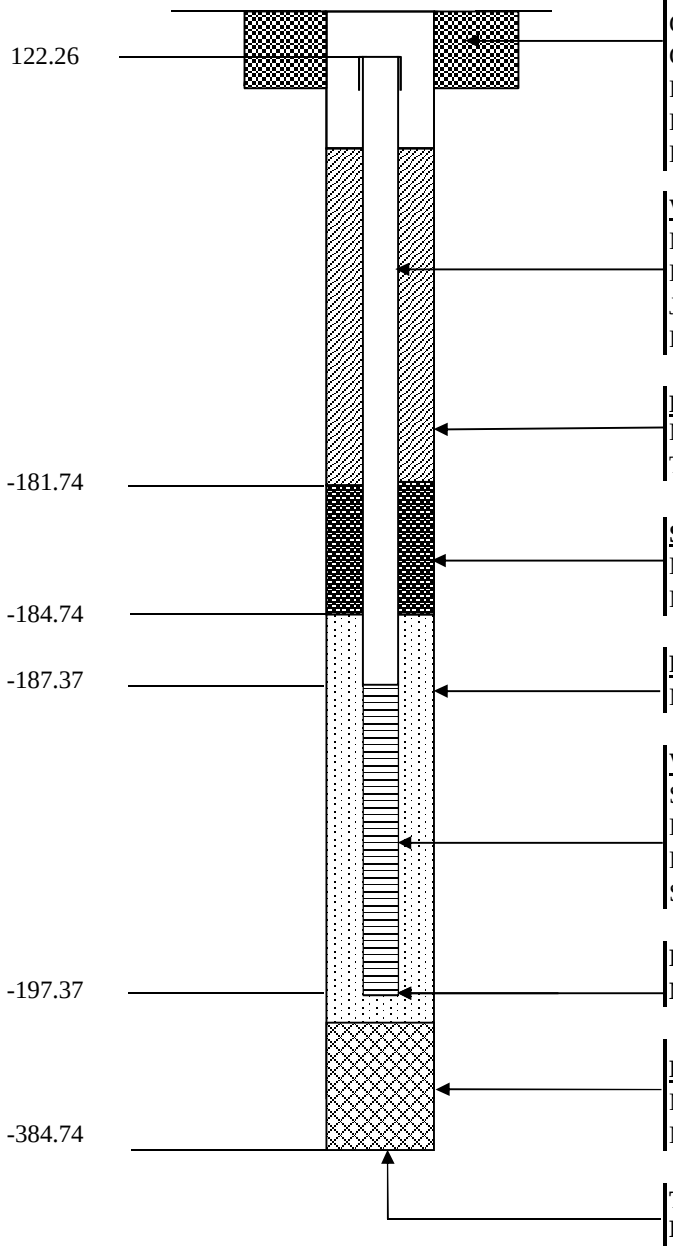


PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**314.68 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**308.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**# 8 Sand / 1 foot**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 12 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**325 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#8 Sand (Seal) / 1 foot**
MATERIAL / THICKNESS	**#4 Sand (Backfill) / 180 feet**
TOTAL DEPTH OF BOREHOLE	**506 feet**
DIAMETER OF BOREHOLE	**7 inches**

	Well Construction Diagram	**WELL NO.:**	**MW-221-320**

CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	2/23/2016
DRILLING CONTRACTOR:	Cascade			**DATE FINISHED:**	3/7/2016
DRILLING METHOD:	Sonic			**DRILLER:**	M. Osterberg
NORTHING (FT):	216002.2	**GS ELEVATION (FT):**	122.63	**INSPECTOR:**	S. Craig, E& E Inc.
EASTING (FT):	1108684.3	**WATER LEVEL (FT, BTOC):**	50	**TOTAL WELL DEPTH (FT, BGS):**	320

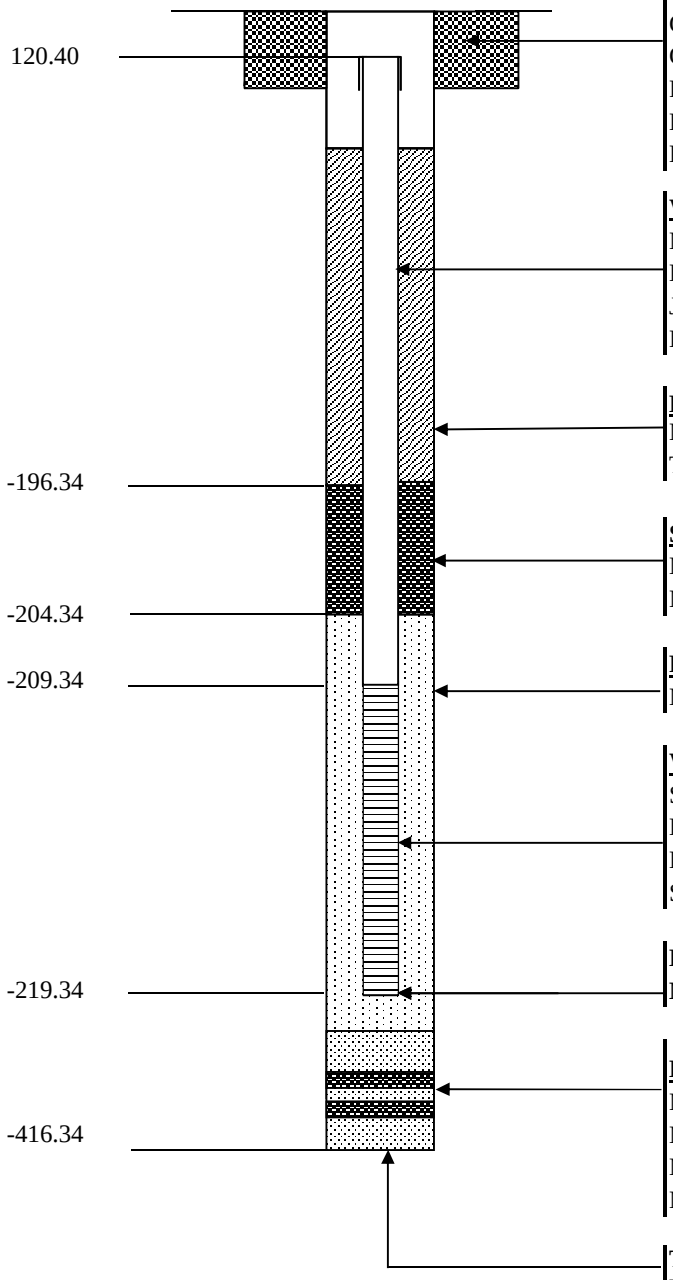
MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**309.63 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**303.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	
FILTER PACK	
MATERIAL / THICKNESS	**#0 & #00 Sand / 18 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**320 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**Formation Collapse / 182 feet**
MATERIAL / THICKNESS	
TOTAL DEPTH OF BOREHOLE	**507 feet**
DIAMETER OF BOREHOLE	**7 inches**

	Well Construction Diagram	WELL NO.:	MW-222-340
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	3/7/2016
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	3/25/2016
DRILLING METHOD: Sonic		**DRILLER:**	M. Bond
NORTHING (FT): 214682.5	**GS ELEVATION (FT):** 120.66	**INSPECTOR:**	T. Dillon, E & E Inc.
EASTING (FT): 1108883.6	**WATER LEVEL (FT, BTOC):** 58	**TOTAL WELL DEPTH (FT, BGS):**	340

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**329.74 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**316.50**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 6 feet**
MATERIAL / THICKNESS	**# 00 Sand / 2 feet**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 18 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL **340 feet**

BOTTOM SEAL / BACKFILL

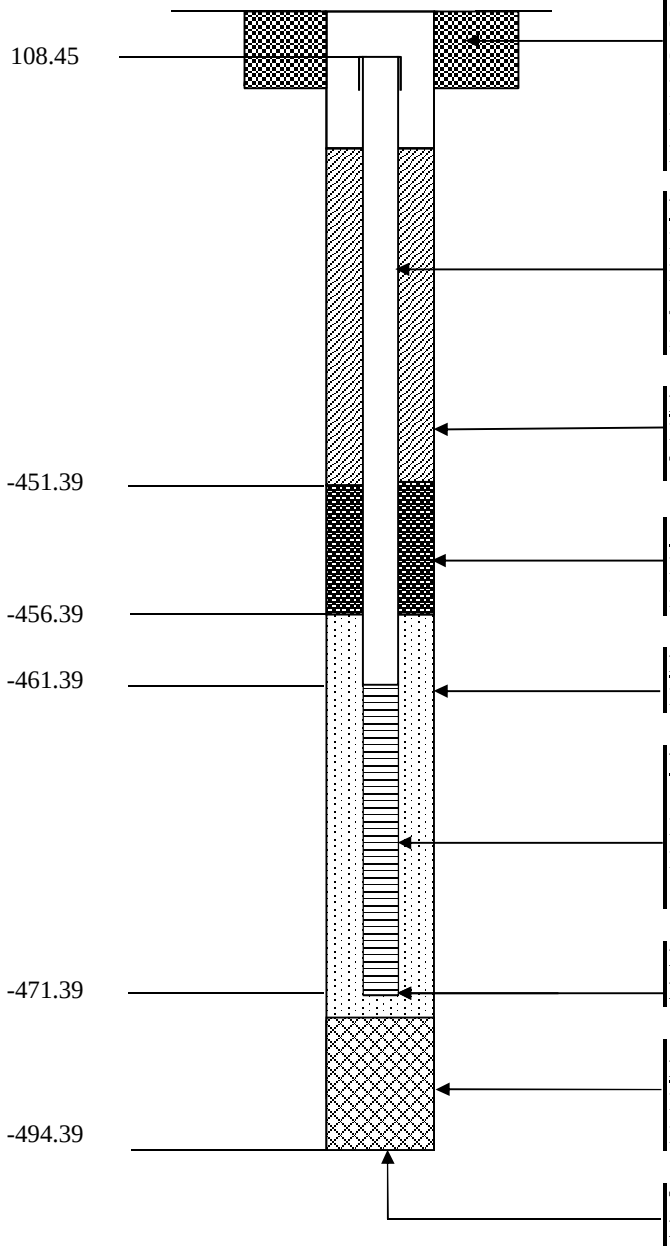
MATERIAL / THICKNESS	**#1 Sand (Backfill) / 20 feet**
MATERIAL / THICKNESS	**Bentonite Pellets (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 Sand (Backfill) / 13 feet**
MATERIAL / THICKNESS	**Bentonite Pellets (Seal) / 2 feet**
	#1 Sand (Backfill) / 157 feet

TOTAL DEPTH OF BOREHOLE **537 feet**

DIAMETER OF BOREHOLE **7 inches**

	Well Construction Diagram	WELL NO.:	MW-223-580
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	1/4/2016
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	2/17/2016
DRILLING METHOD: Sonic		**DRILLER:**	M. Osterberg
NORTHING (FT): 210665.1	**GS ELEVATION (FT):** 108.61	**INSPECTOR:**	J. Ganz, LBG
EASTING (FT): 1109257.8	**WATER LEVEL (FT, BTOC):** 46.15	**TOTAL WELL DEPTH (FT, BGS):**	580

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**569.84 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**559.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 16 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL **580 feet**

BOTTOM SEAL / BACKFILL

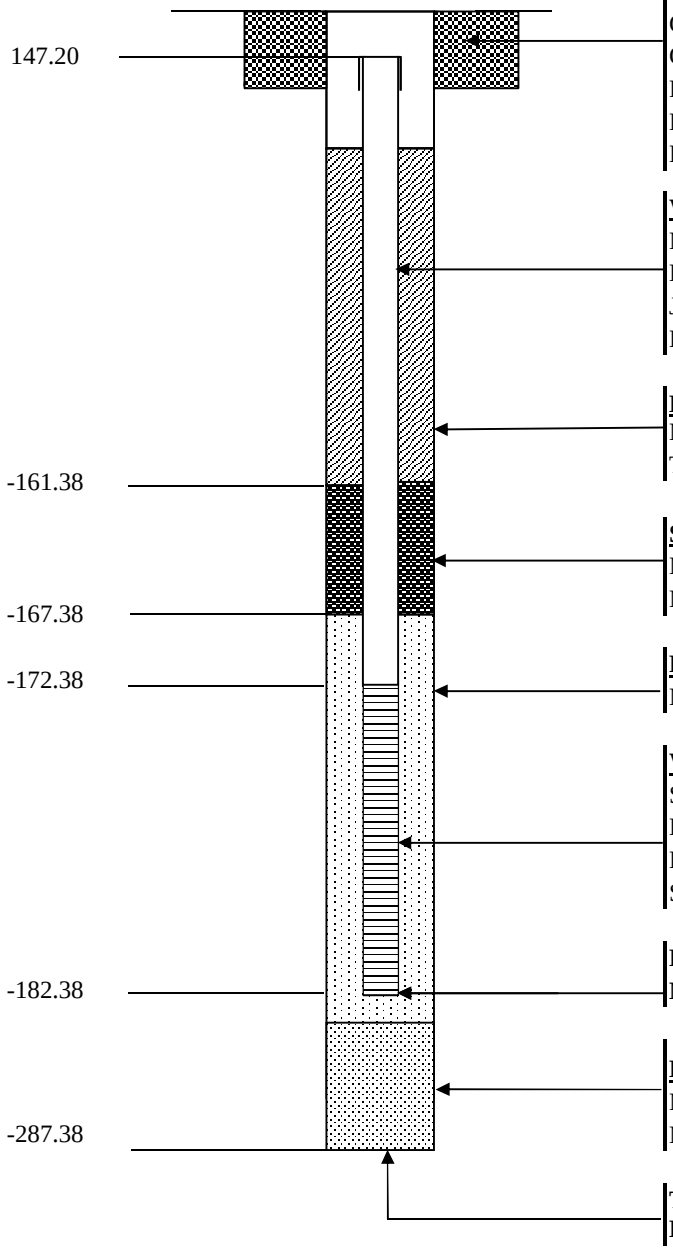
MATERIAL / THICKNESS	**Formation Collapse / 22 feet**
MATERIAL / THICKNESS	

TOTAL DEPTH OF BOREHOLE **603 feet**

DIAMETER OF BOREHOLE **7 inches**

	Well Construction Diagram	WELL NO.:	MW-224-330
CLIENT: USACE		**PROJECT NO:**	2001764.012.05
PROJECT: Sylvania Corning FUSRAP		**DATE STARTED:**	2/17/2016
DRILLING CONTRACTOR: Cascade		**DATE FINISHED:**	3/4/2016
DRILLING METHOD: Sonic		**DRILLER:**	M. Bond
NORTHING (FT): 220190.7767	**GS ELEVATION (FT):** 147.62	**INSPECTOR:**	T. Dillon, E & E Inc.
EASTING (FT): 1106763.486	**WATER LEVEL (FT, BTOC):** 72.5	**TOTAL WELL DEPTH (FT, BGS):**	330

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD

CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**

WELL CASING

MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**319.58 feet**

BACKFILL AROUND CASING

MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**308.5 feet**

SEAL

MATERIAL / THICKNESS	**Bentonite Pellets / 5 feet**
MATERIAL / THICKNESS	**#00 Sand / 1 foot**

FILTER PACK

MATERIAL / THICKNESS	**#0 Sand / 16 feet**

WELL SCREEN

SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**20 feet**
SLOT SIZE	**0.010 inch**

DEPTH TO BOTTOM OF MONITORING WELL — **330 feet**

BOTTOM SEAL / BACKFILL

MATERIAL / THICKNESS	**#1 Sand (Backfill) / 104 feet**
MATERIAL / THICKNESS	

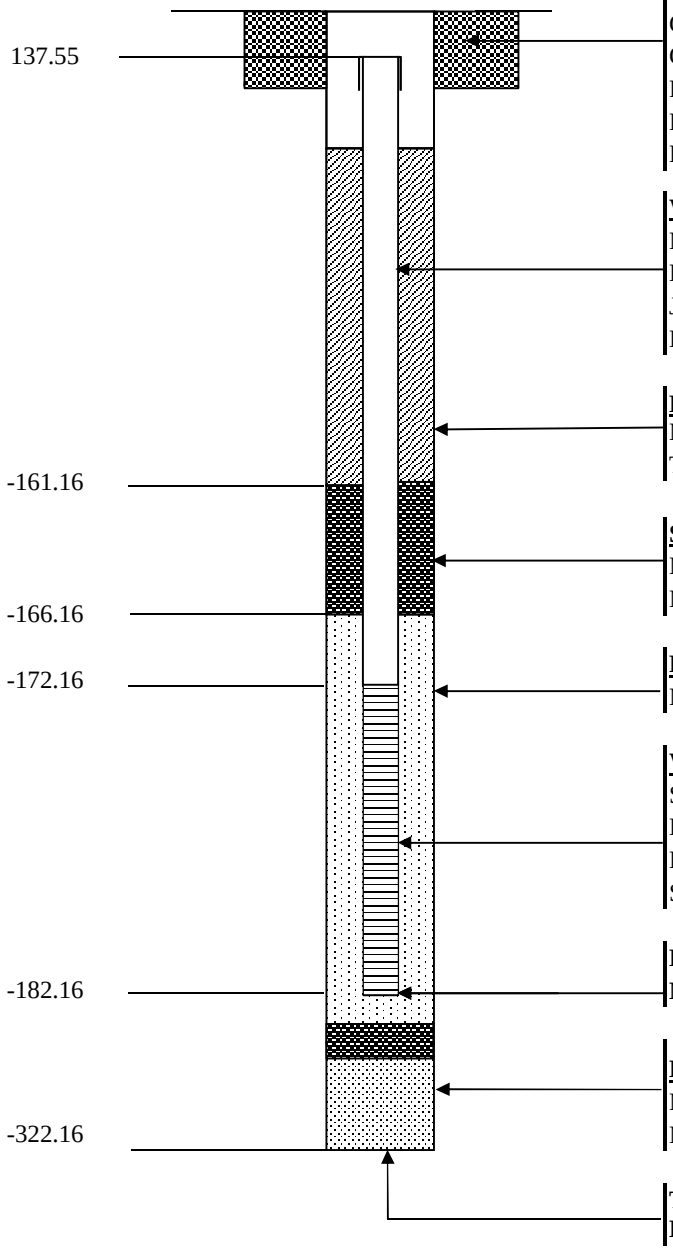
TOTAL DEPTH OF BOREHOLE — **435 feet**

DIAMETER OF BOREHOLE — **7 inches**

	Well Construction Diagram	WELL NO.:	MW-225-320

CLIENT:	USACE			**PROJECT NO:**	2001764.012.05
PROJECT:	Sylvania Corning FUSRAP			**DATE STARTED:**	3/9/2016
DRILLING CONTRACTOR:	Boart Longyear			**DATE FINISHED:**	3/22/2016
DRILLING METHOD:	Sonic			**DRILLER:**	M. Osterberg
NORTHING (FT):	218257.5	**GS ELEVATION (FT):**	137.84	**INSPECTOR:**	S. Craig, CDM
EASTING (FT):	1107262.4	**WATER LEVEL (FT, BTOC):**	70.0	**TOTAL WELL DEPTH (FT, BGS):**	320

MONITORING WELL CONSTRUCTION DETAILS
CROSS SECTIONAL VIEW
(NOT TO SCALE)



PROTECTIVE CASING AND CONCRETE PAD	
CASING MATERIAL	**Steel**
CASING DIAMETER	**8 inches**
CASING LENGTH	**12 inches**
PAD DIMENSIONS	**2 feet x 2 feet x 6 inches**
HEIGHT ABOVE GROUND	**Flush-Mount**
LOCKABLE WELL (KEY NO.)	**0464**
WELL CASING	
MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
JOINT TYPE	**Tri-Loc Threaded**
LENGTH	**309.71 feet**
BACKFILL AROUND CASING	
MATERIAL	**Cement-Bentonite Grout**
THICKNESS	**298.5 feet**
SEAL	
MATERIAL / THICKNESS	**Bentonite Pellets / 3 feet**
MATERIAL / THICKNESS	**#00 Sand / 2 feet**
FILTER PACK	
MATERIAL / THICKNESS	**#0 Sand / 20 feet**
WELL SCREEN	
SCREEN MATERIAL	**Sch 80 PVC**
DIAMETER	**2.5 inches**
LENGTH	**10 feet**
SLOT SIZE	**0.010 inch**
DEPTH TO BOTTOM OF MONITORING WELL	**320 feet**
BOTTOM SEAL / BACKFILL	
MATERIAL / THICKNESS	**#00 Sand (Seal) / 2 feet**
MATERIAL / THICKNESS	**#1 Sand (Backfill) / 134 feet**
TOTAL DEPTH OF BOREHOLE	**460 feet**
DIAMETER OF BOREHOLE	**8 inches**

Table 1

USACE

Sylvania Corning FUSRAP Site

Town of Hicksville, New York

Well Development Progress and Deviations Summary

Monitoring Well ID	Date	Minimum Volume (gallons)*	Total Development Water Purged (gallons)	Comments
MW-216-510	10/7/2014	372 (three well volumes; see comments)	115	Well does not produce significant volumes of water and not enough to develop drill water lost during drilling. Presume that drill water lost in area of well placement was into more transmissive areas. Will develop a total of 3 well volumes and stable parameters from the well. 10/16/14 - While 3 well volumes have been removed, turbidity remains elevated (>200 NTUs). 11/10/14 - Sparged well with nitrogen for approximately 4 hours in an attempt to draw fines from sand pack into the well. 11/11/14 - Checked well for sediment buildup (none present), pump well using Monsoon pump. 11/12/14 - No sediments present within the well. Becuase previous attempts have been unsuccessful to increase pumping capacity, no further development is planned.
	10/8/2014		65	
	10/15/2014		120	
	10/16/2014		120	
	10/17/2014		11	
	11/10/2014		75	
	11/11/2014		25	
MW-58-75	10/13/2014	1,100	600	Well development complete
	10/14/2014		500	
MW-218-95	10/13/2014	2,355	175	Well development complete
	10/14/2014		2,025	
	10/15/2014		230	
MW-215-400	10/15/2014	4,710	370	Well development complete
	10/16/2014		930	
	10/20/2014		2150	
	10/21/2014		1,260	
MW-217-490	10/22/2014	4,329	2750	Well development complete - additional pumping was required to get turbidity below 50 NTUs (5,100 gallons extracted).
	10/23/2014		2350	
MW-219-560	11/11/2014	4,080	1800	Well development complete
	11/12/2014		2300	
MW-59-75	11/13/14	13	250	Well development complete - additional pumping was required to get turbidity below 50 NTUs.
MW-220-325	12/15/14	2,699	1,825	Well development complete.
	12/16/14		950	
	TOTALS	**19,286**	**20,996**	

Notes:

*Minimum volume to be removed from well as specified in WP (3 well volumes plus 3 times drill water added during installation).

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 10/13/14

LOCATION SIB-01 / MW-58-75 in front of building 70 WELL NO. MW-58-75

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = ~~6.4~~ 10 gallons. ~~x3 = 10.6~~ 10
4.95 x 3 = 14.85

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 66.44
WELL DEPTH (TD) 76.4
COLOR brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 66.46 66.38
WELL DEPTH (TD) 75.38 75.38
COLOR clear
ODOR none
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE SS Monsoon pump, surge first well volume purged.

1.62
7.2
1.056

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
0900	0	0	6.30	~~720~~	15.5	>1000	
0905	4	0.8	6.08	910	15.8	102.2	
0910	8	1.6	6.25	950	15.6	41.4	
0915	12	2.4	6.24	980	15.7	120	
0920	16	3.2	6.28	980	15.7	21.7	
0925	20	4.0	6.31	970	15.6	127	
0930	24	4.8	6.42	980	15.7	25.1	
0935	28	5.7	6.30	980	15.8	9.2	
0940	32	6.5	6.37	990	15.9	5.66	

10/13/14

DEVELOPED BY: T. Dillon

DATE: 10/13/14

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1100	36		6.29	1090	17.1	>1000	Continue development
1110	44		6.42	1070	16.5	20.6	
1120	52		6.37	1070	16.3	5.69	1.3 gal/min
1150	91		6.29	1020	16.8	4.18	
1220	115		6.30	1010	17.3	19.7	Volume adjusted to tank level
1250	205		6.31	1000	17.2	6.11	
1320	250		6.30	960	16.0	7.05	
1350	285		6.30	970	17.1	6.61	
1420	315		6.30	970	17.1	46.0	
1450	350		6.24	960	16.9	6.19	
1520	385		6.31	950	16.9	4.08	
1550	410		6.12	910	16.5	2.91	
1620	450		6.16	920	16.2	1.95	
1650	490		6.15	920	16.3	3.18	
1720	530		6.14	900	16.3	4.59	
1750	575		6.15	910	16.1	4.17	
10/24/14							
930	575		5.45	1070	20.5	>1000	
1000	625		5.85	950	16.3	15.9	
1030	655		5.82	990	19.3	5.51	
1100	685		5.92	960	20.2	4.53	
1130	725		5.89	930	20.4	3.85	
1200	765		5.97	930	20.6	4.77	
1230	805		5.87	920	21.2	4.52	
1300	845		5.90	940	21.0	7.17	
1330	885		5.89	946	20.6	3.91	
1400	925		6.02	940	21.2	3.01	
1430	965		5.90	950	20.5	3.86	
1500	1005		5.91	920	20.1	2.69	
1530	1045		5.92	940	19.5	2.29	
1600	1085		5.91	920	19.0	2.32	
1630	1130		5.90	930	19.2	3.00	

DEVELOPED BY: T. Pillon

DATE: 10/13/14

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 11/13

LOCATION Hicksville, NY WELL NO. MW-59

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 64.62
WELL DEPTH (TD) 73.71
COLOR Brown
ODOR None
CLARITY Cloudy

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 64.62
WELL DEPTH (TD) 74.79
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Waterra pump with Check Valve

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
900	0		12.29	4.267	10.31	>1000	
900	8		11.87	1.185	14.37	>1000	
905	16		11.24	0.446	14.34	>1000	
910	25		11.01	0.321	14.55	>1000	
915	33		10.65	0.228	14.56	>1000	
920	41		10.29	0.185	14.63	787	
925	50		10.05	0.164	14.68	728	
930	~~50~~ 75		9.52	0.142	14.90	30	
940	88		9.24	0.131	14.92	22	
945	100		9.97	0.125	14.81	31	
							STOP Pump. → Reset depth
955	100		7.09	0.133	14.42	173	
1000	112		9.93	0.123	14.18	231	
1010	135		9.54	0.115	14.56	143	
1025	160		9.11	0.107	14.47	141	
1035	175		9.11	0.102	14.83	88.6	
1040	188		7.76	0.100	14.87	73.4	
1045	200		7.72	0.100	14.91	69.7	
1050	208		7.77	0.099	15.03	67.1	
1055	215		7.72	0.097	15.09	63.9	
1100	227		7.68	0.096	15.04	57.6	
1105	235		7.64	0.094	15.13	51.4	
1110	240		7.61	0.094	15.09	48.7	
1115	245		7.59	0.095	15.09	46.9	
1120	250		7.56	0.093	15.07	45.6	

DEVELOPED BY: [signature]

DATE: 11/13/14

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP — DATE 12-16-11

LOCATION Hicksville, NY — WELL NO. MW201-220

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.860	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 58.80
WELL DEPTH (TD) 220
COLOR Olive Grayish Greenish Brown
ODOR Mod
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 58.78
WELL DEPTH (TD) 220
COLOR Clear
ODOR None
CLARITY At Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

12-16-11

5768
5.33
2924
2924
744

80654

MW-61-220

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0755	12	12	9.18	0.416	14.24	999	4 gal/min
0815	80	92	8.19	0.286	13.15	217	60.04 DTW
0845	120	272	5.83	0.280	12.66	64.9	
0915	120	532	5.83	0.275	12.36	36.5	60.04 DTW
0945	120	450	5.83	0.276	12.33	27.6	
1015	120	670	5.87	0.271	12.75	35.1	
1045	120	690	5.83	0.277	12.76	32.8	
1115	120	810	5.76	0.273	12.60	33.4	
1146	120	930	5.77	0.274	13.05	39.9	
1210	10	940	5.80	0.275	12.87	36.3	
1156	10	950	5.75	0.274	12.40	35.2	
1209	10	960	5.73	0.273	12.77	33.5	58.78
			Complete @ 960gal				

960 gal in Tanks

DEVELOPED BY: JG

DATE: 12-16-11

12-16-11

WELL DEVELOPMENT RECORD

SITE Sylvania-Corning FUSRAP DATE 6/11 - 6/12/12 - 6/13/12

LOCATION Hicksville, NY WELL NO. MW 202-220

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.25
WELL DEPTH (TD) 220
COLOR milky → clear
ODOR none
CLARITY clear

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.20
WELL DEPTH (TD) 220
COLOR none
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE air lift w/ nitrogen

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1540	25		—	—	—	—	6/11/12 - 5 gpm
1545	50		6.12	182.5	16.2	14.4	
1600	125		6.11	176.0	14.9	7.79	
1700	425		6.34	171.3	14.6	3.36	
0735	425		—	—	—	—	6/12/12 - 5 gpm
0800	550		8.33	173.3	15.1	2.93	
0900	850		5.59	167.5	14.4	2.20	
1000	1150		5.96	169.1	14.6	2.45	
1015	1225		6.10	165.9	14.1	1.89	
1030	1300		6.19	165.6	14.5	2.34	
1045	1375		6.18	165.7	14.4	2.42	
1050	1400		6.10	165.5	14.9	6.06	
1055	1425		6.10	166.0	14.1	2.30	
1100	1450		6.10	166.3	14.2	3.58	
1105	1475		6.06	166.1	14.1	7.66	END DEVELOPMENT
1000	1550		5.90	171.5	14.5	2.05	6/13/12
1015	1625		5.96	170.5	14.0	1.93	
1030	1700		5.94	170.0	13.9	2.28	END DEVELOPMENT

DEVELOPED BY: Peter Hamont

DATE: 6/12/12
6/13/12

WELL DEVELOPMENT RECORD

SITE Sylvania-Corning FUSRAP DATE 6/11/12

LOCATION Hickeville, NY WELL NO. MW202-380

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.71
WELL DEPTH (TD) 380
COLOR none -> light brown
ODOR none
CLARITY clear - slightly cloudy

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 54.81
WELL DEPTH (TD) 380
COLOR none.
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE air lift w/ nitrogen and surging.

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm) uS	TEMP (°C) °F	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
1110	12.50		5.14	278.0	15.6	16.0	
1130	92.5		5.52	272.3	14.4	2.15	~4gpm
1230	332.5		6.17	266.1	14.6	4.6	surged -, 5gpm
1330	572.5		6.67	265.3	14.4	1.98	
1400	692.5		6.25	263.4	14.6	30.3	surged
1415	752.5		6.04	264.4	13.7	2.31	
1430	812.5		5.98	262.9	13.9	2.35	
1435	832.5		6.19	269.4	13.3	2.42	
1440	852		6.23	265.4	13.0	1.67	End development
1345	852		6.42	255.6	15.1	1.81	4/13/12
1400	1000		6.24	269.7	13.2	1.38	
1415	1075		6.27	268.9	13.1	2.64	
1430	1150		6.26	265.4	13.1	2.48	
1445	1225		6.30	269.1	12.9	2.13	End development

DEVELOPED BY: Peter Lamont DATE: 6/11/12

WELL DEVELOPMENT RECORD

SITE Sylvanica - Corning FUSRAP DATE 6/12 - 6/13/12

LOCATION Hicksville, NY WELL NO. MW 204 - 495

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.860	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.92
WELL DEPTH (TD) 495
COLOR milky white → tan
ODOR NONE
CLARITY cloudy

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) _____
WELL DEPTH (TD) _____
COLOR _____
ODOR _____
CLARITY _____

DESCRIPTION OF DEVELOPMENT TECHNIQUE Air lift w/nitrogen

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
1540	60		7.67	539.5	14.5	238	6/12/12 6 ppm
1600	180		8.12	283.8	13.5	20.1	
1700	540		7.36	141.6	14.1	13.2	
1715	630		—	—	—	—	stop development
0930	630		—	—	—	—	6/13/12
1030	990		6.14	117.6	12.8	4.71	
1130	1350		6.91	99.13	13.1	3.10	
1430	1710		6.61	91.79	12.6	2.80	
1530	2070		6.85	89.02	13.1	2.38	
1545	2140		6.78	90.57	12.5	3.56	
1600	2250		6.77	88.35	12.7	3.60	
1615	2340		6.76	87.40	12.7	2.31	
1630	2430		6.73	89.10	12.7	3.29	End development

DEVELOPED BY: Peter Lamont DATE: 6/12-6/13/12

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-15-11

LOCATION Hicksville, NY WELL NO. MW203-160

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.670	518.670×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) ~~57.76~~ 56.60
WELL DEPTH (TD) 160
COLOR Moderate orange brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 58.87
WELL DEPTH (TD) 160
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

12-15-11

MW-203-160

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0915	10	10	8.43	0.310	13.86	999	3.8 gal/min
0930	57	67	6.89	0.274	13.70	248	
1000	114	181	6.49	0.266	13.75	80.5	
1030	114	238	6.55	0.265	13.71	56.9	
1100	114	350	6.41	0.259	13.47	6.40	
1130			6.45	0.261	13.64	36.0	57.88 DTW
1200		575	6.48	0.260	13.51	36.1	
1230		689	6.45	0.260	13.92	48.4	
1300		803	6.40	0.257	14.16	35.8	
1330		947	6.47	0.253	13.68	27.9	
1400		1031	6.41	0.256	13.25	27.0	
1430		1145	6.40	0.254	13.31	27.1	58.87 DTW

Complete @ 1050 gal

@ 1000 ~~1050 gal~~

MW203-160

Min gal: 1000 gal

DEVELOPED BY: [signature]

DATE: 12-15-11

[signature] 12-15-11

WELL DEVELOPMENT RECORD

SITE Sylvania FOSRAP DATE 12-15-11

LOCATION Hicksville, NY WELL NO. MW203-360

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.670	518.670×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) ~~56.68~~ 57.76
WELL DEPTH (TD) 360
COLOR Moderate Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 57.75
WELL DEPTH (TD) 360
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

12-15-11

MW-203-360

7
390
475
15

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0845	10	10	12.09	2.07	13.03	999	5 gal/min
0900	75	85	9.52	0.333	12.62	534	
0930	150	225	7.25	0.291	12.52	242	
1000	150	375	6.69	0.290	12.91	50.9	
1030	150	525	6.84	0.287	12.25	49.1	
800 1100	150	675	6.45	0.180	12.21	43.6	
1130	—	—	6.45	0.288	12.55	49.7	61.59 DTW
1200	300	1200	6.45	0.289	12.68	49.8	
1230	150	1350	6.41	0.291	12.75	50.5	
1300	150	1410	6.49	0.292	12.70	25.4	
1330	150	1560	6.57	0.299	12.71	32.5	
1975 1400	150	1710	6.40	0.299	12.74	29.3	
1415 1425	75	2050	6.49	0.299	12.98	37.4	
1420 1410	25	2075	6.52	0.300	12.76	40.7	
1425 1425	25	2100	6.43	0.300	12.70	36.7	57.75 DTW
			Complete @ 2100 gal				

MW 203-360

Min Gal: 2100 gal

DEVELOPED BY: [signature]

DATE: 12-15-11

[signature]
12-15-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-15-11

LOCATION Hicksville, NY WELL NO. MW203-450

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.670	518.670×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 57.41
WELL DEPTH (TD) 450
COLOR Moderate Yellowish Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 57.44
WELL DEPTH (TD) 450
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

12-15-11

MW-203-450

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0825	0	0	11.51	0.670	13.45	47.2	
0830	25	25	11.52	0.445	12.81	999	5 gal/min
0840	150	175	10.[illegible]	0.226	12.38	472	
0950	150	325	7.24	0.183	12.40	783	
1000	150	475	6.61	0.186	12.23	68.2	
1030	150	625	6.81	0.185	12.13	63.1	
850 1059	150	~~775~~	6.40	0.184	12.36	35.8	
1130	150	925	6.33	0.182	12.24	44.4	61.47 gal/min
1200	150	1075	6.37	0.182	12.78	40.1	
1230	150	1225	6.31	0.183	12.72	42.4	
1300	150	1375	6.29	0.182	12.75	34.4	
1330	150	1525	6.43	0.185	12.45	29.9	
1400	150	1675	6.33	0.184	12.47	29.3	
1975 1430	150	~~1825~~	6.35	0.183	12.50	27.2	
1500	150	2100	6.35	0.175	12.32	25.1	
1530	100	2200	6.27	0.176	12.30	38	
1535	↓	2235	6.30	0.176	12.25	39.4	
1540		2270	6.30	0.177	12.26	39.9	
1545		2300	6.32	0.176	12.25	32.8	
1550			Complete @ 2300 gal				

MW203-450

Mixed: 2,300 gal

DEVELOPED BY: JG

DATE: 12-15-11

12-15-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-19-11

LOCATION Hicksville WELL NO. MW2004-320

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2 (0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 58.24
WELL DEPTH (TD) 320
COLOR Olive grayish brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 58.31
WELL DEPTH (TD) 320
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

12-19-11

MW-204-320

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0845	50	50	9.46	0.702	13.47	999	
0915	150	200	8.52	0.587	11.35	441	
0945	150	350	9.55	0.635	12.54	333	
1015	150	500	6.61	0.672	12.22	166	
1045	150	650	6.23	0.743	11.73	38.0	
1115	150	800	6.62	0.742	12.21	42.9	
1145	150	950	6.29	0.772	12.55	47.0	
1215	150	1100	6.28	0.778	12.59	36.1	
1220	25	1125	6.21	0.776	12.88	26.4	
1225	25	1150	6.20	0.777	12.62	23.1	
1230	25	1175	6.20	0.778	12.64	29.3	
1235	25	1200	6.16	0.776	12.65	31.0	58.31
			Complete @ 1200 gal				

DEVELOPED BY: [signature]

DATE: [signature] 12-19-11

[signature]
12-19-11

MW-204-470

WELL DEVELOPMENT RECORD

SITE _____ DATE _____

LOCATION _____ WELL NO. _____

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 58.50
WELL DEPTH (TD) 470
COLOR Grayish Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 58.64
WELL DEPTH (TD) 470
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

[signature] 12-19-[illegible]

MW-24-470

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0945	10	10	11.34	0.099	12.49	999	
1000	150	160	6.74	0.157	11.29	234	
1015	150	310	6.36	0.153	12.12	283	
1115	150	460	6.76	0.119	12.01	209	
1145	150	610	6.33	0.123	12.07	134	
1215	150	760	6.38	0.123	12.16	135	
1245	150	910	6.29	0.120	12.43	113	
1315	150	1060	6.44	0.110	11.84	18.2	
1345	150	1210	6.44	0.111	12.05	14.6	
1415	150	1360	6.62	0.107	11.85	16.5	
1445	150	1510	6.58	0.110	11.90	22.1	
1450	25	1525	6.64	0.109	12.09	18.2	
1455	25	1550	6.66	0.103	12.08	24.6	
1500	25	1575	6.60	0.103	12.12	19.1	
1505	25	1600	6.60	0.108	12.05	17.9	
Complete @ 1600 gal, Removed							

1600 gal

DEVELOPED BY: JG

DATE: 12-14-11

12-14-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-8-11

LOCATION Hicksville, NY WELL NO. MW205-285

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 60.77
WELL DEPTH (TD) 290.44
COLOR ~~Orange~~ 10YR Moderate yellowish Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 201.63
WELL DEPTH (TD) 285
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

12-12-11

MW-205-285

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1400	0	0	8.74	0.176	13.61	804	181.22 DTW; 3gal/min
1430	60	60	9.85	0.444	11.21	391	184.92 DTW
1500	~~60~~ 120	~~120~~ 120	7.52	0.790	11.42	199	183.46
1530	48	168	7.16	1.15	11.42	159	
1600	48	216	7.30	1.37	11.33	53.4	
1630	48	264	6.58	1.45	11.03	50.1	
1700	48	312	6.59	1.52	11.39	24.5	193.67 DTW

gal=2700

MW205-285

Main Removal! 1000gal

DEVELOPED BY: JG DATE: 12-8-11

12-8-11

MW-205-285

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0900	50		9.60	1.62	14.93	53.2	60.87 DTW; 2 gal/min
0930	60	60	6.63	1.60	11.53	31.1	
1000	60	120	6.36	1.60	11.68	35.3	
1030	60	180	6.32	1.59	11.90	22.0	
1100	60	240	6.48	1.65	12.88	16.9	1.8 gal/min
1130	50	290	6.45	1.59	12.53	28.9	
1200	50	340	6.50	1.69	13.81	27.2	
1230	50	400	7.10	1.72	12.56	21.5	
1300	50	450	7.09	1.72	12.70	26.7	
12/12/2011 → 0800	15	465	11.02	1.72	13.31	58.5	2 gal/min
0830	50	515	9.43	1.70	11.83	24.1	DTW 188.63 1.8 gal/min
0900	54	569	7.23	1.74	11.04	23.4	
(750) 0930	54	573	7.03	1.75	11.03	25.2	
250 gal 1000	54	627	7.04	1.75	11.33	20.2	
1005	9	709	7.04	1.75	11.89	30.1	
1010	9	718	7.06	1.75	11.88	28.6	
gal 730 1015	9	730	7.05	1.74	12.01	19.2	
		Complete @ 1000 gal removed					

MW205-285:

Min Removal: 1000 gal (730 gal remains)

DEVELOPED BY: [signature]

DATE: 12/9/11

[signature] 12-12-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-08-11

LOCATION Hicksville, NY WELL NO. MW205-470

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 57.86 (No stickup yet)
WELL DEPTH (TD) 470
COLOR Moderate Orange Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 60.87
WELL DEPTH (TD) _____
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

MW-205-470

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
1405	0	0	10.97	0.350	12.36	999	
1435	150	150	9.02	0.195	11.19	172	
1505	150	300	7.55	0.227	11.17	119	
1535	150	450	7.33	0.187	11.07	51.7	
1605	150	600	7.37	0.255	10.97	35.7	
1635	150		7.08	0.250	11.18	38.7	
1705	150	830	7.09	0.269	11.65	20.5	

830 gal.

MW205-470
Min Removal: 1600 gal

DEVELOPED BY: JG

DATE: 12-8-9

JG
12-8-9

MW-205-470

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
0900	50		9.24	0.264	12.92	50.2	
0930	150	200	6.89	0.272	11.79	46.4	
1000	150	350	6.80	0.226	11.76	56.1	
1030	150	400	7.01	0.228	11.80	29.2	
1100	150	550	7.11	0.241	12.40	25.0	5gal/min
1130	150	700	7.18	0.259	12.68	45.4	
1135	25	725	7.17	0.244	12.51	36.6	
1140	25	750	7.17	0.242	12.32	35.3	
1145	25	770	7.15	0.241	12.39	36.1	
			Complete		1600gal Removed		

MW 205-470

Min Removal: 1600gal (770 gallons)

DEVELOPED BY: JG

DATE: 12-9-11

12-9-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-07-11

LOCATION Hicksville, NY WELL NO. MW206-320

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 60.32
WELL DEPTH (TD) 320
COLOR Moderate Yellowish Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER 12-08-11

WATER LEVEL (TOIC) 62.00
WELL DEPTH (TD) (OBS) 320
COLOR clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE N. Hoyer 1.84

12-8-11

MW-206-320

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1320	10	10	8.71	0.223	13.90	981	60.32 5 gal/min
1340	140	150	6.60	0.480	12.77	197	
1410	150	300	6.68	0.478	13.89	79.2	1430 400gal/switched to 2K Truck
1440	150	450	6.55	0.476	12.66	67.6	1440 pump into 500gal trailer
1510	150	600	6.33	0.553	13.78	42.5	
1540	150	750	6.23	0.604	13.24	44.1	
1610	150	900	6.24	0.649	13.13	41.6	1620 moved to 2K Tanker (950 gal)
1640	150	1050	6.16	0.632	13.46	51.9	
1150 1700	100	1050	6.14	0.658	13.08	49.7	

Min Removal: 2350

MW206-320

DEVELOPED BY: tg

DATE: 12-07-11

[signature] 1207-11

MW-206-320

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0910	0	1150	9.26	0.821	11.29	53.7	61.5G DTW; 5gal/min
0940	150	1300	6.50	0.678	12.73	23.0	
1010	150	1450	6.16	0.688	11.58	39.4	
1040	150	1600	6.14	0.670	12.32	32.4	
1110	150	1750	6.16	0.642	11.89	37.3	
1140	150	1900	5.88	0.639	12.26	32.8	
1210	150	2050	5.87	0.640	12.35	20.5	
1240	150	2200	5.87	0.646	11.89	16.4	
1245	25	2225	5.77	0.634	11.86	23.0	
1250	25	2250	5.76	0.644	11.54	17.9	
1255	25	2275	5.77	0.644	11.25	21.5	
1300	25	2300	5.78	0.640	11.42	24.1	
1305	25	2325	5.75	0.641	11.68	28.6	
1310	25	2350	5.78	0.642	11.52	18.3	62.00 DTW, 15 gal/min
		Complete @ 2350 gal					

MW206-320
Min Removal: 2350 (1200 remaining)

DEVELOPED BY: [signature]

DATE: 12-8-11

[signature]
12-8-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-07-11

LOCATION Hanksville, NY WELL NO. MW 206-4-70

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.560	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 61.47
WELL DEPTH (TD) 470
COLOR ~~Orange~~ Yellowish Orange
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER @ 12-8-11

WATER LEVEL (TOIC) 60.92
WELL DEPTH (TD) 470
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

12-8-11

MW-206-470

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1245	10	10	11.61	0.955	14.62	999	5 gal/min @ 47
1315	140	150	8.32	1.50	12.94	113.0	69.43 DTW
1345	150	300	6.93	1.55	12.90	112	
1415	150	450	6.78	1.53	12.94	97.5	5 gal/min
1445	150	600	6.55	1.62	12.98	54.9	
1515	150	750	6.52	1.59	13.06	68.5	
1545	150	900	6.45	1.64	12.61	103	
1615	150	1050	6.44	1.65	12.53	50.4	
1645	150	1200	6.38	1.66	12.53	45.5	
1700	50	1250	6.39	1.58	12.53	10.8	
					~~12.57~~		

1250

Min Removal: 1700 gal

DEVELOPED BY: JG

DATE: 12-07-11

12-8-11

D

MW-206-470

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
							60.50
0915	0	1250	8.82	1.72	11.84	27.9	~~60.50~~ DTW 5.5 gal/min
0940	150	1400	6.53	1.70	11.40	30.5	
1005	150	1550	6.48	1.73	11.41	30.2	
1010	30	1580	6.30	1.68	11.46	31.6	
1015	30	1610	6.36	1.72	11.65	29.9	
1020	30	1640	6.32	1.74	11.66	29.9	
1025	30	1670	6.30	1.72	11.66	29.5	
1030	30	1700	6.30	1.74	11.65	29.7	60.92 DTW
			Complete @ 1700 gal/removed				

MW 206-470

Min Removal: 1700 (450 gal remain)

DEVELOPED BY: JG DATE: 12-8-11

12-8-11

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 5-30-12

LOCATION Hicksville, NY WELL NO. MW-207-170

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.760	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.07
WELL DEPTH (TD) 170'.03
COLOR lt. tan
ODOR none
CLARITY cloudy / fines

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 86.40 end purging / recharge 2/13 was 55.30
WELL DEPTH (TD) 170'.03
COLOR clear
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

MW-207-170

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
5/31/12							
0800	0	0	8.35	134.6	16.9	271	1.5 gal/min, DTW=89.50.
0820	30	30	7.94	146.3	15.5	345	was 5 gpm initially, turned
0840	30	60	7.17	146.8	15.1	76.4	down to 1.5 gpm to recharge.
0940	105	165	6.81	164.1	15.4	25.9	1.75 gpm / DTW = 95.70
1040	105	270	6.72	172.9	16.0	4.46	
1140	105	375	6.42	178.4	16.0	2.81	
1240	105	480	6.27	183.1	16.4	1.82	
1340	105	585	5.84	184.5	17.9	0.98	
1440	105	690	5.75	186.8	16.6	1.49	
stopped purging to empty truck → 1510	~~53~~	~~743~~					
1550	— start to purge again						2 gpm
1555	10	753	6.16	187.0	16.8	38.9	
1655	120	873	5.96	188.0	16.0	2.47	2 gpm still
1755	120	993	5.76	188.3	15.5	1.62	stopped purging for today
6/1/12							
0835	0	993	7.91	194.9	16.1	49.0	2 gpm
0935	120	1,113	6.42	189.2	15.6	2.47	
1035	120	1,233	5.86	189.7	15.9	2.07	
1055	40	1,273	5.57	188.9	15.4	1.75	
1115	40	1,313	5.47	190.0	15.8	3.12	
1135	40	1,353	5.58	189.3	15.5	1.76	
1145	20	1,373	5.38	189.9	15.4	1.51	DTW = 86.40

MW-207-170
Min Removal: 1,367 gal

Final DTW = 86.40 with purging
Recharged Final DTW = 55.30 @ 1213 after purging + pump removed.

DEVELOPED BY: [signature]

DATE: 6/1/12

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 5-30-12

LOCATION Hicksville, NY WELL NO. MW-207-250

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.63
WELL DEPTH (TD) ~~250'(MW)~~ 249.30
COLOR lt. brown
ODOR None
CLARITY ~~clear to~~ cloudy (MW)

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.65 (after pump removed)
WELL DEPTH (TD) ~~250(MW)~~ 249.30
COLOR Clear
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

MW-207-350

Int. Well

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm) MS	TEMP (°C)/F)	TURB. (NTU)	COMMENTS
1120	0	0	6.62	165.8	16.3	198	5 gal/Min, DTW = 55.65
1140	100	100	6.31	287.7	14.4	4.09	DTW = 56.20
1200	100	200	5.90	288.2	14.5	5.51	
1220	100	300	5.89	289.6	14.7	1.32	
1300	300	600	6.07	288.5	15.3	1.33	
1340	200	800	6.01	286.4	14.7	2.09	
1400	100	900	5.86	286.3	14.1	1.53	
1410	50	950	5.81	286.1	14.7	1.03	
~~1420~~	~~50~~	~~1000~~	(at 1415)				Had to stop purging to empty the tank
1505	start to purge again						DTW = ~~67.88~~ 56.15 (MW) purging 5 gpm
1515	50	1,000	6.18	285.4	16.3	1.54	
1525	50	1050	5.99	285.8	15.8	4.88	
1535	50	1,100	5.97	285.1	15.9	1.34	
1537	stopped purging						

MW-207-250

Min Removal: 1,068

Final DTW = 55.65 after pump removed.

DEVELOPED BY: [signature]

DATE: 5-30-12

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 5-30-12

LOCATION Hicksville, NY WELL NO. MW-207-320

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9080	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.72
WELL DEPTH (TD) 320'
COLOR Tan
ODOR none
CLARITY cloudy

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.79 after pumpout, 56.15 final reading
WELL DEPTH (TD) 320'
COLOR clear
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen air lift

MW-207-320

Deep Well

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm) µS	TEMP (°C/°F) °C	TURB. (NTU)	COMMENTS
1030	0	0	7.63	287.6	17.0	3.88	2.5 gal/Min, DTW=55.80
1035	increased purge rate					→	5.0 gal/Min, DTW=69.05
1055	100	100	6.96	254.4	16.0	21.1	
1115	100	200	6.62	260.6	16.8	21.4	
1135	100	300	6.59	251.6	17.1	20.91	DTW=69.75
1155	100	400	6.13	250.1	15.1	20.8	
1215	100	500	5.97	247.3	14.0	7.80	
1315	300	800	6.23	250.2	16.2	3.10	
1355	200	1000	6.11	250.4	15.1	3.85	
1415	100	1100	5.86	248.4	13.8	3.98	
~~1435~~	~~100~~	~~1200~~	(at 1415)				
1505	Start to purge again						DTW=67.86 purging
1525	100	1,200	5.87	246.4	13.8	5.69	5gpm
1535	50	1250	5.85	246.9	13.7	3.62	
1545	50	1300	5.87	247.3	14.1	2.50	
~~1605~~ 1600	75	1,375	5.94	248.4	14.2	6.35	DTW=56.15=after shut down purging
1605	shut off purging						

Had to stop purging to empty the tank

MW-207-320
Min Removal: 1,361 gal

Final DTW=55.79
after pump was removed

DEVELOPED BY: [signature]

DATE: 5/30/12

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 01-10-2012

LOCATION Hicksville, NY WELL NO. MW205-350

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2 (0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.670	518.670×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.860	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 56.31
WELL DEPTH (TD) (350)
COLOR ~~Opaque~~ 1-11-12 Moderate orange Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 56.41 01-11-12
WELL DEPTH (TD) 350
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

Jonathan Gray 1-11-12

MW-208-350

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0800	start	pd	no pump				
0810	52	52	5.80	1.49	11.13	47	
0830	100	150	6.29	1.47	12.90	31.3	
0900	150	300	6.15	1.49	13.22	21.5	
0930	200	500	6.10	1.52	12.75	26.6	
1000	150	650	6.00	1.53	12.98	26.8	
1030	150	800	5.91	1.56	13.41	19.6	
1100	150	950	5.91	1.58	13.57	17.0	
1130	150	1100	5.88	1.62	14.01	18.1	
1200	125	1225	5.86	1.63	14.09	22.8	
1205	25	1250	5.78	1.61	13.91	23.6	
1210	25	1275	5.72	1.60	13.80	22.1	
1215	25	1300	5.70	1.60	13.75	20.7	
1220	25	1325	5.69	1.60	13.64	20.4	
1225	25	1350	5.68	1.60	13.51	22.5	
1230	25	1375	5.68	1.60	13.52	29.2	
1235	25	1400	5.68	1.60	13.64	25.4	
1240	25	1425	5.68	1.60	13.68	21.0	
1245	25	1450	5.69	1.60	13.51	22.6	
1250	25	1475	5.68	1.60	13.46	24.3	
1255	25	1500	5.67	1.60	13.53	21.7	
Complete 1505 gal Rec'vd							

DEVELOPED BY: [signature] DATE: 9-12-12

[signature]
1-11-12

MW-208-540

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 01-10-2012

LOCATION Hicksville, NY WELL NO. MW208-540

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.760	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 57.25
WELL DEPTH (TD) 540
COLOR Moderate orange Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 59.30
WELL DEPTH (TD) 540
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

1-10-12

MW-208-540

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	0.2 pH	±3% COND. (umhos/cm)	1° TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1140	60	60	12.75	0.743	15.92	999	5.9 gpl/min 59.70 DTW
1200	150	150	11.55	0.436	12.37	680	
1230	150	300	11.12	0.582	13.32	271	
1300	150	450	10.74	0.457	12.28	259	
1330	150	600	10.41	0.397	12.29	217	
1400	200	800	10.21	0.382	12.18	146	
1430	250	1050	9.75	0.360	12.26	128	59.79 DTW
1500	200	1250	9.66	0.359	12.00	112	
1530	150	1400	9.42	0.353	11.82	99	
1600	200	1600	9.14	0.346	11.84	106	
1620	150	1750	8.96	0.347	11.81	87.5	
1625	25	1775	9.68	0.378	12.09	105	
1630	25	1800	9.25	0.361	12.15	75	
1635	25	1825	9.52	0.364	12.12	43	
1640	25	1850	8.96	0.347	12.11	47	
1645	25	1875	8.87	0.345	12.14	41	
1650	25	1900	8.75	0.346	12.18	35.8	
1655	25	1925	8.80	0.344	12.20	31.0	
1700	25	1950	8.88	0.349	12.22	33	
1705	25	1975	8.98	0.350	12.24	34	
1708	15	1990	8.77	0.345	12.26	41	
	Completed 1990 gal removed						

DEVELOPED BY: [signature]

DATE: 1/10/12

[signature]
1-10-12

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP — DATE 12-6-11

LOCATION Hicksville, NY — WELL NO. MW209-380

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.860	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 37.11
WELL DEPTH (TD) 380
COLOR Moderate Yellowish Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 36.72
WELL DEPTH (TD) 380
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

12-7-11

MW-209-380

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1140	15	15	11.64	0.982	12.89	999	7 gal/min
1200	35	150	8.93	0.477	12.65	167	5gal/min
1230	150	300	6.63	0.446	12.37	110	50.18 DTW
1300	150	450	6.11	0.456	12.47	54.5	
1330	150	600	6.20	0.437	12.47	47.3	
1400	150	750	6.13	0.439	12.35	49.1	
950 1430	150	950	6.11	0.431	12.35	45.1	
1500	150	1100	6.16	0.429	12.17	45.2	
1530	150	1350	6.04	0.430	12.16	26.9	
1600	150	1500	6.11	0.434	12.17	38.2	5gal/min
~~1650~~ 1650gal 1630	150	~~1650~~ 1	6.17	0.427	12.36	29.5	

Min Removed: 2100 gal

MW209-380

DEVELOPED BY: [signature]

DATE: 12-6-11

[signature] 12-6-11

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MW - 209 - 380

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0850	25	1675	10.02	0.502	13.89	999	
0930	~~100~~	~~1825~~ 1775	8.58	0.455	12.73	70.9	
1010	150	1825	6.01	0.452	12.60	43.2	
1030	175	2000	5.91	0.448	12.60	196	
1035	25	2025	5.97	0.449	12.42	33.3	
2050 1040	25	~~2050~~	5.97	0.445	12.55	31.0	
2015 1045	25	~~2075~~	5.98	0.447	12.50	43.7	
1050	25	2100	5.98	0.447	12.25	39.2	
1055			Complete @ 2100 gal				37.00 DTW

DEVELOPED BY: FJ

DATE: 12-07-11

12-7-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP — DATE 12-6-11

LOCATION Hicksville, NY — WELL NO. MW209-530

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-2}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.760	5.5850	518.670	518.670×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 37.91
WELL DEPTH (TD) 530
COLOR Moderate Orange Brown
ODOR Slight Sulfur odor
CLARITY opaque

FINAL DEVELOPMENT WATER 12-6-11

WATER LEVEL (TOIC) 51.33
WELL DEPTH (TD) 536
COLOR Clear
ODOR None
CLARITY ~~Clear~~ (X) Milky/ translucent

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

12-6-11

MW-209-530

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1100	5	5	11.38	0.723	13.88	999	6 gal/min
1140	50	55	9.32	0.115	12.86	329.0	5 gal/min
1200	120	115	8.54	0.114	12.49	240	
1230	150	265	6.95	0.095	12.75	122	51.80 DTW
1300	150	415	6.36	0.105	12.40	233	
1330	150	565	6.39	0.105	12.37	236	
1400	150	715	6.33	0.109	12.37	372	
1430	150	~~885~~	6.37	0.094	12.37	335	1065 gal
1440	50	1106	6.38	0.083	12.39	333	
1450	50	1156	6.40	0.090	12.31	339	
1500	50	1200	6.53	0.108	12.39	265	
1510	50	1250	6.27	0.105	12.29	184	
1520	50	1300	6.37	0.082	12.32	127	
1530	50	1350	6.29	0.093	12.53	~~334~~ 141	1.6
1540	50	1400	6.35	0.080	12.34	212	
1550	50	1450	6.36	0.079	12.33	201	
1600	50	1600	6.34	0.077	12.41	208	
1610	50	1650	6.29	0.074	12.35	228	5 gal/min
1620	50	1700	6.35	0.078	12.41	209	
1630	50	~~1750~~	6.30	0.077	12.41	199	1775 gal removed

JG ~~1700~~

Min Removal: 1200 gal
MW 209-530

DEVELOPED BY: JG DATE: 12-6-11

JG 12-6-11

MW-210-280

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-05-11

LOCATION Hicksville, NY WELL NO. MW210-280

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.790	5.5850	518.670	518.670×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 44.03
WELL DEPTH (TD) 280
COLOR Yellowish Brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 44.10
WELL DEPTH (TD) 280
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

12-5-11

MW-210-280

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1055	0	0	11.43	0.816	17.20	67.6	
1056	20	20	8.69	0.541	15.64	999	5gal/min
1125	150	150	8.93	0.427	14.09	230	
1210	150	300	7.88	0.424	14.05	132.1	
1245	150	450	7.38	0.431	13.95	73.1	
1305	150	600	7.26	0.422	14.11	42.4	
1340	150	750	7.35	0.419	14.18	39.2	
1415	150	900	6.27	0.416	14.02	59.0	START DOWN 1485
1507	150	1050	6.27	0.412	13.80	28.1	RESUME DEVELOPMENT 1495
1537	100	1150	7.10	0.412	13.78	24.8	
1635	150	1300	5.95	0.414	13.80	24.0	
1655	100	1400	5.87	0.415	13.85	49.9	
1705	50	1450	5.89	0.412	13.96	46.5	
1715	50	1500	5.86	0.414	13.93	39.2	
1800	250	1750	5.83	0.415	13.96	31.1	
1810	100	1650	5.72	0.419	14.07	38.0	
1820	50	1700	5.76	0.419	14.14	36.9	
1830	50	1750	5.74	0.420	14.13	36.5	
			Complete 2000 gal				

DEVELOPED BY: J Gey DATE: 12-5-11

J Gey 12-5-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP — DATE 2011-12-01

LOCATION Hicksville, NY — WELL NO. MW210-380

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 43.57
WELL DEPTH (TD) 380
COLOR Moderate orange brown
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 49.31
WELL DEPTH (TD) 380
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

12-2-11

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MW-210-380

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0858	10	10	11.37	0.502	17.45	9.5	6 gal/min
0904	5	15	11.71	0.694	13.22	999	44.73 dtw
0948	250	250	9.12	0.630	13.35	196	44.53
1032	250	500	6.31	0.637	12.66	56.6	5.8 gal/min
1118	250	750	6.47	0.634	14.15	16.6	
1204	250	1000	6.04	0.633	13.92	18.6	
1250	250	1250	6.02	0.632	15.87	41.3	5 gal/min
1400			6.06	0.644	15.08	35.1	
1430	250	1750	5.95	0.630	14.84	29.8	
1520	250	2000	5.92	0.635	15.66	21.0	
1610	250	2000	5.85	0.624	11.93	15.9	2000 gal truck fill
1700	250	2250	5.78	0.623	12.37	17.9	Actual volume Noted in poly tank
1730	150	2400	5.87	0.624	12.64	34.6	
			End of Day				

DEVELOPED BY: [signature]

DATE: 12-1-11

[signature]
12-2-11

MW-210-380

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0845	15	2415	7.59	0.638	14.83	23.3	6gal/min; 43.85 DTW
0927	250	2650	6.38	0.639	14.28	18.7	
1009	250	2900	6.06	0.637	14.36	26.4	
1051	250	3150	6.06	0.636	13.96	18.8	6.8gal/min;
1133	250	3400	6.07	0.635	13.72	12.6	
1209	250	3650	6.04	0.630	13.77	16.2	
1245	250	3900	6.04	0.636	13.84	35.0	
1321	250	4150	6.03	0.634	13.86	6.4	
1357	250	4400	6.05	0.635	14.12	10.8	switched N tanks; 5.5gal/min
1442	250	4650	5.96	0.640	13.96	20.3	
1530	250	4900	5.90	0.639	13.71	18.7	(4700 gal removed)
1540	500	(4750)	5.87	0.637	13.40	15.5	
1550	150	(4600)	5.86	0.634	13.30	18.5	
1600	120	(4850)	5.88	0.640	13.49	23.1	
1610	50	(4900)	5.89	0.641	13.09	22.8	
1620	50	(4950)	5.90	0.640	13.20	10.7	
1630	50	(5000)	5.89	0.639	1332	16.2	
			complete				

DEVELOPED BY: [signature]

DATE: 12-2-11

[signature]
12-2-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-05-11

LOCATION Hicksville, NY WELL NO. MW210-470

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 44.17
WELL DEPTH (TD) 470
COLOR Moderate Yellowish Orange
ODOR None
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 102.14
WELL DEPTH (TD) 470 (SC 12/6)
COLOR ~~Moderate Yellowish Orange~~ Clear
ODOR ~~None~~ (SC-12/5) None
CLARITY ~~Opaque~~ (SC-12/6) Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift;

MW-210-470

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0950	0	0	11.47	0.674	16.67	19.9	
0952	15	15	12.45	4.39	14.59	999	66.81; 5 gal/min
1035	225	225	11.36	0.561	13.67	170	48.34 DTW
1120	225	225	10.94	0.397	13.08	195	
11205	225	675	10.70	0.345	13.32	106.0	
1250	225	900	9.20	0.315	13.36	87.9	
1335	225	1250	9.15	0.297	13.53	58.2	
1410	225	1475	6.84	0.279	13.47	37.3	SHUT DOWN 1455
1505	225	1700	6.67	0.265	12.88	52.9	Resume Development 1945, 5gal/min
1515	50	1750	6.19	0.278	12.97	34.1	1150gal
1605	50	1250	7.98	0.276	12.74	41.6	
1635	50	1300	6.06	0.281	12.84	40.0	
1655	100	1350	6.02	0.283	13.01	39.5	
1705	50	1400	6.80	0.279	13.12	34.4	SC 1450
1715	50	1450	6.76	0.288	13.13	38.4	1400
1725	50	1500	6.79	0.279	13.28	46.4	1500
			Complete	1500gal			

DEVELOPED BY: J. Garz

DATE: 12-05-2011

12-5-11

WELL DEVELOPMENT RECORD

SITE Hicksville, NY DATE 12-06-11

LOCATION Sylvania FUSRAP WELL NO. MW211-190

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 49.32
WELL DEPTH (TD) 190
COLOR
ODOR
CLARITY

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC)
WELL DEPTH (TD)
COLOR
ODOR
CLARITY

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

DTW = 49.23

MW-211-190

MW 211-250
FINAL DTW = 49.50
12/14/2011

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0900	0	0	8.51	0.456	13.98	999	5 gallons/min
0930	150	150	9.92	0.452	11.93	84.6	
1000	150	300	8.93	0.423	13.02	34.1	
1030	150	450	7.82	0.419	13.06	21.8	
1100	150	500	7.85	0.421	13.04	20.0	
1130	150	650	7.85	0.417	13.05	38.6	
1200	150	800	7.83	0.414	13.44	20.5	
1230	150	950	7.85	0.416	13.04	23.0	
1240	10	960	7.21	0.411	13.64	20.5	
1245	10	970	7.17	0.410	13.70	19.5	
1250	10	980	7.13	0.411	13.77	23.2	
1300	10	990	7.12	0.413	13.33	24.6	
1310	10	1000	7.19	0.413	13.25	27.1	
1320	10	1010	7.22	0.411	13.36	25.0	
1330	10	1020					
1340	10	1030					
1350	10	1040					
1400	10	1050					

Min Removal: 1,050
MW211-190

Post Development DTW = 49.22

DEVELOPED BY: [signature] DATE: 12/14/2011

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-6-11

LOCATION Hicksville, NY WELL NO. MW211-250

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 49.51
WELL DEPTH (TD) 250
COLOR Dark Brown (Greyish Brown)
ODOR Hydrogen Sulfide
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) _____
WELL DEPTH (TD) _____
COLOR _____
ODOR _____
CLARITY _____

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

MW-211-250

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0535	10	0	8.00	0.595	13.45	318	5 gal /min
0905	150	160	10.04	0.710	11.81	51.7	
0935	150	320	9.20	0.668	11.81	43.6	
1005	150	470	8.54	0.668	11.14	27.1	
1035	150	620	8.30	0.669	11.18	29.2	
1105	150	770	8.01	0.662	11.27	31.9	
1135	150	920	7.97	0.666	11.73	25.5	
1205	150	1070	7.91	0.670	12.63	24.1	— A
1235	150	1220	7.89	0.671	12.74	25.6	
1305							OUT OF NITROGEN
1315	150	1370	1030	0.476	11.73	45.0	RE-START Pump w/ Nitrogen
1345	150	1520	7.87	0.669	12.43	24.0	
1355							START Down Pumping
1425	150	1660	7.71	0.661	12.30	20.2	RESUME Pumping @ 1400
1455	150	1810	7.61	0.666	12.41	19.1	
1525	150	1960	7.68	0.665	12.47	18.9	
1555	150	2010	7.55	0.670	12.40	18.1	
1625	150	2160	7.54	0.675	12.39	17.6	
1630	10	2170	7.59	0.676	12.41	18.6	
1635	10	2180	7.55	0.674	12.49	12.58	
1640	10	2190	7.51	0.677	12.43	12.67	
1645	10	2200	7.21	0.675	12.40	11.01	

Min Removed: 2200 gal

MW 211-250: B6

DEVELOPED BY: DATE:

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-6-11

LOCATION Hicksville, NY WELL NO. MW211-455

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 50.23
WELL DEPTH (TD) 455
COLOR light Greenish Brown
ODOR Sweet odor
CLARITY Opaque (Drilling Mud)

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) _____
WELL DEPTH (TD) _____
COLOR _____
ODOR _____
CLARITY _____

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

MW-211-450

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0340	15	15	12.58	4.55	12.02	999	5 gal/min
0910	150	165	11.79	0.965	11.73	113.0	
0940	150	315	11.34	0.739	11.58	112.0	
1010	150	465	11.60	0.750	11.90	78.9	
1040	150	615	11.25	0.652	11.50	62.7	
1110	150	765	11.64	0.578	11.62	59.0	
1140	150	925	11.01	0.550	11.81	92.5	
1210	105	1030	10.36	0.503	12.16	65.3	- 5 gallons / 95 sec.
1240	105	1135	10.28	0.498	12.10	62.3	
1310	105	1240	10.32	0.482	10.99	61.4	
1335	105	1345	10.20	0.474	11.82	46.2	
1385							SHUT DOWN Pumping
1405	105	1450	8.99	0.478	11.87	79.1	Resume Pumping @ 1400
1435	105	1555	8.81	0.465	12.03	31.8	
1505	105	1660	7.77	0.460	12.10	31.7	
1535	105	1765	8.20	0.454	10.85	25.2	
1605	105	1860	9.88	0.470	12.11	24.6	
1635	105	1965	8.31	0.469	11.14	23.5	2070 Pumped 12/13/11
1705	105	2070	8.76	0.477	11.82	20.9	

Min Required: 3550 gal
MW211-455

DEVELOPED BY: [signature]

DATE: 12/13/2011

MW-211-450

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
0905	—	2070	10.68	0.505	12.65	191.0	3 gallons / min
0935	105	2175	8.54	0.426	13.25	34.1	
1005	105	2280	9.38	0.451	11.85	27.3	
1035	105	2385	9.73	0.452	12.29	25.0	
1105	105	2490	9.70	0.450	12.64	29.4	
1135	105	2595	9.65	0.453	12.42	28.6	
1205	105	2700	9.63	0.447	12.51	27.3	
1235	105	2805	8.47	0.412	13.01	22.2	
1305	105	2910	8.77	0.436	12.32	21.3	
1335	105	3015	8.83	0.432	12.29	20.9	
1405	105	3120	8.80	0.431	11.86	22.4	
1435	105	3225	8.90	0.426	11.84	25.2	
1505	105	3330	8.88	0.426	11.87	22.5	
1535	105	3435	8.86	0.425	11.86	20.4	
1605	105	3540	8.87	0.425	11.85	21.8	
1610	17.5	3557	8.85	0.424	11.85	20.6	

Post Development DTW =

DEVELOPED BY: [signature]

DATE: 12/14/2016

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 12-12-11

LOCATION Hicksville, NY WELL NO. MW212-580

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.760	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 44.28
WELL DEPTH (TD) 580
COLOR Moderate Orange Brown
ODOR slight organic odor
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 56.94
WELL DEPTH (TD) 580
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen Lift

12-12-11

MW-212-580

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1130	0	0	12.21	2.80	12.41	68.2	44.28 DTW
1132	10	10	11.94	1.27	12.03	999	5 gal/min
1200	140	150	9.67	0.314	12.13	248	
1250	150	300	8.22	0.160	12.06	204	
1300	150	450	7.00	0.142	11.80	106	53.78 DTW
1330	150	600	6.83	0.126	11.97	69.0	
1400	150	550	6.73	0.114	11.81	38.1	
1430	150	700	6.67	0.108	11.60	31.8	
1500	150	850	6.61	0.099	11.97	37.5	
1530	150	1000	6.54	0.096	12.15	26.7	
1600	150	1200	6.45	0.094	11.49	30.3	
1630	150	1350	6.35	0.091	11.11	38.8	1500 gal In Truck
1645	75	1575	6.34	0.090	11.40	34.1	
1650	25	1600	6.36	0.090	11.76	29.6	
1655	25	1625	6.36	0.090	11.84	39.5	
1700	25	1650	6.34	0.089	11.39	33.1	56.94
			Complete 1650 gal				

MW-212-580:

Min Removal: 1650 gal

DEVELOPED BY: JJ

DATE: 12-12

12-12-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 11-29-2004

LOCATION Hicksville, NY WELL NO. MW213-570

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.760	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 45.28
WELL DEPTH (TD) (570)
COLOR Brown
ODOR Known
CLARITY Opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 49.42
WELL DEPTH (TD) 570
COLOR Clear
ODOR slight sulfer odor
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

MW-213-570

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		±0.1 pH	±3% COND. (umhos/cm)	±10% TEMP (°C/°F)	±10% TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
1004	~10	10	6.62	0.140	13.46	999	~3.0 gal/min
1024	80	80	6.95	0.069	13.20	240	~5.0 gal/min
1058	180	250	6.31	0.058	13.74	45.2	
1132	250	500	6.31	0.057	13.83	80.4	
1206	250	750	6.18	0.055	13.58	74.3	
1240	250	1000	6.04	0.054	13.45	50.2	
1319	270	1270	6.25	0.055	13.71	53.0	
1348	250	1500	6.33	0.055	13.54	24.3	5 gal/min
1422	250	1750	6.22	0.054	13.40	26.2	
1432	50	1800	6.05	0.053	13.15	55.0	
1442	50	1850	6.13	0.053	12.96	48.6	
1452	50	1900	6.16	0.053	13.06	49.7	
1502	50	1950	6.19	0.053	13.21	36.9	

DEVELOPED BY: J. Gauz

DATE: 2011-11-29

11-29-11

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 2011-11-30

LOCATION Hicksville, NY WELL NO. MW 214-570

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.760	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 44.71 ft. bgs (TOC)
WELL DEPTH (TD) ~570
COLOR light
ODOR None
CLARITY opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 55.31 ft. bgs (TOC)
WELL DEPTH (TD) ~507
COLOR Clear
ODOR none
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen lift

2011-11-30

MW-214-570

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
0921	10	10	6.04	0.155	13.54	21.7	5gal ~ min, 56.91 DTW
0951	140	150	6.60	0.087	13.22	63.6	
1021	150	300	6.27	0.083	12.50	30.1	54.44 DTW
1051	150	450	6.22	0.079	12.43	46.5	3.8 g/min 54.77 DTW
1151	150	600	6.21	0.077	12.17	15.3	
1211	150	750	6.24	0.076	13.76	43.7	
1251	150	1000	6.12	0.075	12.02	16.2	~800gal on truck gauge
1321	150	1150	6.12	0.074	12.06	10.4	~1000gal on truck
1401	150	1300	6.08	0.074	12.05	25.8	~1100gal on truck
1410	50	1350	6.05	0.074	11.98	13.7	
1420	50	1400	6.09	0.074	11.66	23.1	
1430	50	1450	6.10	0.073	11.43	42.1	
1451	50	1500	6.11	0.074	11.13	33.0	last water ~1350 gal emptied in Tank truck

DEVELOPED BY: Jan Gauer DATE: 2011-11-30

WELL DEVELOPMENT RECORD

SITE _____ DATE _____

LOCATION _____ WELL NO. _____

_____

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = 94.83 gallons. x 3 = 284.49

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419 x 10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 37.56
WELL DEPTH (TD) 392.0
COLOR Clear
ODOR none
CLARITY Clear

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 37.78
WELL DEPTH (TD) 394.45
COLOR Clear
ODOR None
CLARITY Clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Air lifting using Nitrogen

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
10/15/14							
1655	0		10.97	5540	20.9	63	
1700	20		10.39	530	15.2	>1000	
1705	40		9.06	340	14.3	54	
1710	106		7.56	280	14.5	53.3	
1715	172		7.17	290	14.4	48.4	
1720	238		6.95	280	13.9	41.6	
1725	304		6.79	280	13.4	53.9	
1755	337		6.58	240	15.9	5.90	
1825	370		6.39	250	14.0	3.70	
1240	370		6.57	25	15.06	73.3	
1310	500		6.59	216	12.88	12.6	
1320							Van truck stopped pump
10/16/14							
1330	500		6.60	216	17.21	5.66	
1400	100		6.71	213	12.37	7.12	
1430	100		6.71	212	12.26	7.6	
1500	100		6.62	209	12.48	5.38	
1530	900		6.48	212	12.39	7.59	
1600			6.71	209	12.16	5.92	
1630			6.73	210	12.19	5.43	
1700			6.67	208	12.10	3.80	
1715	1200						
1730			6.72	211	12.01	4.14	Out of nitrogen
1600	1300		6.68	206	11.83	4.09	
10/22/14							
0910	1300		10.59	820	11.80	23.1	
940	1440		8.08	210	11.2	18.0	
1010	1600		6.37	200	11.3	11.5	

DEVELOPED BY: [signature] DATE: 10/21/14

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
10/20/14							
1040	1760		6.16	200	11.8	5.64	
1110	1800		6.02	200	13.6	3.52	
1140	1900		5.90	200	13.2	8.36	
1210	2000		6.03	200	13.8	3.59	
1240	2100		6.03	200	13.6	4.06	
1310	2250		5.99	200	14.4	1.55	
1340	2400		6.00	190	14.7	7.61	
1410	2500		6.03	190	15.0	2.34	
1440	2600		6.03	190	14.4	1.68	
1510	2700		5.96	190	14.6	1.12	
1540	2825		6.00	190	13.8	3.55	
1610	2950		5.97	190	12.8	0.99	
1640	3075		5.79	200	13.7	2.76	
1710	3200		5.99	190	12.90	1.34	
1740	3325		5.97	190	12.9	1.57	
1810	3450		5.97	190	13.2	2.19	
0900	3450		5.13	470	13.2	1.77	
0930	3600		5.50	230	12.6	1.60	
1000	3700		5.74	230	12.7	1.55	
1030	3800		5.87	230	13.1	2.08	
1100	3900		5.90	230	14.1	1.50	
1130	4000		5.98	230	14.6	1.47	
1200	4100		5.93	230	13.9	1.57	
1230	4200		5.93	230	13.8	1.53	
1300	4310		5.98	230	13.3	1.48	
1330	4425		5.93	230	12.9	1.52	
1400	4550						out of N. bay
1430							N. N. bay
1450	4580		5.80	230	13.3	1.63	
1505	4650		5.96	230	12.9	1.64	
1515	4690		5.92	230	12.7	1.67	
1520	4710		5.96	230	12.8	1.63	

DEVELOPED BY: [signature] DATE: 10/21/14

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 10/7/14 - 10/17/14

LOCATION Hicksville, NY WELL NO. MW-216

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (π).
1 well volume (v) = 124 gallons. x3 = 372

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 42.25
WELL DEPTH (TD) 511.2
COLOR brown
ODOR none
CLARITY opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 96.82
WELL DEPTH (TD) 510.5
COLOR line greenish yellow
ODOR none
CLARITY cloudy - opaque

DESCRIPTION OF DEVELOPMENT TECHNIQUE

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1340	0	0	10.03	317	18.35	>1000	Flow stopped
1345	50	0.37	9.81	225	14.96	>1000	
1350	75	0.56	9.85	248	14.54	>1000	
1355	100	0.74	9.86	280	15.05	>1000	
1400	110	0.81	9.76	298	14.77	>1000	stopped flow air is freezing up
~~1405~~							
1410	110	0.81	9.77	298	15.74	>1000	
1415	112	0.83	9.73	302	15.93	>1000	
1430							stopped flow
1425	112	0.83	9.68	301	17.80	>1000	very poor flow, stop
1525	112	0.83	9.50	309	16.00	>1000	to talk to manufacter.
1530	115	0.85	9.12	323	15.29	>1000	
1540							Stop for the day
0850	150	1.1	7.15	310	15.00	>1000	
0900	160	1.2	7.89	310	16.50	>1000	very low flow
1005	175	1.3	8.30	330	16.10	>1000	very low flow again
1030	180	1.33	8.40	310	14.60	>1000	stopped flow 1040
1420	180		8.32	300	26.6	>1000	
1425	230		7.64	250	17.3	>1000	
1430	255		7.85	260	17.3	>1000	
1440	265		7.96	280	17.7	>1000	
1450	~~280~~ 275		7.87	300	18.5	>1000	
1500	280		7.26	310	12.4	>1000	
1530	290		7.27	280	12.6	>1000	
1600	300		7.11	270	18.6	>1000	
0855	317		6.62	300	14.7	>1000	

10/7/14

10/8/14

10/15/14

10/14/14

Volumes determined by container measurements.

Purge 372 gallons out to develop - water introduced is not counted.

DEVELOPED BY: T. Dillon DATE: 10/7/14

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
10/16/14							
0900	334		6.58	221	13.86	116	
0905	351		6.65	195	13.92	174	
0915	368		7.13	203	14.35	235	
0925	385		7.34	210	16.24	660	
0935	402		7.48	203	16.70	650	
0945	420		7.63	211	17.72	652	
0945	420.7		5.70	324	15.92	220	Monsoon pump low flow
0955	421.4		6.34	215	16.14	194	
1000	422.1		6.55	210	15.97	327	
1005	422.8		6.69	209	15.68	225	
1010	423.5		6.73	209	15.86	161	
1015	424.2		6.87	211	16.35	193	
1020	424.9		6.93	211	16.00	182	
1025	225.6		6.88	212	15.98	181	
1030	226.3		6.81	210	16.24	170	
1035	427		6.93	211	16.20	193	
1040	427.7		6.93	211	16.56	277	
1045	428.4		6.97	211	16.24	225	
1050	429.1		6.98	212	16.52	178	
1055	429.8		7.00	212	16.61	202	
1100	430.5		7.01	212	16.58	205	
1105	431.2		6.93	212	16.76	179	
1110	432		7.00	212	16.66	226	water below pump

10/17/14

DEVELOPED BY: T. Dillon DATE: 10/17/14

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 10/22/14

LOCATION Gate Lane WELL NO. MW-217

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 42.97
WELL DEPTH (TD) 490.04
COLOR Dark
ODOR None
CLARITY _____

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 42.98
WELL DEPTH (TD) 490.04
COLOR Clear
ODOR None
CLARITY _____

DESCRIPTION OF DEVELOPMENT TECHNIQUE _____

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
855	0		10.11	420	14.4	2.52	
900	20		9.24	230	13.9	213	
905	40		9.07	320	13.3	>1000	
910	60		8.80	300	13.2	>1000	
915	80		8.31	280	12.9	>1000	
920	100		8.07	280	12.8	>1000	
925	120		7.92	290	12.8	>1000	
955	300		7.43	300	13.0	>1000	
1025	450		7.21	250	13.2	>1000	
1055	600		7.00	230	13.2	>1000	
1125	750		6.83	200	13.3	>1000	
1155	900		6.71	180	13.0	>1000	
1225	1050		6.59	170	12.8	>1000	
1255	1200		6.54	160	13.0	>1000	
1325	1350		6.52	150	13.0	>1000	
1355	1500		6.39	140	12.9	>1000	
1425	1650		6.27	140	12.9	>1000	
1455	1800		6.64	140	13.7	>1000	
1525	2000		6.34	130	13.0	948	
1555	2150		6.21	120	12.6	925	
1625	2300		6.17	120	12.7	922	
1655	2450		6.05	110	12.7	914	
1725	2600		5.99	110	12.7	836	
1755	2750		6.00	110	13.0	930	
0720	2750		6.35	120	14.1	842	
0750	2950		6.14	130	12.9	>1000	

DEVELOPED BY: [signature] DATE: 10/23/14

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
0820	3100		6.20	110	13.3	842	
0850	3250		5.96	100	12.8	633	
0920	3450		5.96	100	12.7	255	
0950	3600		5.93	90	12.6	226	
1020	3800		5.97	90	13.7	201	
1050	3950		5.96	90	13.3	173	
1120	4100		5.47	80	12.9	181	
1150	4250	4250	5.74	80	12.5	178	
1220	4400		5.73	80	12.6	127	
1250	4500		5.55	80	12.9	114	
1320	4600		5.55	80	12.7	110	
1350	4700		5.55	80	12.7	129	
1420	4800		5.56	80	12.5	100	
1450	4900		5.55	80	12.6	90	
1520	4950		5.57	80	12.8	68.7	
1535	5000		5.59	80	12.5	59.7	
1540	5025		5.56	80	12.5	52.6	
1545	5050		5.55	80	12.6	49.7	
1550	5075		5.55	80	12.7	46.5	
1555	5100		5.56	80	12.5	45.9	

DEVELOPED BY: [signature] DATE: 10/23

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP

DATE 10/13/14 - 10/15/14

LOCATION Hercules property

WELL NO. MW-218

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = 17.135 gallons. x3 = 51.4

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 61.52
WELL DEPTH (TD) 94.90
COLOR dark brown
ODOR none
CLARITY opaque

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 61.54
WELL DEPTH (TD) 93.80
COLOR clear
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Wattera at 5 gals/min

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

	TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
10/13/14	1545	0	0	7.62	141	16.55	>1000	
	1550	10	0.6	7.64	183	14.88	>1000	
	1555	20	1.2	7.49	183	14.46	>1000	
	1600	30						Phone call
	1605	40	2.3	7.54	184	14.46	>1000	
	1610	50	2.9	7.33	181	14.57	>1000	
	1615	60	3.5	7.25	179	14.33	>1000	
	1645	90	5.3	7.14	180	14.49	>1000	
	1715	120	7.0	6.88	163	14.45	40.7	
	1745	175	10.2	6.55	151	14.74	17.6	adjusted to container reading
10/14/14	0940	175	10.2	6.01	223	16.17	>1000	
	1010	250	14.6	6.35	147	15.44	124	
	1040	340		6.21	139	15.76	55.0	adjusted to container reading
	1110	460		6.06	134	16.37	36.8	
	1140	550		6.17	131	16.85	23.7	
	1210	690		6.08	124	16.01	76.6	
	1240	825		5.97	121	15.18	73.3	adjusted to container reading
	1310	975		5.93	120	15.76	39.8	
	1340	1100		5.86	118	15.70	40.3	
	1410	1225		5.93	117	15.60	41.8	
	1440	1345		5.90	115	15.44	34.2	
	1510	1465		5.90	115	15.34	32.5	
	1540							stopped to wait for vac truck
	1610	1650		5.88	115	16.26	24.6	Pumped out 500gal tank to frac tank, still
	1640	1770		5.89	115	14.96	19.5	
	1710	1890		5.85	113	15.12	16.5	waiting on ~~for~~ vac truck

Total: 2355 gallons to be purged.

DEVELOPED BY: T. Dillon DATE: 10/14/14

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

	TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
10/14/14	1740	2010		5.87	113	14.93	12.8	
	1810	2200		5.76	113	14.85	13.8	
10/15/14	0830	2200		4.88	280	20.3	22.8	using Hama instrument
	0840	2250		5.12	170	17.7	104.4	for readings instead of
	0850	2300		5.12	150	17.1	66.9	YSI
	0855	2350		5.08	150	16.5	65.2	
	0900	2400		5.12	150	16.5	57.0	
	0905	2410		5.10	140	18.6	48.6	
	0910	2420		5.14	140	18.7	49.6	
	0915	2430		5.17	140	19.3	49.4	

DEVELOPED BY: T. Dillon DATE: 10/15/14

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 10/11/14 - 11/12/14

LOCATION Hazelville, NY WELL NO. MW-219

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 48.35
WELL DEPTH (TD) 560 43
COLOR brown
ODOR None
CLARITY Cloudy

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 47.10
WELL DEPTH (TD) 560 45
COLOR Clear
ODOR None
CLARITY C

DESCRIPTION OF DEVELOPMENT TECHNIQUE Air lifting with Nitrogen

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
0925	0		12.29	5.232	15.98	25.1	
0930	10		12.13	2.076	11.90	>1000	Need to Adjust tubing
0935	10		12.12	1.707	13.5	>1000	
1000			11.34	0.438	12.65	>1000	
1005			10.83	0.219	12.25	>1000	
1010			10.52	0.252	12.20	>1000	
1015			10.31	0.215	12.88	>1000	
1020			10.07	0.196	12.80	>1000	
1025	150		9.93	0.192	12.97	>1000	
1035	225		9.67	0.187	12.97	>1000	
1045	325		9.20	0.192	12.98	>1000	
1055	525		8.75	0.188	12.98	>1000	
1125	675		8.14	0.190	13.03	>1000	
1255	750		8.03	0.193	13.09	689	
1325	850		7.95	0.195	13.83	200	
1355	885		7.89	0.196	13.85	160	
1425	950		7.77	0.192	13.13	157	
1455	1100		7.23	0.195	12.91	98	
1525	1300		7.23	0.199	12.95	196	
1555	1450		6.96	0.205	13.23	108	
1625	1600		7.77	0.200	13.30	109	
1655	1800		7.10	0.198	13.10	82.2	
825	1800		4.85	0.315	15.49	79.5	
855	1950		5.03	0.207	12.63	63.6	
925	2125		6.64	0.203	13.18	97.3	
955	2275		6.69	0.205	12.99	84.5	

11/11/14

DEVELOPED BY: [signature] DATE: 11/12/14

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
1025		2450	6.90	.207	12.82	63.1	
1035		2600	6.81	.209	12.87	57.3	
1125		2750	6.77	.209	13.91	42.9	
1155		2900	6.75	.209	13.27	34.9	
1225		3050	6.75	.210	13.40	39.5	
1255		3200	6.86	.210	13.02	24.6	
1325		3350	6.73	.207	13.07	18.9	
1355		3500	6.75	.208	13.09	15.6	
1425		3650	6.62	.207	13.15	16.5	
1455		3800	6.59	.205	12.89	14.6	
1525		3950	6.55	.205	12.97	12.9	
1535		4000	6.54	.205	12.85	12.6	
1545		4050	6.53	.206	12.84	12.4	
1555		4100	6.53	.206	12.97	12.3	

DEVELOPED BY: [signature]

DATE: 11/12/14

Borehole Requirements

WELL DEVELOPMENT RECORD

SITE Sylvania Corning FUSRAP DATE 12/15/14

LOCATION Wantagh off-ramp / Old Country Rd. WELL NO. MW-220

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = 76.9 gallons. x3 = 230.76

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 44.41'
WELL DEPTH (TD) 324.9'
COLOR no color
ODOR none
CLARITY clear

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 44.45
WELL DEPTH (TD)
COLOR no color
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
9:25	0		10,85	2 89	13.08	14.4	
9:30			10.30	2 59	11.73	91.5	
9:35			9,38	2 57	11.45	46.6	
9,40			9,05	274	11.52	29.1	
9:45			8.77	2 78	10,55	16.2	
9:50			8.60	268	11.30	15.8	
9:55			8 43	238	11.30	18.7	
10:00			8.21	259	11.00	11.7	
1015	250		8.43	277	11.04	7.88	
1025			8.46	281	10.79	NA	
1035			8.46	282	11.17	NA	Turbidity meter not working
1045			8.56	1.172	1206	NA	
1055			8.48	0.311	10.84	NA	
1105	500		8.65	335	10.70	3.28	
1115	500		8.65	288	11.18	5.83	
1125			8.61	290	11.47	4.89	
1135			8.68	294	11.34	4.52	
1145			8.61	295	11.50	3.76	
1155			8.75	285	11.32	2.81	
205	750		8.64	287	11.30	3.23	
12:15			8.68	0.292	11:31	3.42	
12:25			8.72	0.289	11:36	3.12	
12:35			8.62	0.289	11:39	2.62	
12:45			8.46	0.295	11.36	2.50	
12:55			8.69	289	11.40	832	Stopped to change tank
13:05			8.62	290	10.84	44.8	

DEVELOPED BY: _____ DATE: _____

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
1315			8.66	288	11 37	30.6	
1325	1000		—	—	—	—	Sucking out tank
1335			—	—	—	—	Liquid N not working
1345			8.77	298	11.05	28.6	Using dry nitrogen
1355			8.81	286	11.42	11.2	
14:15			8.72	0.289	11.30	3,62	
—	~~1275~~ (10)						
14:35	1275		8.67	0.292	10.75	5.5	
14:55			8.66	0.289	10.68	15.9	
15:15			8.90	0.285	10.82	2.98	
15:45	1550		8.85	0.292	10.24	4.69	
16:15			8.60	282	10.87	3.65	
16:45	1825		8.57	282	10.86	2.05	
12-16 14 2:00			7.43	0.331	9.28	5.73	
8:30			6.81	294	11.35	2.08	0845 2100 gals
9:00			6.68	0.271	9.20	0.93	
9:30			6.12	0.273	11.95	7.90	
10:00			6.20	0.267	11.85	2.66	0940 2375 gals
10:30			6.38	0.267	10.00	0.83	
11:00			6.32	0.266	11.87	1.12	1040 2625 gals
11:05			6.30	0.265	11.62	1.03	
11:10			6.24	0.264	11.63	1.60	
11:15	2775		6.17	0.264	11.45	4.20	

DEVELOPED BY: _____ DATE: _____

WELL DEVELOPMENT RECORD

SITE MW-22I / Sylvania DATE 3/24/16

LOCATION DOT Facility / Sylvania WELL NO. MW-22I

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2 (0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509 x10⁻³
11/2	0.092	0.0123	1.142	1.142 x10⁻³
2	0.163	0.0218	2.024	2.024 x10⁻³
21/2	0.255	0.0341	3.167	3.167 x10⁻³
3	0.367	0.0491	4.558	4.558 x10⁻³
31/2	0.500	0.0668	6.209	6.209 x10⁻³
4	0.653	0.0873	8.110	8.110 x10⁻³
41/2	0.826	0.1104	10.260	10.260 x10⁻³
5	1.020	0.1364	12.670	12.670 x10⁻³
51/2	1.234	0.1650	15.330	15.330 x10⁻³
6	1.469	0.1963	18.240	18.240 x10⁻³
7	2.000	0.2673	24.840	24.840 x10⁻³
8	2.611	0.3491	32.430	32.430 x10⁻³
9	3.305	0.4418	41.040	41.040 x10⁻³
10	4.080	0.5454	50.670	50.670 x10⁻³
11	4.937	0.6600	61.310	61.310 x10⁻³
12	5.875	0.7854	72.960	72.960 x10⁻³
14	8.000	1.0690	99.350	99.350 x10⁻³
16	10.440	1.3960	129.650	129.650 x10⁻³
18	13.220	1.7670	164.180	164.180 x10⁻³
20	16.320	2.1820	202.680	202.680 x10⁻³
22	19.750	2.6400	245.280	245.280 x10⁻³
24	23.500	3.1420	291.850	291.850 x10⁻³
26	27.580	3.6870	342.520	342.520 x10⁻³
28	32.000	4.2760	397.410	397.410 x10⁻³
30	36.720	4.9090	456.020	456.020 x10⁻³
32	41.780	5.5850	518.870	518.870 x 10⁻³
34	47.160	6.3050	585.680	585.680 x10⁻³
36	52.880	7.0690	656.720	656.720 x10⁻³

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419 x 10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 49.41
WELL DEPTH (TD) 320
COLOR Orange-Brown
ODOR none
CLARITY Turbid

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 49.38
WELL DEPTH (TD) 320.46 TOIC
COLOR none
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Air lift (nitrogen)

1 well volume = $(320 \times 0.255) + \left(0.30 \times \left((16 \times 2) - (40 \times 0.255)\right)\right) = 89.34$ gal

Water used during drilling = 180 gal (297'-317') + 345 gal (317'-332') = 525 gal

614.34 gal
X 3 volumes

Total = 1843.02 gal

3/25/16

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
1035	0		4.91	0.249	12.72	57.1	INITIAL 3/24/16
1120	175		5.09	0.454	14.11	9.21	
1210	325		5.39	0.440	13.21	12.0	
1330	525		5.53	0.436	14.12	9.26	
1415	735		5.51	0.431	12.88	10.42	
1500	937		5.59	0.430	12.80	5.60	
1545	1090		5.64	0.427	12.01	4.11	
1630	1215		5.60	0.426	12.65	1.36	
1715	1365		5.51	0.424	10.99	3.48	
0800	1500		8.67	0.466	11.76	3.51	START FOR 3/25/16
0830	1575		7.78	0.436	12.15	3.38	
0900	1645		7.59	0.433	12.44	2.65	
0930	1745		7.48	0.433	12.50	1.79	
0940	1763		7.47	0.433	12.42	2.05	
0950	1800		7.46	0.431	12.32	3.15	
1000	1835		7.43	0.433	12.38	2.60	
1010	1870		7.40	0.431	12.39	1.21	
1020	1905		7.40	0.430	12.58	2.40	

DEVELOPED BY: A. UHRIG, J. TROYER DATE: 3/25/16

3/25/16

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE _____

LOCATION Hicksville, NY WELL NO. MW-222

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) Bailers installed pump in well before WL could be recorded.
WELL DEPTH (TD) 340
COLOR Light brown
ODOR None
CLARITY Turbid

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 49.48
WELL DEPTH (TD) 340.45 TOIC
COLOR none
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Air Lift with Nitrogen

1 well volume = $(340 \times 0.255) + (0.30 \times ((18 \times 2) - (40 \times .255)))$ = 94.44
86.7 7.74
+305.00
399.44
x 3 volumes
Total 1,198.32

Water used during drilling (315' - 353')
= 150 gal (302-317) = 20 gal
150 ga (317-337) = 150 gal
150 ga (337-357) = 135 gal
177 305 gal

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN		pH	COND. (umhos/cm)	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	GALS.	BORE VOL.					
10:00	0		7.72	0.330	14.09	>1000	
11:30	150		7.53	0.326	12.99	206	
12:00	250		7.34	0.322	13.35	127	
12:30	360		7.23	0.342	12.98	89.9	
13:00	470		7.21	0.349	13.09	67.7	
13:30	570		7.17	0.352	13.20	50.9	
14:00	670		7.08	0.336	13.18	34.4	
14:30	780		7.03	0.362	12.88	40.5	
15:00	890		7.02	0.349	13.02	29.6	
15:10	930		7.00	0.366	12.83	23.6	
15:20	970		6.98	0.365	12.91	22.4	
15:30	1010		7.00	0.365	13.22	20.6	
15:40	1050		7.01	0.364	12.99	18.1	
15:50	1090		7.00	0.365	12.86	18.0	
16:00	1130		7.03	0.364	12.67	17.9	
16:10	1170		7.03	0.363	12.88	15.4	
16:20	1210		7.03	0.366	12.60	16.4	

DEVELOPED BY: Eric Lamberg

DATE: 3/29/16

WELL DEVELOPMENT RECORD

SITE Sylvania Corning SUSRAP DATE 2/19/16

LOCATION Hicksville, NY WELL NO. MW-223

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).

1 well volume (v) = _____ gallons.
143.52

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1 1/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2 1/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3 1/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4 1/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
5 1/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 46.15
WELL DEPTH (TD) 586
COLOR light brown
ODOR none
CLARITY Turbid

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 44.05
WELL DEPTH (TD) ~~575.10~~ 579.30
COLOR clear
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE airlift with Nitrogen

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. ~~(umhos/cm)~~ mS/cm	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
1030	0		8.80	0.450	10.76	>1000	Begin purge
1100	150		7.67	0.249	9.32	69.5	
2/19/16 1130	300		7.01	0.234	9.16	20.5	
1200	450		6.82	0.229	9.52	7.52	
~~1230~~	SGC						~~End reading for 2/19/16~~ SGC
1230	500		6.72	0.221	9.86	18.4	End reading for 2/19/16
0810	500		6.42	0.227	9.66	11.3	Begin purging on 2/22/16*
0910	842		6.68	0.215	10.34	14.8	
~~1010~~							~~SGC~~
0925	927.5		6.70	0.213	10.47	5.44	Nitrogen tank ran out
1005	927.5		6.46	0.212	9.81	1.68	Resume purging - Same rate
2/22/16 1105	1269.5		6.49	0.212	10.17	11.4	
1205	1611.5		6.64	0.213	10.20	14.8	
1305	1953.5		6.56	0.209	10.24	4.56	
1405	2295.5		6.56	0.213	11.03	16.5	
1505	2637.5		6.48	0.208	10.32	3.30	
1605	2979.5		6.45	0.204	10.06	0.84	
1705	3321.5		6.52	0.208	9.87	7.92	
1750	3578		6.51	0.208	9.52	5.31	Final reading 2/22/16
0815	3828		~~6.45~~ 5.93	.243	10.68	13.6	Begin purging 2/23/16 0730
0900	4078		6.43	.239	10.65	7.32	
2/23/16 0920	4178		6.44	.242	10.86	5.80	
0940	4278		6.38	.242	10.90	6.56	
1000	4378		6.38	.243	10.94	5.15	
1020	4478		6.40	.245	10.92	2.12	Development complete

2/22/16 → * 5.7 gal/min = 342 gal/hr

DEVELOPED BY: S. Craig

DATE: 2/19/16
2/22/16

4,435

WELL DEVELOPMENT RECORD

SITE Sylvania FUSRAP DATE 3/10/16

LOCATION Hicksville, NY WELL NO. MW-228

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
12	5.875	0.7854	72.960	72.960×10^{-3}
14	8.000	1.0690	99.350	99.350×10^{-3}
16	10.440	1.3960	129.650	129.650×10^{-3}
18	13.220	1.7670	164.180	164.180×10^{-3}
20	16.320	2.1820	202.680	202.680×10^{-3}
22	19.750	2.6400	245.280	245.280×10^{-3}
24	23.500	3.1420	291.850	291.850×10^{-3}
26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 70.25'
WELL DEPTH (TD) 330.7
COLOR Clear
ODOR Solvent-like
CLARITY Clear

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 70.31'
WELL DEPTH (TD) 330.88 TOIC
COLOR clear
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Nitrogen airlift method
225 gal water notes

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

	TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	pH	COND. ~~(umhos/cm)~~ mS/cm	TEMP (°C/°F)	TURB. (NTU)	COMMENTS
	0952	0		8.80	0.169	16.18	49.4	Inital.
	1030	90		7.98	0.171	14.54	7.56	Solvent odor
	1100	180		7.42	0.170	14.05	5.90	Solvent odor
	1130	270		7.23	0.173	14.65	2.26	Solvent odor
	1200	360		7.27	0.172	13.88	2.34	Solvent odor
	1300	540		7.06	0.176	14.06	2.11	Solvent odor
	1330	630		7.06	0.177	14.03	0.56	Solvent Odor
	1400	720		6.99	0.178	13.96	0.75	Solvent odor
	1430	810		7.07	0.178	13.98	0.61	Solvent odor
	1500	900		6.93	0.176	13.98	1.61	Solvent odor
	1530	990		6.98	0.176	13.49	0.94	Solvent odor
	1600	1,080		6.91	0.179	13.35	0.62	Solvent odor
	1630	1,170		6.97	0.177	13.07	0.83	Solvent odor
3/10/16	~~1700~~ 1715	1,260		6.98	0.177	12.82	0.38	Solvent odor - last reading for day
3/11/16	0800	1,260		5.27	0.145	11.43	0.68	Initial reading
	0830	1,350		6.00	0.146	12.19	0.89	Solvent odor
	0900	1,440		6.14	0.146	12.32	0.48	Solvent odor
	0930	1,530		6.15	0.145	12.29	0.60	Solvent odor
	1000	1,620		6.17	0.145	12.72	51.1	Solvent odor
	1030	1,710		6.16	0.145	12.77	5.91	Solvent odor
	1100	1,800		6.13	0.145	13.03	2.70	Solvent odor
	1130	1,890		6.10	0.145	13.08	1.09	Solvent odor
	1200	1,980		6.12	0.146	12.48	0.76	Solvent odor
	1230	2,070		6.12	0.145	12.62	0.59	Solvent odor
	←	Development Complete						→

3/10/16 - flow rate ~3gal/min. ~~1025 - rate reduced to 5gal/min~~ (See)
3/11/16 - flow rate ~ 3gal/min

DEVELOPED BY: S. Craig O. Sokal DATE: 3/10/16 | 3/11/16

WELL DEVELOPMENT RECORD

SITE ~~AAE~~ Sylvania Fusrap — DATE 3/28/16

LOCATION Hicksville, NY — WELL NO. MW-225

MEASUREMENT OF WATER LEVEL AND WELL VOLUME

- Prior to sampling, the static water level and total depth of the well will be measured with a calibrated weighted line. Care will be taken to decontaminate equipment between each use to avoid cross contamination of wells.
- The number of linear feet of static water (difference between static water level and total depth of well) will be calculated.
- The static volume will be calculated using the formula:

$$V = Tr^2(0.163)$$

Where:
V = Static volume of well in gallons;
T = Depth of water in the well, measured in feet;
r = Inside radius of well casing in inches;
and 0.163 = A constant conversion factor which compensates for r^2h factor for the conversion of the casing radius from inches to feet, the conversion of cubic feet to gallons, and (pi).
1 well volume (v) = _____ gallons.

Volume of Water in Casing or Hole

Diameter of Casing or Hole (in)	Gallons per Foot of Depth	Cubic Feet per Foot of Depth	Liter per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
11/2	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
21/2	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
31/2	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
41/2	0.826	0.1104	10.260	10.260×10^{-3}
5	1.020	0.1364	12.670	12.670×10^{-3}
51/2	1.234	0.1650	15.330	15.330×10^{-3}
6	1.469	0.1963	18.240	18.240×10^{-3}
7	2.000	0.2673	24.840	24.840×10^{-3}
8	2.611	0.3491	32.430	32.430×10^{-3}
9	3.305	0.4418	41.040	41.040×10^{-3}
10	4.080	0.5454	50.670	50.670×10^{-3}
11	4.937	0.6600	61.310	61.310×10^{-3}
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16	10.440	1.3960	129.650	129.650×10^{-3}
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26	27.580	3.6870	342.520	342.520×10^{-3}
28	32.000	4.2760	397.410	397.410×10^{-3}
30	36.720	4.9090	456.020	456.020×10^{-3}
32	41.780	5.5850	518.870	518.870×10^{-3}
34	47.160	6.3050	585.680	585.680×10^{-3}
36	52.880	7.0690	656.720	656.720×10^{-3}

1 Gallon = 3.785 liters
1 Meter = 3.281 feet
1 Gallon water weighs 8.33 lbs. = 3.779 kilograms
1 Liter water weighs 1 kilogram = 2.205 pounds
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth

INITIAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 63.36
WELL DEPTH (TD) 320 feet
COLOR light brown
ODOR none
CLARITY Turbid

FINAL DEVELOPMENT WATER

WATER LEVEL (TOIC) 62.78
WELL DEPTH (TD) 320.56 bgs
COLOR clear
ODOR none
CLARITY clear

DESCRIPTION OF DEVELOPMENT TECHNIQUE Airlift using compressed nitrogen

1 well volume = $(320 \times 0.255) + (0.30 \times ((20 \times 2) - (40 \times 0.255))) = 90.54$
81.6 8.94

Water used during const. (295'-335') = 150 gal (297-307) 150
160 gal (307-327) 160
150 gal (327-347) 60
370 gal total

320.00
460.54
x 3 volumes
1,381.62 gal

177

02:002260_KZ03_04_07-B2651
Geotech Logbook.docx-8/7/14

3/29/16

WELL DEVELOPMENT - PARAMETER MEASUREMENTS

TIME	TOTAL VOL. WITHDRAWN GALS.	TOTAL VOL. WITHDRAWN BORE VOL.	± 0.2 pH	± 3% COND. (umhos/cm)	± 1 deg TEMP (°C/°F)	< 50 TURB. (NTU)	COMMENTS
1300	Ø		8.68	0.413	14.44	>1000	start 3/28/16
1345	170		7.78	0.484	13.19	85	
~~1415~~ 1430	270		6.90	0.493	12.86	16.7	
~~1445~~ 1500	400		6.81	0.506	13.25	19.5	
~~1515~~ 1530	485		6.96	0.509	14.04	5.52	
1600	595		6.88	0.514	14.22	6.41	
1630	720		6.84	0.514	14.66	10.62	
~~1645~~ 1700	825		6.76	0.519	13.81	4.18	
~~1715~~ 1730	955		6.76	0.515	13.56	6.66	
50+20 0740	955		6.84	0.290	12.08	11.75	start 3/29/16
0750	995		7.16	0.300	11.38	5.73	
08:00	1015		7.15	0.291	11.56	4.08	
08:10	1040		7.12	0.284	11.57	3.79	
08:20	1065		7.09	0.281	11.29	3.61	
08:30	1095		7.05	0.280	11.00	3.51	
08:40	1125		6.98	0.279	11.30	5.65	
08:50	1155		6.97	0.279	12.01	4.38	
09:00	1185		6.95	0.279	11.64	4.48	
09:10	1225		6.95	0.279	12.36	4.05	
09:20	1265		6.93	0.279	12.84	3.98	
09:30	1305		6.87	0.280	12.71	4.52	
09:40	1345		6.84	0.280	12.77	3.76	
09:50	1385		6.91	0.282	13.12	4.88	
10:00							

DEVELOPED BY: A. Uhrig / E. Lambert DATE: 3/28/16 - 3/29/16

A. Uhrig 3/29/16

350 ml/min = purge flow rate
250 ml/min = sample flow rate

QA/QS sample = NA
DUP sample = NA
Analysis = U, Th, Ra 224/228, Gross Alpha Beta, TAL Metals, VOCs
1 well vol = 42.0 (3 vol = 126)
samplers = M. Weath, J. Mays

Groundwater Sample Log

Project: 002260-KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ sylvania
Well No.: MW-13D
Sample Date: 3-16-09
Sampling Device: ~~QED TI200 bladder pump~~ 6-tech stainless steel bladder pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 66.30 (MW) 66.35
Final Water Level (feet TOIC): 66.35
Casing Type: PVC 2"

Sample ID: MW13D-GW
Sample Time: 1805 ~~1800~~ corrected
Sample Tubing: ~~QED~~ teflon-~~lined~~ polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 2.02
Well Depth (feet TOIC): 300
Screen Interval (feet BGS): 290-300
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in liters
1700	4.30	13.71	303.3	1.66	1.14	159.6	66.30		0
1715	4.34	13.83	301.2	(MW) 0.52	0.52	117.3	66.37		1.75
1720	4.36	13.73	300.8	1.67 2.32	0.46	52.3	66.35		3.5
1725	4.34	13.68	300.4	23.2	0.52	-24.4	66.35		5.25
1730	4.30	13.56	312.5	24.3	0.64	-6.4	66.35		7.0
1735	4.30	13.70	314.2	11.1	0.67	-32.4	66.35		8.75
1740	4.25	13.67	310.3	5.34	0.78	65.3	66.36		10.5
1745	4.29	13.61	305.5	4.36	0.80	89.7	66.34		12.25
1750	4.29	13.54	304.3	2.43	0.81	102.6	66.35		14.0
1755	4.28	13.56	302.9	2.23	0.83	108.5	66.35		15.75
1800	4.27	13.50	302.0	2.02	0.84	111.5	66.35		17.5
				Averaged results					

250

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Analyzed 3-16-09

300 ml/min = purge flow rate (increased to 450 at 1420)
250 ml/min = sample flow rate

QA/QC samples = NA
D&P samples = NA
Analysis = U, Th, Ra226/228, Gross Alpha Beta, TAL Metals, VOCs
1 well vol = 42.9 (3 = 128.7)
samplers: M. Warth, J. Mays
DTW = 65.20

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-14D
Sample Date: 3/16/09
Sampling Device: ~~QED T1200 bladder pump~~ Geo Tech Stainless Steel Bladder Pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 65.20
Final Water Level (feet TOIC): 65.19
Casing Type: PVC 2"

Sample ID: MW14D-GW
Sample Time: 1505
Sample Tubing: ~~QED~~ teflon-~~lined~~ coated polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 20.3
Well Depth (feet TOIC): 304
Screen Interval (feet BGS): 294-304
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge vol in liters
1350	3.90	12.00	618.0	25.5	0.01	174.6	65.20	600Q S-ORP-O YSI	0
1355	4.12	13.13	619.5	25.6	0.00	128.3	65.18	Serial # R5875	1.5
1400	4.17	13.18	622.2	20.3	0.00	1.6	65.18	+ 0406690	3.0
1405	4.18	13.05	623.5	15.7	0.00	-52.7	65.18		4.5
1410	4.20	13.07	623.8	17.1	0.00	-67.4	65.18		6.0
1415	4.19	13.01	624.5	265	0.00	-55.9	65.19		7.5
1420	4.14	12.93	627.1	530	0.00	-22.3	65.17		9.0
1425	4.13	13.01	626.0	503	0.00	-8.5	65.18		10.5
1430	4.19	12.92	621.1	158	0.00	43.0	65.19		12.0
1435	4.08	12.92	620.9	78.6	0.00	41.4	65.19		13.5
1440	4.10	12.92	623.0	47.5	0.00	51.4	65.19		15.0
1445	4.10	12.83	628.0	28.4	0.00	64.7	65.19		16.5
1450	4.09	12.85	628.8	25.3	0.00	74.5	65.18		18.0
1455	4.09	12.87	629.6	26.2	0.00	82.1	65.18		19.5
1500	4.08	12.79	627.1	20.3	0.00	87.1	65.19		21.0
				averaged results		averaged results			

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

360 ml/min = purge rate/flow
200 ml/min = sample rate

Purge rate = 360 ml/min
QA/QC Sample = NA
Dup ID = NA
Analysis = U, Th, Ra 226/228, Gamma Spec, Alpha/Beta, TAL Metals, VOCs
1 well vol = 43.9 (3 wv = 131.7)
Samplers = M. Worth, J. Mays
PTW = 65.00

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ (MW 3/16/09) Sylvania
Well No.: MW-15D
Sample Date: 3/16/09
Sampling Device: ~~QED T1200 bladder pump~~ Geotech Stainless steel bladder pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 65.00
Final Water Level (feet TOIC): 65.02
Casing Type: PVC 2"

Sample ID: MW15D-GW
Sample Time: 1110
Sample Tubing: ~~QED teflon-lined polyethylene~~ (MW 3/16/09) Teflon lined polyethylene tubing
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 2.10
Well Depth (feet TOIC): 310'
Screen Interval (feet BGS): 300'-310'
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0 ppm

Purge Vol. (liter) 0 / 1.8 / 3.6 / 5.4 / 7.2 / 9 / 10.8 / 12.6 / 14.4 / 16.2 / 18 / 19.8

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1015	3.78	11.86	700.2	3.00	0.01 (MW 3/16/09)	227.1	65.00	600 QS - ORP - 0 YSI
1020	3.96	13.36	616.7	2.13	0.01	230.6	65.05	Serial # R5575 & 04D6610
1025	3.97	13.51	600.2	—	0.02	220.1	65.03	
1030	4.03	13.61	557.5	2.97	0.02	209.8	65.00	
1035	4.07	13.57	564.6	2.06	0.02	206.3	65.02	
1040	4.05	13.58	557.1	2.85	0.02	205.6	65.02	
1045	4.04	13.54	552.6	2.83	0.02	206.4	65.02	
1050	3.99	13.47	545.5	2.35	0.03	209.1	65.02	
1055	4.01	13.43	546.4	1.83	0.03	202.5	65.02	
1100	4.01	13.43	546.6	1.89	0.02	201.4	65.02	
1105	4.03	13.55	548.5	2.10	0.03	195.9	65.02	
~~1110~~				↓				
				(Averaged turbidity)				

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

3/16/09

3/16/09

LAMOTTE - R5876 YSI #R10226

Sampler: J. MAYS

400 ML/min Purge Flow RATE

250 ML/min Sample Flow RATE

TD = 290 - WL 65.40 = 224.60 gallons x .163 = 36.60 gallons + Sand Pk 4.7 gallons = 41.30 gallons

290 TD

1 well VOL = 41.30 gallons

3 well VOL = 123.92 gallons

QA/QC Samples = N/A

Dup Sample = N/A

310' 1 well VOL = 44.56 gal

310' 3 well VOL = 133.70 gal

Analysis VOCs, TAL metals with Hg, Gross Beta + Alpha Gamma Spec. Ra 226/228

Filtered + unfiltered Samples for Metals

Groundwater Sample Log

Project: 002260.KZ03.04.07

Site: ~~Former Griffiss Air Force Base~~ Sylvania Crossing Fusrap Site

Well No.: MW16D

Sample Date: 3/24/09

Sampling Device: ~~QED T1200 bladder pump~~ SS bladder

Alkalinity (mg/L as $CaCO_3$): NA

Ferrous Iron (mg/L): NA

Initial Water Level (Feet TOIC): 65.40

Final Water Level (feet TOIC): 65.41

Casing Type: PVC

Sample ID: MW16D-GW

Sample Time: 1415

Sample Tubing: QED teflon-lined polyethylene

Phenolphthalein Alkalinity (mg/L): N/A

Sample Turbidity (NTUs): 125

Well Depth (feet TOIC): 290'

Screen Interval (feet BGS): 280'-290'

Casing Inner Diameter (inches): 2

Initial OVA Reading (ppm): 0.0 ppm

310' (TD = 310' - WL 65.40 = 244.6 x .163 = 39.86 + Sand Pk 4.7 gallons = 44.56 gallons

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in Liters
0935	7.87	13.31	0.485	195	3.85	-302.1	65.40		①
0940	8.17	13.33	0.421	243	2.86	-358.2	65.40		2.0
0945	8.26	13.32	0.420	259	2.97	-350.7	65.40		4.0
0950	8.33	13.23	0.423	747	2.68	-337.4	65.40		6.0
0955	9.03	13.09	0.390	>1000	1.82	-310.8	65.40		8.0
1000	9.36	13.33	0.379	>1000	1.15	-298.0	65.40		10.0
1005	9.36	13.40	0.370	>1000	1.28	-249.0	65.40		12.0
1010	9.32	13.40	0.360	>1000	1.46	-219.9	65.40		14.0
1015	9.22	13.56	0.356	836	1.61	-186.2	65.41		16.0
1020	9.12	13.64	0.347	575	1.74	-158.2	65.41		18.0
1025	9.06	13.12	0.238	444	1.76	-134.5	65.41		20.0
1030	9.02	13.00	0.361	356	1.85	-125.8	65.41		22.0
1035	9.00	12.90	0.245	331	1.90	-122.2	65.41		24.0
1040	8.97	12:87	0.197	299	1.99	-117.0	65.41		26.0
1045	8.94	13.18	0.238	247	2.02	-107.8	65.41		28.0
1050	8.90	13.07	0.242	245	2.08	-102.2	65.41		30.0

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: MW16D **Date:** 3/24/09

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in Liters
1055	8.84	13.15	0.239	203	2.11	-93.9	65.41		32.0
1100	8.81	13.25	0.238	198	2.18	-86.5	65.41		34.0
1115	8.66	13.56	0.220	155	2.30	-70.9	65.41		40.0
1130	8.58	12.78	0.276	143	3.56	-37.6	65.41		46.0
1145	8.51	12.88	0.265	133	3.00	-59.9	65.41		52.0
1200	8.46	12.90	0.269	124	2.87	-62.2	65.41		58.0
1215	8.38	13.67	0.377	118	2.75	-69.0	65.41		64.0
1230	8.31	13.02	0.377	111	2.78	-57.9	65.41		70.0
1245	8.21	14.10	0.374	101.4	2.85	-51.8	65.41		76.0
1300	8.24	14.13	0.378	120.2	2.76	-48.6	65.41		82.0
1315	8.23	14.07	0.376	117	2.95	-43.8	65.41		88.0
1330	8.18	13.99	0.376	120	2.89	-42.7	65.41		94.0
1345	8.10	14.08	0.375	135	2.85	-40.4	65.41		100.0
1400	8.02	14.05	0.374	123	3.01	-37.2	65.41		106.0
1405	8.00	14.09	0.375	120	3.00	-36.3	65.41		108.0
1410	7.98	1411	0.374	125	3.02	-35.1	65.41		110.0
1440									124.0
1500									130.0
1515								9 am 3/24/09	136.0
1530									142.0
1545									

141 gpm
3/24/09

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

250 ml/min = purge flow rate
250 ml/min = sample flow rate
YSI # 650 MDS #R5818
LaMotte #R2443

pup sample = NA
analysis = U, Th, Ra 226/228, Gross alpha Beta, TAL Metals, VOCs, Gamma Spec
1 well vol = 6.37 gal
3 well vol = 19.11 gal
samples = M. Werth, J. Mays

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-17S
Sample Date: 3-20-09
Sampling Device: ~~QED T1200 bladder pump~~ Geo Tech Stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 65.55
Final Water Level (feet TOIC): 65.55
Casing Type: PVC 2"

Sample ID: MW17S-GW
Sample Time: 1125
Sample Tubing: ~~QED~~ teflon-~~lined~~ coated polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 5.82
Well Depth (feet TOIC): 76
Screen Interval (feet BGS): 66-76
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	purge vol in liters
1055	6.72	15.45	0.369	9.19	5.40	-191.9	65.55		0
1100	6.76	15.43	0.364	9.12	1.46	-283.6	65.55		1.25
1105	6.96	15.38	0.357	7.46	0.69	-360.7	65.55		2.50
1110	7.05	15.38	0.358	6.60	0.51	-372.7	65.55		3.75
1115	7.13	15.38	0.363	5.63	0.47	-373.5	65.55		5.00
1120	7.16	15.41	0.365	5.82	0.51	-369.4	65.55		6.25
				averaged results					7.50

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

M. Werth 3-20-09

02:002260_KZ03_04_07-B2651

250 ml/min = purge flow rate
190 ml/min = sample flow rate

QA/QC samples = NA
Dup sample = NA
analysis = U, Th, Ra 228/226
Gross alpha Beta, TAL
metals, VOCs, Gamma Spec
1 well vol = 5.81 (3 well vol = 17.4)
samplers: M. Werth, J. Noyes

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-18S
Sample Date: 3-18-09
Sampling Device: ~~QED T1200 bladder pump~~ GeoTech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 65.01
Final Water Level (feet TOIC): 65.01
Casing Type: PVC 2"

Sample ID: MW18S-GW
Sample Time: 1625
Sample Tubing: ~~QED~~ teflon-~~lined~~ coated polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 44.3
Well Depth (feet TOIC): 72
Screen Interval (feet BGS): 62-72
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol. in liters
1545	6.86	14.10	0.687	136.0	3.72	147.1	65.01		0
1550	6.80	14.12	0.673	111.0	3.55	110.9	65.01		1.25
1555	6.59	14.11	0.731	55.1	3.35	116.1	65.01		2.5
1600	6.36	14.24	~~0.014~~ 1.201	48.4	3.06	132.5	65.01		3.75
1605	6.81	14.03	1.204	36.5	3.05	140.9	65.01		5.0
1610	6.78	14.05	1.204	38.0	2.91	140.9	65.01		6.25
1615	6.77	13.98	1.211	40.3	2.83	137.8	65.01		7.5
~~1620~~				averaged results					~~8.75~~

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

3-18-09

250

400 mL/min = purge Flow Rate
150 mL/min = Sample Flow Rate
Sampler: J. Mays

YSI 650MDS # 5818
Fathom LS # R2443

Purge Rate: 400 mL/min
QA/QC Samples:
Duplicate Sample ID:
Analysis: VOC's, Gross Alpha + Beta, Ra 226, TAL Metals, U, Th,
1x Well Volume: 44.01 gallons
Samplers: J. Mays

Groundwater Sample Log

Project:
Site: Former Griffiss Air Force Base
Well No.: MW-19D
Sample Date: 3-19-09
Sampling Device: ~~QED T1200~~ Geotech SS bladder pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 64.20
Final Water Level (feet TOIC): 64.22
Casing Type: PVC

Sample ID: MW19D-GW
Sample Time: 1380 coated 3x well volume = 132.0 gallons
Sample Tubing: QED teflon-~~lined~~ polyethylene
Phenolphthalein Alkalinity (mg/L): N/A
Sample Turbidity (NTUs): 31.3
Well Depth (feet TOIC): 305.6
Screen Interval (feet BGS): 295.6 - 305.6
Casing Inner Diameter (inches): 2
Initial OVA Reading (ppm): 0.0 ppm

TD = 305.6 - 64.20 WL = 241.4 X .163 = 39.3 + SAND PK 4.7 gallons = 44.01

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in Liters
1215	5.98	13.85	2.799	15.5	1.34	132.9	64.20		0
1220	6.00	13.77	2.800	14.3	1.23	129.2	64.20		2.0
1225	5.92	13.67	2.795	42.6	2.07	135.6	64.20		4.0
1230	5.82	13.59	2.577	829	3.90	123.3	64.20		6.0
1235	5.76	13.57	2.558	406	4.06	136.4	64.20		8.0
1240	5.72	13.60	2.548	287	3.87	149.9	64.20		10.0
1245	5.71	13.54	2.551	175	4.08	162.7	64.20		12.0
1250	5.69	13.58	2.554	150	3.81	168.3	64.20		14.0
1255	5.69	13.55	2.560	130	4.00	175.1	64.20	cleaned out flow cell full of sediment	16.0
1300	5.70	13.54	1.302	100.1	4.65	181.0	64.20		18.0
1305	5.69	13.52	1.299	92.6	4.53	182.6	64.20		20.0
1310	5.69	13.50	1.296	73.6	4.60	183.4	64.22		22.0
1315	5.69	13.42	1.298	69.8	4.47	184.8	64.22		24.0
1320	5.69	13.44	1.295	54.0	4.36	185.4	64.22		26.0
1325	5.69	13.43	1.297	46.4	4.35	184.9	64.22		28.0
1330	5.69	1340	1.295	38.4	4.34	185.6	64.22		30.0

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in Liters
1335	5.67	13.38	1.297	31.8	4.18	185.2	64.22		32.0
1340	5.69	13.41	1.295	31.6	4.19	186.0	64.22		34.0
1345	5.67	13.43	1.298	31.3	4.20	185.8	64.22		36.0

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

350 ml/min = purge flow rate
200 ml/min = sample flow rate

QA/QC samples = NA
DUP Sample = NA
analysis = U, Th, Ra 226/228, Gross Alpha Beta, Gamma Spec, TAL Metals, VOCs
1 well vol = 43.8 (3 well vol = 131.6)
Samplers = M. Werth / J. Mays

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-20D
Sample Date: 3-18-09
Sampling Device: ~~QED T1200 bladder pump~~ GeoTech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 65.10
Final Water Level (feet TOIC): 65.08
Casing Type: PVC 2"

Sample ID: MW20D-GW
Sample Time: 1045
Sample Tubing: ~~QED~~ teflon-~~lined~~ coated polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 8.53
Well Depth (feet TOIC): 310
Screen Interval (feet BGS): 300-310
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

	Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	purge vol in liters
	1210	4.60	14.94	~~5922~~	13.1	~~999.99~~	194.3	65.10		—
3-17-09	1215	4.92	14.47	9009	11.0	999.99	193.9	65.10		—
	1220	stopped	to fix YSI.	Recalibrated DO to 100%	and conductivity			4.49 -	(YSI not working 1425)	—
3-18-09	0955	6.11	13.38	3.140	7.53	7.57	228.2	65.10		0
	1000	5.95	13.65	3.215	5.36	5.27	223.1	65.08		1.75
new YSI meter	1005	5.95	13.63	3.227	7.04	5.44	223.8	65.08		3.50
	1010	5.94	13.60	3.276	7.64	5.85	224.4	65.08		5.25
	1015	5.94	13.67	3.338	8.22	6.25	224.3	65.08		7.00
	1020	5.95	13.74	3.337	12.30	6.54	224.9	65.08		8.75
	1025	5.93	13.77	3.357	9.49	7.02	225.8	65.08		10.5
	1030	5.93	13.73	3.397	8.94	7.12	226.8	65.08		12.25
	1035	5.94	13.76	3.338	8.53	7.23	225.8	65.08		14.0
					averaged results					

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

3/18/09

Sampler: J. Mays 450 mL/min = Purge Flow Rate
195 mL/min = Sample Flow Rate

QA/QC Sample = NA
Dup Sample = NA
analysis: U, Th, Ra 226/228
Gross Alpha Beta, TAL
Metals, VOC's
Gamma Spec
1 Well Vol = 44.75 gal
3 Well Vol = 134.2 gal

Groundwater Sample Log

YSI 650MDS # 5818
Lamotte - R 2443

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-21D
Sample Date: 3-19-09
Sampling Device: ~~QED T1200 bladder pump~~ Geotech SS Bladder pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 64.28
Final Water Level (feet TOIC): 64.28
Casing Type: PVC

Sample ID: MW 21D-GW
Sample Time: 1025 Coted
Sample Tubing: ~~QED~~ teflon-~~lined~~ polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 4.16
Well Depth (feet TOIC): 310
Screen Interval (feet BGS): 300 - 310
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

RAD instruments reading background on ambient air + purge H_2O

TD: 310' - WL = 64.28 = 245.72 X .163 = 1 well vol 40.05 + sand pk 4.7 gallons = 44.75 gal

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Purge vol in Liters	Comments
0900	5.82	14.00	1.030	13.7	3.26	190.4	64.28	0	
0905	5.74	14.01	1.035	3.93	2.11	109.3	64.28	2.2	
0910	5.72	14.06	1.039	3.43	2.09	72.9	64.28	4.4	
0915	5.70	14.14	1.005	4.00	1.81	-38.9	64.28	6.6	
0920	5.64	14.05	0.983	41.4	2.25	-76.9	64.28	8.8	Fine sand in Turb. bottle
0925	5.59	14.00	0.968	114	2.48	-31.1	64.28	10.10	Fine sand in Turb. bottle
0930	5.56	13.98	1.013	58.0	3.47	7.1	64.28	12.30	
0935	5.57	13.94	1.041	15.2	3.83	61.9	64.27	14.50	
0940	5.54	13.90	1.056	10.38	3.92	77.7	64.27	16.70	
0945	5.55	13.85	1.058	7.99	4.07	84.9	64.27	18.90	
0950	5.56	13.80	1.083	5.39	4.20	102.8	64.28	21.10	
0955	5.55	13.89	1.085	4.23	4.27	109.2	64.28	23.30	
1000	5.56	13.87	1.089	4.10	4.32	116.7	64.28	25.50	
1005	5.54	13.88	1.091	4.07	4.37	119.2	64.28	27.70	
1010	5.55	13.80	1.093	4.16	4.31	122.6	64.28	29.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

200 - 500 mL/min purge
100 - 250 sample > acceptable range

actual purge flow rate: 500 mL/min
sample flow rate: 200 mL/min

QA/QC sample: NA
Dup Sample: NA
Analysis: U, Th, Ra 226/228, Gross A/B
TAL metals, VOC
1 well vol: 44.57g
Sample: B. Cole

Groundwater Sample Log

Project: 002260.KZ0304.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania Corning PUSCAP
Well No.: MW-22D
Sample Date: 3/19/09
Sampling Device: QED T1200 bladder ~~pump~~ Geotech Stainless steel bladder pump 1.66" 3"
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 65.8
Final Water Level (feet TOIC): 65.8
Casing Type: PVC 2"

Sample ID: MW 22D-GW
Sample Time: 1830 coated
Sample Tubing: ~~QED~~ teflon ~~lined~~ polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 41.9
Well Depth (feet TOIC): 315'
Screen Interval (feet BGS): 305-315' bgs
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

YSI # R5874
650 MDS
LaMotte 2020 #3597

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	purge vol (litres)	Comments
1435	6.58	13.22	1.430	30.5	2.03	-108.6	65.8	Ø	
1440	6.56	13.19	1.428	27.9	2.48	-133.6	65.8	2.5	
1445	6.53	13.06	1.423	147	1.58	-144.1	65.8	5.0	
1450	6.52	13.00	1.458	955	1.05	-135.6	65.8	7.5	
1455	6.49	13.28	1.512	>1000	0.90	-130.7	65.8	10	
1505	6.45	13.21	1.565	>1000	0.78	-109.1	65.8	15	
1515	6.43	13.32	1.573	>1000	1.01	-90.7	65.8	20	
1525	6.42	13.32	1.487	>1000	1.13	-72.7	65.8	25	
1535	6.41	13.33	1.561	925	1.21	-63.2	65.8	30	
1545	6.41	13.18	1.569	801	1.48	-21.5	65.8	35	
1555	6.40	13.25	1.557	106.6	1.57	-5.4	65.8	40	
1605	6.39	13.21	1.563	99.7	1.55	-2.2	65.8	45	
1615	6.37	13.39	1.560	95.7	1.46	0.7	65.8	50	
1625	6.37	13.36	1.555	140	1.41	2.5	65.8	55	
1635	6.37	13.34	1.556	197	1.39	2.3	65.8	60	
1645	6.37	13.33	1.535	305	1.25	1.9	65.8	65	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

140

Groundwater Sample Log

Well No.: MW-22D **Date:** 5/19/09

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Purge vol. (Litres)	Comments
1700	6.37	13.05	1.531	344	0.59	-7.4	65.8	72.5	
1720	6.37	13.19	1.527	533	0.43	-20.1	65.8	82.5	
1725	6.37	13.20	1.530	507	0.47	-22.6	65.8	85.0	
1730	6.36	13.23	1.519	519	0.49	-23.3	65.8	87.5	
1735	6.37	13.22	1.522	535	0.43	-22.8	65.8	90.0	
1740	6.36	13.21	1.528	505	0.45	-21.0	65.8	92.5	
1745	6.36	13.18	1.516	189	0.55	-20.1	65.8	95.0	
1750	6.36	13.16	1.515	175	0.60	-19.6	65.8	97.5	
1755	6.36	13.11	1.519	90.5	0.59	-18.2	65.8	100	
1800	6.35	13.11	1.517	63.2	0.54	-18.9	65.8	102.5	
1805	6.35	13.05	1.512	57.2	0.56	-19.4	65.8	105	
1810	6.35	13.02	1.513	49.7	0.59	-19.7	65.8	107.5	
1815	6.35	13.01	1.510	43.3	0.58	-19.9	65.8	110	
1820	6.35	13.00	1.511	42.1	0.58	-19.5	65.8	112.5	
1825	6.35	12.99	1.509	41.9	0.57	-20.0	65.8	115	

5/19/09

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

YSI #R5284
LaMotte #8876

250 ml/min = purge flow rate
250 ml/min = sampling flow rate

QA/QC sample = NA
Dup Sample = NA
Analysis = U, Th, Ra226/228, Tc, Total metals, Gross Alpha Beta, Gamma Spec
1 well vol = 48.9 (340 ft = 146.9 gal)
Sampler = M. Wenk

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-230
Sample Date: 3-19-09
Sampling Device: ~~QED T1200 bladder pump~~ GeoTech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 63.21
Final Water Level (feet TOIC): 63.21
Casing Type: PVC 2"

Sample ID: MW230-GW
Sample Time: 1045 (1050 crossed)
Sample Tubing: ~~QED~~ teflon-~~lined~~ polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 9.41
Well Depth (feet TOIC): 340
Screen Interval (feet BGS): 330-340
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in liters
0925	7.04	13.42	0.537	9.28	2.01	-130.6	63.21		0
0930	7.04	13.68	0.457	8.29	0.457	-156.6	63.20		1.25
0935	6.98	13.50	0.954	8.59	1.22	-180.1	63.20		2.50
0940	6.89	13.43	0.955	10.13	0.58	-243.1	63.21		3.75
0945	6.89	13.38	0.954	10.32	0.81	-249.1	63.21		5.0
0950	6.92	13.37	0.978	12.40	0.76	-242.2	63.21		6.25
0955	6.96	13.40	0.975	11.70	0.79	-241.3	63.21		7.50
1000	7.02	13.35	0.973	9.48	0.74	-239.7	63.21		8.75
1005	6.98	13.33	0.973	8.03	0.74	-238.1	63.21		10.00
1010	6.85	13.30	0.970	10.03	0.75	-237.5	63.21		11.25
1015	6.83	13.25	0.969	9.41	0.75	-237.1	63.21		12.50
				averaged results					

3-19-09

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

140

300 ml/min = purge flow rate
250 ml/min = sample flow rate

QA/QC samples = NA
MW831-GW = Dup sample = ~~[illegible]~~ MW
Analysis = U, Th, Ra 226/228
Gross Alpha Beta, TAL Metals, VOCs
Gamma Spec

YSI 650 MDS # 5818
LA MOTTE # R2443

1 well vol = 53.1 gal
3 well vol = 159.4 gal
samplers = M. Wade
J. Mays

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-24D
Sample Date: 3-20-09
Sampling Device: ~~QED T1200 bladder pump~~ GeoTech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 67.20
Final Water Level (feet TOIC): 67.20
Casing Type: PVC 2"

Sample ID: MW24D-GW
Sample Time: 0935
Sample Tubing: ~~QED~~ teflon-~~lined~~ coated polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 8.08
Well Depth (feet TOIC): 370
Screen Interval (feet BGS): 360-370
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge vol in liters
0815	5.46	13.32	0.439	6.35	4.60	193.7	67.20		0
0820	5.47	13.05	0.432	5.23	4.16	191.1	67.20		1.5
0825	5.45	13.12	0.437	7.91	4.68	190.3	67.20		3.0
0830	5.44	12.92	0.408	3.76	4.59	189.4	67.20		4.5
0835	5.44	13.09	0.404	4.34	4.79	149.5	67.20		6.0
0840	5.44	13.07	0.404	4.29	4.84	58.8	67.20		7.5
0845	5.45	12.86	0.404	4.88	4.82	2.0	67.20		9.0
0850	5.45	12.84	0.403	9.34	4.78	-2.5	67.20		10.5
0855	5.45	12.64	0.403	20.1	4.59	18.6	67.20		12.0
0900	5.44	12.78	0.402	17.6	4.42	43.0	67.20		13.5
0905	5.43	12.79	0.401	12.8	4.31	68.7	67.20		15.0
0910	5.44	12.57	0.401	10.02	4.15	89.5	67.20		16.5
0915	5.44	12.54	0.400	6.88	4.13	104.8	67.20		18.0
0920	5.44	12.57	0.400	8.14	4.14	109.1	67.20		19.5
0925	5.44	12.57	0.400	8.08	3.93	113.7	67.20		21.0
				averaged results					

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

M. Wade 3/20/09

250

350 ml/min = purge flow rate
190 ml/min = sample flow rate

QA/QC samples = NA
pup sample = MW800-GW
analysis = U, Th, Ra 226/228
Gross Alpha Beta, TAL
Metals, VOCs,
Gamma Spec
1 well vol = 50.5 gal (3 well vol = 151.5 gal)
samplers: M. Werth
J. Mays

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-25D
Sample Date: 3-18-09
Sampling Device: ~~QED T1200 bladder pump~~ Geotech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 63.68
Final Water Level (feet TOIC): 63.66
Casing Type: PVC 2"

Sample ID: MW25D-GW
Sample Time: 1810
Sample Tubing: ~~QED~~ teflon-lined polyethylene coated
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 16.8
Well Depth (feet TOIC): 350
Screen Interval (feet BGS): 340-350
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in liters
1735	6.57	13.98	1.230	15.2	6.43	118.9	63.68		0
1740	6.45	14.05	1.225	14.1	6.44	42.6	63.68		1.75
1745	6.40	13.94	1.223	17.9	6.40	-9.7	63.66		3.5
1750	6.38	13.86	1.221	17.3	3.60	18.5	63.66		5.25
1755	6.37	13.83	1.220	17.9	4.13	57.6	63.66		7.0
1800	6.39	13.77	1.218	17.2	4.43	56.2	63.66		8.75
1805	6.41	13.79	1.217	16.8	4.38	54.1	63.66		10.5

[signature] 3-18-09

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

450 ml/min = purge flow rate
200 = sample flow rate

QA/QC samples = MS/MSD
Dup samples = NA
analysis = U Th, Ra 226/228
Gross Alpha, beta
TAL Metals, VOCs
well vol = 3.8 L (3 vol = 11L)
samplers = M. Hawk, Jodi S. Mayo

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ sylvania
Well No.: MW-26D
Sample Date: 3/17/09
Sampling Device: ~~QED T1200 bladder pump~~ GeoTech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 63.40
Final Water Level (feet TOIC): 63.39
Casing Type: PVC 2"

Sample ID: MW-26D-09
Sample Time: 1020 ended
Sample Tubing: ~~QED~~ teflon-~~lined~~ polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 2.33
Well Depth (feet TOIC): 276
Screen Interval (feet BGS): 266 - 276
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in liters
0525	4.75	14.07	947.1	5.81	0.00	217.9	63.40	600 Q's-ORP=455	0
0530	4.52	14.32	827.0	~~27.9~~ 9.51	0.00	199.3	63.40	Swiel # RS875	2.25
purge delay due to site problems at MW-26D.								+0960690	
0915	4.55	14.15	811.9	3.65	0.00	135.0	63.40		4.5
0920	4.59	14.25	819.3	16.8	0.00	138.5	63.40		6.75
0925	4.51	14.30	827.9	22.3	0.00	149.7	63.40		9.0
0930	4.51	14.23	819.3	7.40	0.00	158.6	63.40		11.25
0935	4.49	14.16	821.7	5.47	0.00	163.3	63.40		13.50
0940	4.53	14.21	821.5	~~22.6~~ 4.25	0.00	159.6	63.40	+S.U.'s = 4.26 Alk=23.6	15.75
0945	4.53	14.29	814.7	3.47	0.00	160.3	63.40		18.0
0950	4.57	14.69	813.6	4.40	0.00	161.9	63.40		20.25
0955	4.48	14.32	815.3	5.59	0.00	161.5	63.40		22.5
1000	4.54	14.93	814.6	2.61	0.00	162.5	63.39		24.75
1005	4.55	14.32	816.5	3.90	0.00	162.2	63.39		27.0
1010	4.55	14.34	818.3	2.33	0.00	161.2	63.39		29.25
				Average results					

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

YSI 5818
LaMotte 5876

200 ml/min = purge flow rate
200 ml/min = sample flow rate

QA/QC sample = NA
DUP sample = NA
Analysis = U, Th, Ra 226/228, Gross Alpha Beta, Gamma Spec, VOCs total metals

1 well vol = 54.5 gal
3 well vol = 163.7 gal
Sampler = M. Werth

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-27D
Sample Date: 3-19-09
Sampling Device: ~~QED T1200 bladder pump~~ Geotech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 63.23
Final Water Level (feet TOIC): 63.23
Casing Type: PVC 2"

Sample ID: MW27D-GW
Sample Time: 1550
Sample Tubing: ~~QED~~ teflon-~~lined~~ sated polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 40
Well Depth (feet TOIC): 375
Screen Interval (feet BGS): 365-375
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in liters
1435	6.35	13.22	0.543	90	3.14	-172.9	63.23		0
1440	6.33	13.56	0.518	500	2.85	-134.3	63.23		1
1445	6.26	13.31	0.505	200	3.16	-109.2	63.23		2
1450	6.23	13.49	0.498	95	3.28	-90.9	63.23		3
1455	6.22	13.48	0.495	65	3.40	-73.5	63.23		4
1500	6.23	13.45	0.496	55	3.45	-64.9	63.23		5
1505	6.24	13.39	0.501	55	3.25	-46.2	63.23		6
1510	6.24	13.47	0.502	50	3.29	-40.7	63.23		7
1515	6.26	13.45	0.504	45	3.24	-26.8	63.23		8
1520	6.27	13.44	0.507	40	3.13	-21.7	63.23		9
1525	6.28	13.42	0.505	40	3.24	-11.7	63.23		10
1530	6.26	13.44	0.507	39	3.33	-1.9	63.23		11
1535	6.27	13.44	0.506	39	3.32	2.5	63.23		12
1540	6.25	13.46	0.506	40	3.34	4.3	63.23		13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Amy Weel
3/19/09

MW-29S Purge / Sample log

Groundwater Sample Log

Project: 002260, KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania Corning FUSRAP
Well No.: MW-29S
Sample Date: 3/23/09
Sampling Device: ~~QED T1200 bladder pump~~ Geotech stainless steel bladder pump
Alkalinity (mg/L as $CaCO_3$): N/A
Ferrous Iron (mg/L): N/A
Initial Water Level (Feet TOIC): 63.90
Final Water Level (feet TOIC): 63.90
Casing Type: PVC

Sample ID: MW29S-GW
Sample Time: 1640
Sample Tubing: QED teflon-lined polyethylene
Phenolphthalein Alkalinity (mg/L): N/A
Sample Turbidity (NTUs): 1-2
Well Depth (feet TOIC): 76
Screen Interval (feet BGS): 66-76
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0ppm

purge rate: 500mL/min
sample rate: 200mL/min
Analyses:
VOC
TAL metals
U, Th, Ra 226/228
Gross A/B
1 well vol. = 6.67
Sampler: B. Cle

Time	pH	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	purge vol. (litres)	Comments
1600	6.07	15.86	0.323	1.9	2.08	-80.3	63.90	0	
1605	6.06	15.84	0.333	1.0	1.96	-73.0	63.90	2.5	
1610	6.05	15.84	0.344	1.2	2.22	-63.9	63.90	5.0	
1615	6.05	15.83	0.347	0.96	2.59	-54.0	63.90	7.5	
1620	6.05	15.83	0.351	1.0	2.85	-47.1	63.90	10	
1625	6.04	15.83	0.333	1.3	2.90	-42.9	63.90	12.5	
1630	6.03	15.83	0.331	1.2	3.01	-40.9	63.90	15	
1635	6.03	15.83	0.329	1.1	2.99	-41.0	63.90	17.5	
1640	6.03	15.83	0.330	1.2	2.97	-41.1	63.90	20	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

* See MW-29S for MW-17S GW sampling data. Was put there by mistake.

Samplers: J. MAYS 450 mL/min = purge Flow Rate
250 mL/min = Sample Flow Rate

QA/QC Sample N/A
Dup Sample - MW802-GW
analysis: U, Th, Ra 226/228 Gross Alpha Beta TAL Metals VOCs, Gamma Spec

Dup Sample - MW802-GW
YSI 650 MDS K5818
LAMOTTE K5876

1 well vol = 49.86 gal
3 well vol = 149.58 gal

RAD Instruments Reading background on Ambient air + purge H2O

Groundwater Sample Log

Project:
Site: Former Griffiss Air Force Base
Well No.: MW 30D
Sample Date: 3/23/09
Sampling Device: ~~QED T1200~~ bladder pump SS
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 62.93
Final Water Level (feet TOIC): 62.93
Casing Type: PVC

Sample ID: MW-30D-GW
Sample Time: 1435
Sample Tubing: QED teflon-lined polyethylene
Phenolphthalein Alkalinity (mg/L): N/A
Sample Turbidity (NTUs): 4.3
Well Depth (feet TOIC): 62.93 ~~Rm~~ 340'
Screen Interval (feet BGS): 330 - 340
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0 ppm

TD = 340 - WL 62.93 = 277.07 x .163 = 45.16 x 3 Sand pk + 4.7 Sal = 49.86

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol in Liters
1315	6.86	14.55	1.739	21	7.81	-110.5	62.93		0
1320	6.94	14.54	1.741	19	3.71	-160.2	62.93		2.2
1325	6.95	14.45	1.741	21	3.46	-180.1	62.93		4.4
1330	6.92	14.36	1.738	15	2.95	-260.6	62.93		6.6
7335	6.80	14.38	0.987	75	2.61	-376.6	62.93		8.8
1340	6.72	14.32	0.912	60	2.46	-404.8	62.93		11.0
1345	6.70	14.35	1.194	55	3.36	-399.9	62.93		13.2
1350	6.69	14.40	1.188	9.5	3.06	-393.1	62.93		15.4
1355	6.68	14.37	1.134	6.9	2.98	-386.5	62.93		17.6
1400	6.69	14.30	1.112	4.7	2.90	-375.3	62.92		19.8
1405	6.69	14.27	1.105	4.0	3.00	-359.8	62.92		22.0
1410	6.68	14.24	1.107	3.9	3.39	-351.2	62.92		24.2
1415	6.69	14.33	1.105	5.0	3.36	-336.4	62.92		26.4
1420	6.68	14.35	1.108	4.6	3.39	-334.8	62.92		28.6
1425	6.69	14.33	1.104	4.1	3.41	-335.6	62.92		30.8
1430	6.69	14.35	1.107	4.3	3.38	-332.9	62.92		33.0

250

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

analyses: VOC, TAL metals, U, Th, Ra 226/228 grow 4/18

1 well vol: 48 gal

YSI # 5874
LaMotte # 3597

Groundwater Sample Log

Project:
Site: ~~Former Griffiss Air Force Base~~ Sylvania Corning FUSRAP
Well No.: MW-31D
Sample Date: 3/20/09
Sampling Device: QED T1200 bladder pump
Alkalinity (mg/L as $CaCO_3$): N4
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 63.10
Final Water Level (feet TOIC): 63.12
Casing Type: PVC

Sample ID: MW31D-GW
Sample Time: 1120
Sample Tubing: QED teflon-lined polyethylene
Phenolphthalein Alkalinity (mg/L): N/A
Sample Turbidity (NTUs): 45
Well Depth (feet TOIC): 330
Screen Interval (feet BGS): 320-330
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0ppm

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	purge vol. (litres)	Comments
1105	6.20	14.56	1.885	37	1.87	-153.9	63.10	0	purged, sampled
1110	6.20	14.61	1.887	35	1.89	-154.3	63.10	5	immediately
1115	6.20	14.62	1.884	35	1.90	-154.1	63.10	10	following development
									on 3/20/09

3/20/09

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

140

375 mL/min = purge flow rate (forward flow rate)
250 mL/min sampling flow rate

2 QA/QC samples, 1 MS
2 dup. samples, 1 MSD
Analysis: VOCs, TAL metals, cross Alpha 2&6, Gamma spec, Ra 226/228, U, Th
samples: MW320-GW
1 unpres 43.3 pg
3 vials 40 ml pres

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-320
Sample Date: 3-23-09
Sampling Device: ~~QED T1200 bladder pump~~ Geotech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 63.21
Final Water Level (feet TOIC): 63.21
Casing Type: PVC 2"

Sample ID: MW320-GW
Sample Time: 1710 Cortland
Sample Tubing: ~~QED~~ teflon-lined polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 25
Well Depth (feet TOIC): 365
Screen Interval (feet BGS): 315 - 365
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

250

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments (Purge Vol in liters)
1315	5.22	12.83	2.147	15.0	8.57	53.6	63.21	0
1320	5.17	13.24	2.168	18.7	7.07	-10.2	63.21	1.875
1325	5.14	13.16	2.174	22.3	6.64	-23.8	63.21	3.75
1330	5.12	13.32	2.169	18.5	6.27	-32.2	63.21	5.625
1335	5.12	13.27	2.166	15.4	6.01	-39.2	63.21	7.5
1340	5.07	13.27	2.167	35.0	6.45	-32.7	63.21	9.375
1345	5.06	13.27	2.172	132	6.52	-36.6	63.21	11.25
1350	5.13	13.39	2.200	155	6.70	-29.4	63.21	13.125
1355	5.11	13.45	2.220	77.9	6.97	-30.4	63.21	15
1400	5.02	13.42	2.216	55.8	6.54	-37.0	63.21	16.875
1405	5.02	13.22	2.194	28.4	6.30	-38.7	63.21	18.75
1410	5.05	13.17	2.152	65.3	7.11	-41.3	63.21	20.625
1415	5.08	13.01	2.157	62.1	6.34	-37.7	63.21	16.5
1420	5.06	13.47	2.174	70.7	6.68	-35.9	63.21	17.87
1425	5.07	13.49	2.175	24.8	6.66	-41.3	63.21	18.24
1430	5.05	13.52	2.173	52.2	8.85	1.4	63.21	20.61

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: MW-32D **Date:** 3-23-09

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	purge Vol. in liters
1435	5.05	13.46	2.178	95	8.62	14.2	63.21		21.98
1440	5.06	13.26	2.056	85	8.67	38.5	63.21		23.35
1445	5.05	13.31	2.156	75	8.76	38.2	63.21		24.73
1450	5.03	13.44	2.070	100	8.91	36.2	63.21		26.10
1455	5.03	13.34	2.170	140	8.03	48.2	63.21		27.48
1500	5.02	13.26	2.138	130	8.11	48.7	63.21		28.85
1505	5.02	13.25	2.164	120	8.69	54.5	63.21		30.22
1510	5.01	13.27	2.166	120	8.62	57.5	63.21		31.60
1525	4.99	13.26	2.167	120	8.15	56.6	63.21		35.72
1540	4.99	13.14	2.158	120	8.15	53.1	63.21		39.84
1455	4.98	13.23	2.155	85	8.12	52.3	63.21		43.96
1510	4.98	12.91	2.156	100	8.28	56.0	63.21		48.08
1525	4.98	13.31	2.153	70	8.92	58.2	63.21		52.20
1540	4.98	13.20	2.141	60	8.77	59.9	63.21		56.32
1545	4.97	12.98	2.170	45	8.57	59.7	63.21		57.69
1550	4.98	12.85	2.169	39	7.98	61.1	63.21		59.06
1555	4.98	13.08	2.152	29	9.02	61.8	63.21		60.43
1600	4.97	13.04	2.155	24	8.10	62.1	63.21		61.80
1605	4.97	13.08	2.155	25	8.10	62.0	63.21		64.17

15 min intervals

5 min intervals

251

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

3/23/09

325 ml/min = purge flow rate
195 ml/min = sample flow rate

QA/QC samples = NA
Dup sample = NA
analysis = U, Th, Ra 226/228, Gross Alpha Beta, TAL metals, VOCs, Gamma Spec
1 well vol = 43 (3 well vol) Sep 5 = 130.5 Sep
Samplers = M. Werth, J. Mays

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-33D
Sample Date: 3-18-09
Sampling Device: ~~QED T1200 bladder pump~~ GeoTech stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 57.43
Final Water Level (feet TOIC): 57.43
Casing Type: PVC 2"

Sample ID: MW33D-GW
Sample Time: 1300
Sample Tubing: ~~QED~~ teflon-~~lined~~ coated polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs): 2.40
Well Depth (feet TOIC): 300
Screen Interval (feet BGS): 290-300
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	Purge Vol. in liters
1220	6.37	13.52	0.950	2.98	6.19	69.2	57.43		0
1225	6.23	13.87	0.807	2.34	3.63	-85.1	57.43		1.625
1230	6.04	13.94	0.722	2.43	2.15	-134.0	57.43		3.25
1235	6.09	13.95	0.587	2.33	1.48	-155.3	57.43		4.875
1240	6.08	14.10	0.570	2.20	1.19	-153.6	57.43		6.5
1245	6.05	14.09	0.562	2.84	1.16	-147.3	57.43		8.125
1250	6.03	14.18	0.557	2.40	1.26	-147.2	57.43		9.75
				averaged results					

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

3/18/09

250

purge rate: 450 mL/min
sample rate: 150 mL/min

analyses: VOC, TAL metals, U, Th, Ra 226/228, Gross A/B

Groundwater Sample Log

Project:
Site: Former Griffiss Air Force Base
Well No.: MW-34D
Sample Date: 3/24/09
Sampling Device: QED T1200 bladder pump
Alkalinity (mg/L as $CaCO_3$): N/A
Ferrous Iron (mg/L): N/A
Initial Water Level (Feet TOIC): 58.80
Final Water Level (feet TOIC): 58.80
Casing Type: PVC

Sample ID: MW34D-GW-U / MW34D-GW-F
Sample Time: 1120
Sample Tubing: QED teflon-lined polyethylene
Phenolphthalein Alkalinity (mg/L): N/A
Sample Turbidity (NTUs): >1000 Submitted filtered and unfiltered smpls.
Well Depth (feet TOIC): 280
Screen Interval (feet BGS): 270-280
Casing Inner Diameter (inches): 2
Initial OVA Reading (ppm): 0.0

YSI # 5874
LaMotte 2020 # 3597

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	purge vol. Liters	Comments
0900	9.63	12.45	0.302	>1000	8.17	193.4	58.8	0	
0910	9.74	12.77	0.297	>1000	0.77	151.2	58.8	5	
0920	8.02	12.69	0.228	>1000	3.36	174.2	58.8	10	
0930	7.41	12.74	0.218	>1000	3.98	179.3	58.8	15	Submitted
0940	7.17	12.58	0.214	>1000	4.07	174.4	58.8	20	filtered + unfiltered
0950	7.03	12.69	0.213	>1000	4.27	168.0	58.8	25	Samples to lab.
1000	6.97	12.74	0.212	>1000	4.33	164.5	58.8	30	
1010	6.93	12.58	0.211	1000	4.33	160.8	58.8	35	
1020	6.87	12.69	0.210	>1000	4.35	155.7	58.8	40	
1030	6.85	12.85	0.209	>1000	4.40	156.1	58.8	45	
1040	6.85	12.88	0.208	>1000	4.38	154.9	58.8	50	
1050	6.84	12.97	0.209	>1000	4.40	155.6	58.8	55	
1100	6.83	12.92	0.208	>1000	4.40	154.8	58.8	60	
1105	6.83	12.87	0.207	>1000	4.40	154.9	58.8	62.5	
1110	6.83	12.91	0.208	>1000	4.40	154.7	58.8	65	
1115	6.83	12.99	0.208	>1000	4.41	154.8	58.8	67.5	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

analysis: VOC, gamma spec, TAL metals, gross alpha, beta, U, Th, Ra 226/228

purge rate = 500mL/min
sample rate = 200 mL/min

1 well vol = 8.5 gals
3 well vol = 25.5 gals

samplers: B. Cole

Groundwater Sample Log

Project:
Site: ~~Former Griffiss Air Force Base~~ Sylvania Corning FUSRAP
Well No.: MW-395
Sample Date: 3/23/09
Sampling Device: ~~QED T1200 bladder pump~~ Geotech stainless steel bladder pump
Alkalinity (mg/L as $CaCO_3$): N/A
Ferrous Iron (mg/L): N/A
Initial Water Level (Feet TOIC): 62.60
Final Water Level (feet TOIC): 62.60
Casing Type: PVC

Sample ID: MW395-6-W
Sample Time: 1410
Sample Tubing: QED teflon-lined polyethylene
Phenolphthalein Alkalinity (mg/L): N/A
Sample Turbidity (NTUs): 14
Well Depth (feet TOIC): 86
Screen Interval (feet BGS): 76-86
Casing Inner Diameter (inches): 2
Initial OVA Reading (ppm): 0ppm

YSI # 5874

Lamotte # 3597

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Purge Vol (Liters)	Comments
1320	5.76	13.81	0.113	14	9.45	108.3	62.60	0	
1325	5.71	13.99	0.112	43	8.79	114.1	62.60	2.5	
1330	5.68	14.36	0.111	80	8.40	126.4	62.60	5.0	
1335	5.69	14.54	0.108	40	8.25	122.2	62.60	7.5	
1340	5.69	14.56	0.108	30	8.25	121.5	62.60	10	
1345	5.69	14.57	0.107	22	8.26	122.0	62.60	12.5	
1350	5.69	14.58	0.106	15	8.30	122.4	62.60	15	
1355	5.69	14.58	0.105	14	8.27	122.7	62.60	17.5	
1400	5.69	14.52	0.105	15	8.23	122.1	62.60	20	
1405	5.70	14.65	0.105	14	8.20	122.3	62.60	22.5	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

250

300 ml/min = purge rate
250 ml/min = sample rate

QA/QC = NA
Dup sample = NA
analysis = U, Th, Ra226/228, TAL Metals, VOCs, Gamma spec, Gross Alpha, Beta
sampler - M. Wroth
1 vol = 39.6 gal
3 vol = 118.9 gal

Groundwater Sample Log

Project: 002260.KZ03.04.07
Site: ~~Former Griffiss Air Force Base~~ Sylvania
Well No.: MW-280
Sample Date: 3-24-07
Sampling Device: ~~QED T1200 bladder pump~~ Geotech Stainless steel pump
Alkalinity (mg/L as $CaCO_3$): NA
Ferrous Iron (mg/L): NA
Initial Water Level (Feet TOIC): 68.63
Final Water Level (feet TOIC):
Casing Type: PVC 2"

Sample ID: MW 280-GW
Sample Time: 1350 (unfiltered + filtered)
Sample Tubing: ~~QED~~ teflon-lined polyethylene
Phenolphthalein Alkalinity (mg/L): NA
Sample Turbidity (NTUs):
Well Depth (feet TOIC): 287
Screen Interval (feet BGS): 277-287
Casing Inner Diameter (inches): 2"
Initial OVA Reading (ppm): 0.0

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments (purge vol in liters)
0845	6.83	13.10	2.051	120	5.74	-27.7	68.63	0
0850	7.04	13.65	2.032	90	4.25	-32.0	68.63	1.5
0855	7.01	12.99	2.033	100	3.99	-60.2	68.63	3.0
0900	7.00	13.11	2.022	270	3.27	-41.6	68.63	4.5
0905	6.86	13.01	2.036	120	400	-25.8	68.63	6.0
0910	6.82	13.02	1.996	110	4.10	-24.7	68.63	7.5
0915	6.79	13.04	1.988	120	3.71	-24.2	68.63	9.0
0920	6.79	12.94	2.038	130	4.13	-24.0	68.63	10.5
0925	6.80	12.94	2.056	130	3.90	-22.6	68.63	12.0
0930	6.80	12.95	2.054	120	3.27	-24.0	68.63	13.5
0935	6.79	12.89	2.058	110	3.25	-24.1	68.63	15.0
0940	6.79	12.91	2.057	110	3.69	-24.0	68.63	16.5
0945	6.79	12.95	2.051	120	3.47	-23.1	68.63	18.0
0950	6.79	12.91	2.056	140	3.46	-23.9	68.63	19.5
0955	6.79	12.96	2.044	130	3.26	-25.2	68.63	21.0
1000	6.78	12.93	2.049	120	3.05	-25.0	68.63	22.5

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: MW-28D **Date:** 3-24-09

Switched to 15min intervals per Dan

Time	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments	purge vol in liters
1015	6.79	12.88	2.053	140	3.32	-33.3	68.63		24.0
1030	6.80	12.89	2.054	150	3.03	-37.6	68.63		25.5
1045	6.79	12.92	2.052	120	2.85	-41.1	68.63		27.0
1100	6.79	13.03	2.022	100	2.67	-42.4	68.63		28.5
1115	6.77	12.91	2.018	100	2.44	-37.0	68.63		30.0
1130	6.75	12.97	2.026	100	2.41	-35.5	68.63		31.5
1145	6.74	13.05	2.005	100	2.07	-30.2	68.63		33.0
1200	6.70	13.02	2.009	100	~~2.00~~ 1.81	-22.9	68.63		34.5
1215	6.69	13.01	2.016	95	1.76	-21.2	68.63		36.0
1230	6.69	12.98	2.055	100	1.70	-24.2	68.63		37.5
1245	6.67	13.04	2.041	100	1.57	-22.6	68.63		39.0
1300	6.68	13.05	2.059	100	1.44	-24.2	68.63		40.5
1315	6.68	13.03	2.059	100	1.68	-24.8	68.63		42.0
1330	6.67	13.08	2.054	95	1.54	-24.5	68.63		43.5
1345	6.67	13.10	2.055	100	1.51	-24.9	68.63		45.0
									46.5

3/24/09

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Monitoring Well Sampling Details
Sylvania Corning FUSRAP Site
Hicksville, NY
Spring 2010

Well ID	Installation Phase	Screened Interval (ft bgs)	Sample Collected (Date/Time)	Final Groundwater Quality Parameters						Samples			Notes
				pH	Temp (ºC)	Specific Conductance (µS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	VOCs[1] (14 d)	Metals[2] (14d)	RAD +[3] (14 d)	
MW-13D	Phase IIIA	290-300	3/24/10 11:05	5.51	13.73	0.098	58	5.02	2.55	1	1	1	
MW-13S	Phase IIIB	70-80	3/24/10 9:50	4.90	14.16	1.278	42.2	9.82	0.61	1	1	1	
MW-14D	Phase IIIA	294-304	3/23/10 12:25	5.72	13.03	0.258	28.8	4.14	48.0	1	1	1	
MW-14DD	Phase IIIB	365-375	3/22/10 16:30	6.10	13.40	0.239	3.6	2.13	8.34	1	1	1	
MW-14S	Phase IIIB	70-80	3/22/10 14:20	5.09	13.81	0.438	44.4	9.21	2.35	1	1	1	
MW-15D	Phase IIIA	300-310	3/23/10 13:45	5.17	13.65	0.198	51.3	6.52	1.19	1	1	1	
MW-15DD	Phase IIIB	360-370	3/23/10 15:50	6.02	13.48	0.113	39.9	6.42	1.42	1	1	1	
MW-15S	Phase IIIB	70-80	3/23/10 10:50	6.18	12.96	2.588	29.7	9.55	0.88	1	1	1	
MW-16D	Phase IIIA	280-290	4/7/10 9:25	6.72	15.11	0.265	-22.5	7.09	350.0	1	2	2	filtered and unfiltered samples for metals and RAD+
MW-16S	Phase IIIB	69.7-79.7	4/7/10 11:25	5.89	15.86	0.182	24.4	0.82	1.63	1	1	1	
MW-17S	Phase IIIA	65-75	3/23/10 15:35	6.24	15.32	0.133	-56.1	1.47	5.72	1	1	1	
MW-18I	Phase IIIB	118-128	3/31/10 15:20	5.39	14.01	1.341	162.5	8.93	2.88	1	1	1	
MW-18S	Phase IIIA	62-72	4/1/10 7:55	6.58	13.80	1.172	105.9	6.99	1.07	1	1	1	
MW-19D	Phase IIIA	296-306	3/31/10 13:20	5.57	13.16	0.380	99.4	6.08	17.30	1	1	1	
MW-19S	Phase IIIB	70-80	3/24/10 16:15	5.77	14.26	0.091	162	3.73	0.03	1	1	1	
MW-20D	Phase IIIA	300-310	4/5/10 14:40	5.75	14.90	2.696	259.2	8.89	8.85	1	1	1	
MW-20I	Phase IIIB	140-150	4/1/10 12:25	5.83	14.52	1.384	136.9	6.16	9.92	1	1	1	
MW-20S	Phase IIIB	70-80	4/1/10 12:20	6.19	14.54	1.288	-5.1	6.53	2.00	1	1	1	
MW-21D	Phase IIIA	300-310	3/24/10 15:01	5.36	14.70	0.270	162.1	4.23	3.67	1	1	1	
MW-21I	Phase IIIB	170-180	3/24/10 14:20	4.32	14.65	1.084	341.5	8.09	47.10	1	1	1	
MW-21S	Phase IIIB	70-80	3/24/10 15:00	6.35	15.02	0.246	-49.6	1.35	4.32	1	1	1	
MW-22D	Phase IIIA	305-315	4/1/10 9:45	6.20	13.72	2.141	-28.1	0.26	43.30	1	1	1	
MW-22I	Phase IIIB	140-150	4/1/10 9:25	5.66	13.73	1.284	8.9	8.31	1.20	1	1	1	
MW-22S	Phase IIIB	70-80	3/31/10 16:05	6.17	13.87	0.422	-18.2	3.71	1.30	1	1	1	
MW-23D	Phase IIIA	330-340	3/31/10 9:00	6.73	13.76	0.638	-75.9	0.44	10.12	1	1	1	
MW-23I	Phase IIIB	170-180	3/29/10 10:00	6.54	13.50	0.592	12	1.92	16.40	1	1	1	
MW-23S	Phase IIIB	90-100	3/29/10 8:50	6.19	13.76	0.128	175.5	7.76	2.02	2	2	2	duplicate MW-901-GWR2 and MS/MSD
MW-24D	Phase IIIA	360-370	3/31/10 14:20	5.22	14.08	0.199	283.6	5.82	2.52	2	2	2	duplicate MW-903-GWR2
MW-24S	Phase IIIB	70-80	3/31/10 12:30	5.99	14.56	0.146	218.4	7.74	0.55	1	1	1	
MW-25D	Phase IIIA	340-350	3/31/10 9:10	5.44	13.79	1.165	116.8	3.20	3.69	1	1	1	
MW-25I	Phase IIIB	230-240	3/31/10 10:01	5.62	13.88	0.680	4.5	6.95	1.80	1	1	1	
MW-25S	Phase IIIB	105-115	3/31/10 10:45	5.16	14.02	0.400	172.7	6.80	1.35	1	1	1	
MW-26D	Phase IIIA	266-276	3/29/10 15:20	5.35	14.21	0.323	165.8	6.54	1.85	1	1	1	
MW-26I	Phase IIIB	110-120	3/31/10 8:30	5.63	14.29	0.504	159	2.22	1.13	1	1	1	

Monitoring Well Sampling Details
Sylvania Corning FUSRAP Site
Hicksville, NY
Spring 2010

Well ID	Installation Phase	Screened Interval (ft bgs)	Sample Collected (Date/Time)	Final Groundwater Quality Parameters						Samples			Notes
				pH	Temp (ºC)	Specific Conductance (µS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	VOCs[1] (14 d)	Metals[2] (14d)	RAD +[3] (14 d)	
MW-27D	Phase IIIA	365-375	4/2/10 9:40	5.19	13.95	0.177	249.9	6.87	45.60	1	1	1	
MW-27I	Phase IIIB	280-290	4/2/10 9:50	5.09	14.15	3.484	9.2	6.99	174.0	1	2	2	filtered and unfiltered samples for metals and RAD+
MW-27S	Phase IIIB	78-88	4/7/10 15:50	5.46	15.89	0.147	163.7	2.41	0.74	1	1	1	MS/MSD
MW-28D	Phase IIIA	277-287	3/31/10 12:40	6.46	13.55	1.921	-32.6	0.40	120.0	1	2	2	filtered and unfiltered samples for metals and RAD+
MW-28I	Phase IIIB	149-159	3/31/10 13:50	7.89	13.76	0.801	119.9	4.70	46.40	1	1	1	
MW-28S	Phase IIIB	90-100	3/31/10 15:00	6.04	13.91	0.452	116.9	6.00	6.27	1	1	1	
MW-29S	Phase IIIA	66-76	3/23/10 8:45	6.03	15.54	0.494	90.5	6.45	3.94	2	2	2	MS/MSD and duplicate MW-900-GWR2
MW-30D	Phase IIIA	330-340	4/1/10 16:00	5.80	15.41	0.920	25.5	2.63	4.50	1	1	1	
MW-30I	Phase IIIB	230-240	4/2/10 9:03	6.18	15.06	0.655	142	7.36	0.39	2	2	2	duplicate MW-905-GWR2
MW-30S	Phase IIIB	90-100	4/1/10 15:40	5.14	15.12	0.137	20.3	9.17	1.50	1	1	1	
MW-31D	Phase IIIA	320-330	4/1/10 14:20	5.30	15.45	2.623	101.2	4.41	29.90	1	1	1	
MW-31I	Phase IIIB	180-190	4/1/10 16:05	5.45	16.06	0.671	166.2	2.51	0.91	1	1	1	
MW-32D	Phase IIIA	295-305	3/23/10 13:00	5.04	12.98	2.046	72.7	1.69	218.0	1	2	2	filtered and unfiltered samples for metals and RAD+
MW-33D	Phase IIIA	290-300	4/2/10 8:45	5.85	13.02	1.047	-59.9	0.55	36.10	1	1	1	
MW-33S	Phase IIIB	65-75	4/2/10 10:15	5.06	13.33	0.076	199.5	12.02	4.01	1	1	1	
MW-34D	Phase IIIA	270-280	4/5/10 10:00	10.08	14.03	0.389	154.7	3.00	1394.0	1	2	2	filtered and unfiltered samples for metals and RAD+
MW-34S	Phase IIIB	65-75	4/5/10 12:25	5.70	13.97	0.087	163.7	6.81	2.22	2	2	2	duplicate MW-906-GWR2
MW-39S	Phase IIIA	76-86	3/24/10 12:10	5.45	15.07	0.199	29.7	9.32	5.34	1	1	1	
MW-41S	Phase IIIB	66-76	3/31/10 16:05	6.16	14.17	0.647	206.1	2.48	1.15	1	1	1	
MW-42I	Phase IIIB	140-150	4/1/10 9:50	6.06	13.74	0.724	98.7	7.07	10.27	1	1	1	
MW-43S	Phase IIIB	63-73	4/1/10 12:20	5.89	14.38	0.790	104	6.67	0.19	1	1	1	
MW-44S	Phase IIIB	65-75	4/1/10 11:00	6.42	14.71	0.596	141.8	2.69	0.16	2	2	2	duplicate MW-904-GWR2 and MS/MSD
MW-49S	Phase IIIB	100-110	3/31/10 10:15	5.71	14.22	0.090	171.1	6.96	1.28	2	2	2	duplicate MW-902-GWR2
MW-50I	Phase IIIB	120-130	3/31/10 11:00	5.58	14.03	0.538	94.7	4.39	4.42	1	1	1	
MW-51I	Phase IIIB	130-140	4/1/10 13:55	5.42	15.21	0.610	272.1	7.50	0.65	1	1	1	
MW-52D	Phase IIIB	275-285	4/5/10 14:50	6.35	14.14	0.250	117.3	1.63	27.10	1	1	1	
MW-53S	Phase IIIB	70-80	4/5/10 12:10	5.70	13.86	0.129	171.5	10.56	2.69	1	1	1	
MW-55S	Phase IIIB	85.5-95.5	4/7/10 12:10	5.82	15.49	0.810	-5	7.64	10.74	1	1	1	
MW-3	GTEOSI	58-78	3/21/10 8:55	5.35	19.24	0.195	111.4	8.73	14.80	1	1	1	
MW-4	GTEOSI	58-78	3/21/10 11:36	5.38	19.33	0.115	84.3	8.86	6.64	1	1	1	

Monitoring Well Sampling Details
Sylvania Corning FUSRAP Site
Hicksville, NY
Spring 2010

Well ID	Installation Phase	Screened Interval (ft bgs)	Sample Collected (Date/Time)	Final Groundwater Quality Parameters						Samples			Notes
				pH	Temp (ºC)	Specific Conductance (µS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	VOCs[1] (14 d)	Metals[2] (14d)	RAD +[3] (14 d)	
MW-8	GTEOSI	120-130	3/21/10 10:25	5.48	15.37	0.338	77.8	5.90	5.11	1	1	1	
MW-9	GTEOSI	72-82	3/21/10 13:10	5.12	18.43	0.056	35	8.66	1.74	1	1	1	
MW-10	GTEOSI	120-130	3/21/10 14:47	4.46	16.59	0.283	60.8	8.84	7.46	1	1	1	
MW-11	GTEOSI	71-81	3/22/10 9:20	5.87	17.74	0.130	21.6	9.30	2.98	1	1	1	
MW-12	GTEOSI	120-130	3/21/10 16:05	6.10	15.53	0.501	24.3	7.82	1.89	1	1	1	

Notes:
[1] VOC - TCL VOCs by method 8260b
[2] Metals - TAL Metals + Hg by methods 6010/6020 and 7470.
[3] Rad+ - Radium 226/228, gamma spectroscopy, gross alpha/beta, isotopic thorium and isotopic uranium

Acronyms:
bgs - below ground surface
DO - Dissolved Oxygen
ID - identification
ft - feet
gpm - gallons per minute
mg/L - milligrams per liter
mV = millivolts
NTU - nephelometric turbidity units
ORP - oxidation-reduction potential
Turb - turbidity
Temp - temperature
ºC - degrees Celcius
µS/cm - microseimens per centimeter. Conductivity corrected to 25 °C.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-3
Sample Date: 6/4/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):68-78
Initial Water Level (Feet TOIC):61.27
Final Water Level (feet TOIC):61.27
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-3-R1
Sample Time: 1610
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 5.8
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1512	1.25	5.51	18.02	149	7.7	9.89	229	60.27	
1517	2.50	5.48	17.10	145	7.4	9.42	238	60.27	
1522	3.75	5.49	16.90	145	7.7	9.15	244	60.27	
1527	5.00	5.48	16.82	144	6.8	8.69	244	60.27	
1532	6.25	5.48	16.95	144	6.9	8.60	244	60.27	
1537	7.50	5.49	17.06	144	6.2	8.57	245	60.27	
1542	8.75	5.49	16.99	144	6.2	8.31	247	60.27	
1547	10.00	5.46	16.75	144	6.0	8.34	248	60.27	
1552	11.25	5.50	16.89	145	5.5	8.18	246	60.27	
1557	12.50	5.50	16.80	144	5.7	8.00	249	60.27	
1602	13.75	5.50	16.72	145	5.5	8.00	252	60.27	
1607	15.00	5.49	16.86	145	5.8	7.99	248	60.27	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-4
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):58-78
Initial Water Level (Feet TOIC):59.86
Final Water Level (feet TOIC):59.86
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-4-R1
Sample Time: 1100
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.9
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1015	1.0	5.66	17.64	132	1.3	8.74	123	59.86	
1020	2.0	5.61	17.33	134	1.4	7.63	154	59.86	
1025	3.0	5.57	17.23	136	1.8	7.11	167	59.86	
1030	4.0	5.55	17.37	137	1.6	6.82	175	59.86	
1035	5.0	5.58	17.22	138	1.7	6.82	180	59.86	
1040	6.0	5.57	17.33	139	1.7	6.83	183	59.86	
1045	7.0	5.59	17.37	140	1.9	6.80	184	59.86	
1050	8.0	5.59	17.28	141	1.8	6.88	188	59.86	
1055	9.0	5.61	17.08	142	1.8	6.84	189	59.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-8
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):60.04
Final Water Level (feet TOIC):60.04
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-8-R1
Sample Time: 0900
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.5
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 210
Purge Rate d/sampling (ml/min): 210
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0818	1.05	5.73	15.63	399	2.3	4.65	128	60.04	
0823	2.10	5.79	15.52	391	2.1	4.85	125	60.04	
0828	3.15	5.79	15.62	392	1.9	4.30	120	60.04	
0833	4.20	5.78	15.63	394	1.7	4.03	114	60.04	
0838	5.25	5.77	15.83	395	1.6	3.53	106	60.04	
0843	6.30	5.77	15.95	399	1.7	3.43	102	60.04	
0848	7.35	5.77	15.95	399	1.6	3.18	100	60.04	
0853	8.40	5.76	15.88	402	1.6	3.10	96	60.04	
0858	9.45	5.75	15.79	404	1.5	2.99	95	60.04	Collected duplicate sample
									MW-801-GW-R1

Key:
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-9
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 82
Screen Interval (feet TOIC):72-82
Initial Water Level (Feet TOIC):60.60
Final Water Level (feet TOIC):60.68
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-9-R1
Sample Time: 1335
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.6
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1150	1.250	5.57	16.29	45	1.3	9.56	170	60.61	
1155	2.5	5.55	16.52	45	0.5	9.13	179	60.61	
1200	3.75	5.59	16.56	45	0.8	9.34	183	60.61	
1205	5.00	5.60	16.27	45	0.6	9.28	186	60.61	
1210	6.25	5.53	16.95	44	0.5	9.03	194	60.61	
Stop pump: MP50 broke; switch controller to MP15									
1228	7.5	5.62	17.45	44	0.6	9.30	192	60.61	
1233	8.45	4.62	16.31	52	0.6	8.35	253	60.61	
1238	9.70	4.50	16.18	54	0.7	7.75	271	60.61	
1243	10.95	4.40	16.20	57	0.7	7.24	284	60.62	
1248	12.20	4.37	16.24	57	0.8	6.73	288	60.62	
1253	13.45	4.37	17.51	56	0.5	6.40	287	60.62	
1258	14.70	4.39	18.14	56	0.3	6.42	286	60.62	
1303	15.95	4.39	18.59	55	0.3	6.29	287	60.62	
Stopped pump; ran out of CO2 – Changed canister and continued									
1315	17.20	4.39	16.55	57	1.1	6.89	293	60.68	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1320	18.45	4.34	15.43	57	2.0	6.76	303	60.68	
1325	19.70	4.30	15.43	58	2.2	6.53	308	60.68	
1330	20.95	4.30	15.27	58	2.6	6.46	313	60.68	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-10
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):60.56
Final Water Level (feet TOIC):60.57
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-10-R1
Sample Time: 1515
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 3.7
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1430	1.0	5.44	16.82	69	4.5	10.48	190	60.57	
1435	2.0	5.38	16.55	67	3.8	8.82	197	60.57	
1440	3.0	5.36	16.29	67	3.9	7.30	207	60.57	
1445	4.0	5.33	16.24	67	3.6	7.21	211	60.57	
1450	5.0	5.32	16.27	67	4.1	6.92	215	60.57	
1455	6.0	5.31	16.35	67	4.1	6.86	211	60.57	
1500	7.0	5.31	16.40	67	3.4	6.57	211	60.57	
1505	8.0	5.33	16.45	67	3.9	6.62	213	60.57	
1510	9.0	5.31	16.18	68	3.8	6.44	219	60.57	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-11
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 81
Screen Interval (feet TOIC):71-81
Initial Water Level (Feet TOIC):60.81
Final Water Level (feet TOIC):60.81
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-11-R1
Sample Time: 1710
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.6
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1625	1.0	5.56	16.25	243	0.5	10.32	170	60.81	
1630	2.0	5.54	16.02	240	0.4	9.86	178	60.81	
1635	3.0	5.53	15.70	237	0.4	9.68	187	60.81	
1640	4.0	5.51	15.46	232	0.8	9.58	196	60.81	
1645	5.0	5.50	15.44	231	0.4	9.41	200	60.81	
1650	6.0	5.49	15.17	231	0.5	9.46	202	60.81	
1655	7.0	5.53	15.16	232	0.5	9.57	202	60.81	
1700	8.0	5.53	15.12	232	0.4	9.65	205	60.81	
1705	9.0	5.52	14.99	232	0.6	9.60	208	60.81	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-12
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):61.38
Final Water Level (feet TOIC):60.30
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-12-R1
Sample Time: 0935
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.4
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0843	1.0	6.08	15.05	576	1.9	7.56	215	60.30	
0848	2.0	5.92	14.41	593	1.8	7.09	218	60.30	
0853	3.0	5.91	14.39	593	1.8	6.76	220	60.30	
0858	4.0	5.92	14.29	595	1.5	6.48	223	60.30	
0903	5.0	5.93	14.37	596	1.6	6.59	222	60.30	
0908	6.0	5.95	14.45	597	1.5	6.43	222	60.30	
0913	7.0	5.97	14.45	597	1.3	6.40	221	60.30	
0918	8.0	5.98	14.35	598	1.4	6.10	222	60.30	
0923	9.0	5.99	14.35	599	1.2	6.12	221	60.30	
0928	10.0	5.95	14.31	599	1.4	6.06	224	60.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-13D
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 300
Screen Interval (feet TOIC):290-300
Initial Water Level (Feet TOIC):64.09
Final Water Level (feet TOIC):64.09
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-13D-R1
Sample Time: 1235
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1135	0.3	6.01	16.62	143	2.6	5.05	188	64.09	
1140	1.8	5.82	16.10	117	1.1	3.5	203	64.09	
1145	3.3	5.81	15.89	113	1.1	3.78	213	64.09	
1150	4.8	5.82	15.73	112	1.7	4.31	214	64.09	
1155	6.3	5.82	15.76	111	3.6	4.86	218	64.09	
1200	7.8	5.81	15.67	111	9.5	5.88	220	64.09	
1205	9.3	5.77	15.67	108	7.2	6.58	224	64.09	
1210	10.8	5.74	15.58	106	4.5	7.02	228	64.09	
1215	12.3	5.72	15.54	107	2.1	7.34	234	64.09	
1220	13.8	5.72	15.58	108	2.4	7.36	233	64.09	
1225	15.3	5.71	15.63	108	1.9	7.38	234	64.09	
1230	16.8	5.72	15.74	108	1.8	7.37	234	64.09	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-13S
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.98
Final Water Level (feet TOIC):64.00
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-13S-R1
Sample Time: 1030
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0930	0.4	5.34	16.51	1200	5.1	9.86	217	63.98	
0935	1.9	5.29	15.82	1290	4.6	8.81	239	63.99	
0940	3.4	5.28	15.71	1290	4.3	8.35	255	63.99	
0945	4.9	5.28	16.34	1300	3.9	7.9	257	64.00	
0950	6.4	5.28	15.82	1320	3.4	8.01	269	64.00	
0955	7.9	5.27	15.85	1360	3.4	7.92	274	64.00	
1000	9.4	5.27	15.87	1420	3.3	7.92	279	64.00	
1005	10.9	5.27	15.83	1480	3.3	7.86	286	64.00	
1010	12.4	5.27	15.70	1530	3.5	7.83	294	64.00	
1015	13.9	5.27	15.60	1590	3.0	7.92	298	64.00	
1020	15.4	5.27	15.54	1620	3.1	7.77	283	64.00	
1025	16.9	5.27	15.67	1630	2.7	7.73	289	64.00	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14D
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 304
Screen Interval (feet TOIC):294-304
Initial Water Level (Feet TOIC):63.17
Final Water Level (feet TOIC):63.38
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-14D-R1
Sample Time: 1050
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 30.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 275-200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0930	5.7	6.73	21.61	2	22.9	8.79	208	63.45	
0935	---	---	---	---	---	---	---	---	Adjusted flow rate to 200ml/min
0940	7.1	6.68	6.68	15.57	269	5.6	1.44	63.60	
0945	8.1	6.81	6.81	18.77	1	13.1	1.68	63.47	
0950	9.1	7.18	7.18	15.04	855	145	0.83	63.46	
0955	---	---	---	---	---	---	---	---	Horiba trouble shooting
1000	---	---	---	---	---	---	---	---	Horiba trouble shooting
1005	10.1	7.26	18.57	2	115	8.71	167	63.45	
1010	11.1	7.41	16.65	2160	1000	1.74	163	63.44	
1015	12.1	7.37	16.39	2330	320	1.08	144	63.43	
1020	13.1	7.24	16.48	2360	169	1.20	113	63.44	
1025	14.1	7.08	16.57	2270	90.3	1.34	93	63.41	
1030	15.1	7.00	16.77	2170	60.7	1.36	90	63.41	
1035	16.1	6.82	16.84	2060	42.1	1.61	92	63.42	
1040	17.1	6.74	16.90	1950	34.6	1.61	95	63.44	
1045	18.1	6.69	17.00	1900	30.7	1.66	99	63.41	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14DD
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC):365-375
Initial Water Level (Feet TOIC):62.92
Final Water Level (feet TOIC):62.95
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-14DD-R1
Sample Time: 1540
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 225
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1425	0.225	5.85	22.10	1	114	17.82	168	62.96	
1430	1.3	5.85	22.10	1	114	17.82	168	62.96	
1435	2.4	5.85	22.10	1	114	17.82	168	62.96	
1440	3.5	5.85	22.10	1	114	17.82	168	62.96	
1445	4.6	5.85	22.10	1	114	17.82	168	62.96	Adjusted flow rate to 250ml/min
1450	5.7	5.85	22.10	1	114	17.82	168	62.96	
1455	6.8	5.85	22.10	1	114	17.82	168	62.96	Cleaned and restarted Horiba U-52
1500	7.9	5.85	14.97	241	14.2	7.13	228	62.96	
1505	9.1	5.56	14.62	247	9.3	6.83	243	62.95	
1510	10.2	5.57	14.60	249	7.3	6.85	246	62.95	
1515	11.3	5.57	14.62	251	5.3	6.83	247	62.95	
1520	12.4	5.57	14.67	252	4.7	6.80	243	62.95	
1525	13.5	5.57	14.82	252	3.4	6.70	250	62.95	
1530	14.6	5.56	14.63	252	3.1	6.83	260	62.95	
1535	15.7	5.56	14.47	251	2.7	6.76	255	62.95	

Key:
BGS = Below ground surface.
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14S
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.12
Final Water Level (feet TOIC):63.13
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-14S-R1
Sample Time: 1655
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 5.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1625	0.4	5.53	15.97	898	21.2	9.65	202	63.12	
1630	1.7	5.45	15.09	901	20.6	9.23	223	63.12	
1635	3.0	5.44	14.84	905	14.1	8.89	246	63.12	
1640	4.3	5.43	14.74	905	9.4	8.77	257	63.15	
1645	5.6	5.42	14.62	901	7.0	8.68	266	63.13	
1650	6.9	5.41	14.55	901	5.4	8.67	263	63.13	

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BGS = Below ground surface.
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15D
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):63.26
Final Water Level (feet TOIC):63.26
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-15D-R1
Sample Time: 1510
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 375
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1427	0.5	5.84	16.39	101	0.0	4.02	210	63.26	
1432	2.375	5.83	16.23	102	0.0	3.90	216	63.26	
1437	4.25	5.79	16.00	102	0.0	3.71	229	63.26	
1442	6.125	5.74	15.80	102	0.0	3.62	239	63.26	
1447	8.0	5.70	15.59	103	0.0	3.70	247	63.26	
1452	9.875	5.65	15.64	112	0.0	4.22	252	63.26	
1457	11.75	5.58	15.70	130	0.2	4.96	258	63.26	
1502	13.62	5.56	15.76	135	0.0	5.19	262	63.26	
1507	15.495	5.55	15.73	135	0.0	5.36	266	63.26	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15DD
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC):62.89
Final Water Level (feet TOIC):62.91
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-15DD-R1
Sample Time: 1635
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1600	0.5	5.56	15.14	1370	0.0	12.55	172	62.91	
1605	2.9	5.61	15.08	1380	0.0	9.38	206	62.91	
1610	5.3	5.62	15.08	1370	0.0	8.99	227	62.91	
1615	7.7	5.61	15.04	1360	0.0	8.69	231	62.91	
1620	10.1	5.61	14.99	1360	0.0	8.61	237	62.91	
1625	12.5	5.61	15.01	1350	0.0	8.51	241	62.91	
1630	14.9	5.61	15.05	1350	0.0	8.26	248	62.91	

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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15S
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):62.77
Final Water Level (feet TOIC):62.80
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-15S-R1
Sample Time: 1350
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1317	0.5	5.47	15.04	253	0.0	5.41	241	62.80	
1322	2.5	5.36	14.78	243	0.0	5.23	260	62.80	
1327	4.5	5.28	14.68	231	6.1	5.77	269	62.80	
1332	6.5	5.26	14.63	216	6.7	6.03	278	62.80	
1337	8.5	5.24	14.59	209	3.9	6.19	285	62.80	
1342	10.5	5.22	14.53	206	3.0	6.31	289	62.80	
1347	12.5	5.21	14.53	204	0.3	6.17	292	62.80	Collected duplicate sample
									MW-802-GW-R1

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-16D
Sample Date: 6/19/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):63.13
Final Water Level (feet TOIC):63.13
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-16D-R1
Sample Time: 1610
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 40.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 440/420
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1310	5.7	6.51	17.02	262	1000	6.43	147	63.18	
1315	7.9	6.30	16.13	237	1000	5.62	187	63.17	
1320	10.1	6.03	16.47	218	1000	5.23	214	63.17	
1325	12.3	5.88	15.88	215	1000	5.00	232	63.17	
1330	14.5	5.82	15.64	214	689	5.38	243	63.17	
1335	16.7	5.79	15.45	214	459	5.50	250	63.15	
1340	18.9	5.79	15.68	213	352	5.35	254	63.14	
1345	21.1	5.77	15.74	212	349	5.50	256	63.15	
1350	23.3	5.79	16.54	208	278	4.66	259	63.16	Adjusted flow rate to 420ml/min
1355	25.4	5.80	16.34	209	242	5.02	261	63.15	
1400	27.5	5.80	16.61	210	193	5.28	259	63.13	
1405	29.6	5.79	17.16	204	187	4.76	259	63.13	
1410	31.7	5.80	18.02	200	142	4.22	262	63.14	
1415	33.8	5.80	17.63	203	145	4.41	263	63.16	
1420	35.9	5.81	17.90	202	121	4.29	263	63.13	
1425	38.0	5.81	18.18	200	109	4.22	265	63.13	

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ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1430	40.1	5.81	18.36	199	109	4.17	266	63.14	
1435	42.2	5.85	18.74	201	79.1	4.89	236	63.14	
1440	44.3	5.81	17.52	204	80.9	4.82	253	63.13	
1445	46.4	5.80	16.83	206	79.7	4.79	262	63.13	
1450	48.5	5.81	17.20	204	77.1	5.48	265	63.14	
1455	50.6	5.80	16.78	206	74.6	4.72	266	63.13	
1500	52.7	5.80	16.90	206	72.8	4.77	269	63.13	
1505	54.8	5.80	16.70	207	67.7	4.51	270	63.13	
1510	56.9	5.81	16.70	207	66.7	4.50	271	63.13	
1515	59.0	5.81	16.20	204	64.5	4.54	273	63.14	
1520	61.1	5.81	16.20	209	63.5	4.56	273	63.13	
1525	63.2	5.80	16.50	204	62.5	4.50	275	63.13	
1530	65.3	5.81	16.47	204	60.4	4.60	275	63.15	
1535	67.4	5.81	16.11	204	61.9	4.38	276	63.15	
1540	69.5	5.81	16.73	204	58.8	4.41	276	63.13	
1545	71.6	5.80	16.24	208	50.1	4.58	277	63.13	
1550	73.7	5.80	16.72	206	44.1	4.68	278	63.13	
1555	75.8	5.81	16.67	205	40.2	4.51	278	63.13	
1600	77.9	5.80	16.36	205	40.9	4.65	279	63.13	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
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TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-16S
Sample Date: 6/19/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 79.7
Screen Interval (feet TOIC):69.7-79.7
Initial Water Level (Feet TOIC):63.65
Final Water Level (feet TOIC):63.72
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-16S-R1
Sample Time: 1705
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 310
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1640	1.9	5.88	23.24	108	4.2	7.99	191	63.68	
1645	3.5	5.56	20.63	113	3.0	5.84	184	63.68	
1650	5.1	5.52	19.51	112	2.6	5.33	160	63.68	
1655	6.7	5.48	19.11	111	3.0	5.27	157	63.67	
1700	8.3	5.46	18.93	110	2.7	5.12	164	63.66	

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-17S
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):63.25
Final Water Level (feet TOIC):63.27
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-17S-R1
Sample Time: 1110
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 225
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1050	0.9	5.68	15.87	169	8.9	3.67	101	63.27	
1055	3.15	5.64	15.81	189	1.2	4.35	108	63.27	
1100	5.40	5.64	15.77	190	0.0	4.45	109	63.31	
1105	7.65	5.66	15.77	194	0.0	4.38	107	63.27	

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-18I
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 128
Screen Interval (feet TOIC):128-128
Initial Water Level (Feet TOIC):62.93
Final Water Level (feet TOIC):62.94
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-18I-R1
Sample Time: 1325
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1300	0.5	5.79	19.02	616	2.8	5.20	252	62.94	
1305	2.75	5.31	18.20	1250	2.1	6.33	290	62.95	
1310	5.00	5.26	17.70	1320	2.7	6.21	305	62.96	
1315	7.25	5.27	17.35	1300	2.7	6.16	311	62.95	
1320	9.50	5.29	17.54	1290	2.5	5.92	313	62.94	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-18S
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC):62-72
Initial Water Level (Feet TOIC):62.75
Final Water Level (feet TOIC):62.82
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-18S-R1
Sample Time: 1420
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 7.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 370
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1358	0.5	6.67	16.36	1120	66.2	6.49	239	62.79	
1403	2.35	6.64	15.86	1130	30.1	5.54	221	62.80	
1408	4.2	6.64	15.77	1140	13.7	5.35	212	62.81	
1413	6.05	6.64	15.70	1140	7.7	5.21	207	62.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-19D
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 306
Screen Interval (feet TOIC):296-306
Initial Water Level (Feet TOIC):61.92
Final Water Level (feet TOIC):61.93
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-19D-R1
Sample Time: 1610
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 43.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 260
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1340	13.5	7.12	25.88	2280	945	6.0	147	61.93	
1345	14.8	5.60	20.56	2530	871	2.46	184	61.93	
1350	16.1	5.57	19.46	2620	751	1.92	190	61.94	
1355	17.4	5.55	19.21	2660	635	1.82	195	61.91	
1400	18.7	5.54	19.08	2690	536	1.65	199	61.92	
1405	20.0	5.53	19.22	2730	433	1.58	203	61.93	
1410	21.3	5.52	19.37	2750	399	1.55	207	61.92	
1415	22.6	5.53	19.57	2770	298	1.48	210	61.92	
1420	23.9	5.53	19.69	2790	285	1.47	212	61.93	
1425	25.2	5.53	20.12	2800	199	1.44	217	61.93	
1430	26.5	5.53	20.25	2800	190	1.40	217	61.93	
1435	27.8	5.53	20.20	2800	160	1.34	219	61.93	
1440	29.1	5.53	20.13	2810	149	1.32	223	61.93	
1445	30.4	5.53	19.84	2810	127	1.33	225	61.93	
1450	31.7	5.53	19.60	2830	111	1.30	224	61.93	
1455	33.0	5.53	19.58	2860	104	1.33	224	61.93	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1500	34.3	5.53	20.00	2860	84.2	1.36	227	61.93	
1505	35.6	5.53	20.31	2840	84.4	1.29	227	61.93	
1510	36.9	5.53	20.38	2840	84.2	1.28	229	61.93	
1515	38.2	5.53	20.29	2840	72.9	1.29	229	61.93	
1520	39.5	5.54	20.23	2830	65.8	1.28	231	61.93	Pump raised 2-3’ per D. Kennedy
1525	40.8	5.54	19.98	2830	61.6	1.29	234	61.90	
1530	42.1	5.54	19.52	2820	56.0	1.28	237	61.92	
1535	43.4	5.53	19.23	2830	53.9	1.27	239	61.90	
1540	44.7	5.53	19.04	2840	50.6	1.26	240	61.92	
1545	46.0	5.52	18.02	2840	46.0	1.40	242	61.92	
1550	47.3	5.51	17.32	2860	47.0	1.42	244	61.92	
1555	48.6	5.51	16.81	2900	42.3	1.37	244	61.93	
1600	49.9	5.51	16.76	2900	42.2	1.36	244	61.93	
1605	51.2	5.50	17.18	2910	43.5	1.32	243	61.94	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-19S
Sample Date: 6/4/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):62.08
Final Water Level (feet TOIC):62.09
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-19S-R1
Sample Time: 1645
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1610	0.95	7.00	20.30	151	2.3	9.26	188	62.08	
1615	1.9	5.71	16.63	83	2.1	8.53	215	62.08	
1620	3.4	5.61	16.18	73	0.9	7.78	242	62.08	
1625	4.7	5.62	16.76	73	0.6	6.75	240	62.08	
1630	5.7	5.61	17.25	72	0.6	6.80	241	62.08	
1635	6.6	5.60	17.39	73	1.6	6.99	244	62.09	
1640	7.6	5.60	17.38	71	0.8	6.53	242	62.09	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20D
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):62.74
Final Water Level (feet TOIC):62.78
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-20D-R1
Sample Time: 1005
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0918	0.5	6.67	15.31	2360	0.0	5.26	146	62.70	
0923	3.0	6.47	14.98	2020	0.0	5.51	188	62.78	
0928	5.5	6.33	14.96	1590	1.6	5.84	198	62.78	
0933	8.0	6.20	14.98	1150	3.2	5.56	197	62.78	
0938	10.5	6.06	14.86	1080	0.8	5.67	209	62.78	
0943	13.0	6.03	14.85	1090	0.2	5.56	214	62.78	
0948	15.5	5.99	14.91	1090	0.1	5.86	218	62.78	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20I
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):62.91
Final Water Level (feet TOIC):62.95
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-20I-R1
Sample Time: 1045
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 8.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 490
Purge Rate d/sampling (ml/min): 210
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1020	0.5	5.96	16.47	878	9.2	2.80	192	62.91	
1025	2.95	5.77	16.17	1630	8.8	5.79	208	62.95	
1030	5.40	5.78	16.38	1620	8.4	5.63	235	62.95	
1035	7.85	5.77	16.50	1620	8.7	5.45	252	62.95	
1040	10.3	5.77	16.60	1620	8.5	5.36	260	62.95	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20S
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):62.67
Final Water Level (feet TOIC):62.80
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-20S-R1
Sample Time: 0840
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 4.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0812	0.5	6.61	17.22	1010	4.7	4.62	228	62.79	
0817	3.0	6.70	17.16	1020	4.2	4.16	228	62.79	
0822	5.5	6.72	17.71	1010	4.3	3.81	227	62.78	
0827	8.0	6.73	17.88	1010	4.2	3.72	226	62.77	
0832	10.5	6.73	17.80	1010	4.0	3.64	225	62.80	Collected duplicate sample
									MW-803-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21D
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):62.00
Final Water Level (feet TOIC):62.00
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-21D-R1
Sample Time: 0920
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0830	0.5	6.29	15.04	509	0.0	0.73	26	62.00	
0835	3.0	6.21	15.02	498	4.6	1.41	78	62.00	
0840	5.5	5.73	14.99	429	11.1	1.59	169	62.00	
0845	8.0	5.67	14.94	422	4.48	1.85	194	62.00	
0850	10.5	5.65	14.94	421	0.0	2.23	213	62.00	
0855	13.0	5.65	14.92	421	0.0	2.49	220	62.00	
0900	15.5	5.64	14.81	421	0.0	2.75	227	62.00	
0905	18.0	5.64	14.88	421	0.0	3.00	227	62.00	
0910	20.5	5.64	14.84	422	0.0	3.31	228	62.00	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21I
Sample Date: 6/4/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 180
Screen Interval (feet TOIC):170-180
Initial Water Level (Feet TOIC):62.10
Final Water Level (feet TOIC):62.16
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-21I-R1
Sample Time: 1800
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 16.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1730	7.58	4.50	15.08	104	42.9	8.13	414	62.16	
1735	9.98	4.48	15.06	104	26.2	8.11	420	62.15	
1740	12.38	4.49	15.02	104	20.4	7.78	423	62.15	
1745	14.78	4.50	14.98	104	16.8	7.90	425	62.16	Collected duplicate sample
									MW-800-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21S
Sample Date: 6/4/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):62.00
Final Water Level (feet TOIC):62.21
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-21S-R1
Sample Time: 1600
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1530	3.79	5.66	21.73	1	137	16.13	222	62.12	
1535	6.04	6.07	15.89	116	1.6	7.95	231	62.14	
1540	8.29	6.06	15.74	117	1.6	7.60	247	62.10	
1545	10.54	6.05	15.72	116	1.5	7.47	249	62.15	
1550	12.79	6.05	15.77	116	1.3	7.23	248	62.19	
1555	15.04	6.05	15.78	115	1.7	7.22	244	62.21	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22D
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 315
Screen Interval (feet TOIC):305-315
Initial Water Level (Feet TOIC):63.87
Final Water Level (feet TOIC):64.10
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-22D-R1
Sample Time: 1705
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 49.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1155	6.1	11.51	27.00	2630	534	3.07	-24	64.35	
1200	7.4	11.96	18.12	3240	823	0.89	-94	64.34	
1205	8.7	11.79	17.53	3380	1000	0.80	-71	64.39	Meter reads 0.0 NTU – error for
1210	10.0	10.73	17.31	3160	1000	1.19	-22	64.36	high turbidity
1215	11.3	9.42	16.87	3340	1000	1.35	24	64.38	
1220	12.6	8.47	16.86	3440	1000	1.41	55	64.39	
1225	13.9	8.19	16.81	3470	1000	1.41	63	64.36	
1230	15.2	7.95	16.84	3490	1000	1.40	68	64.36	
1235	16.5	7.67	16.75	3510	1000	1.37	73	64.39	
1240	17.8	7.56	16.68	3520	1000	1.36	75	64.39	
1245	19.1	7.42	16.75	3530	794	1.35	77	64.36	
1250	20.4	7.28	16.75	3530	613	1.34	78	64.41	
1255	21.7	7.18	16.73	3540	491	1.31	79	64.41	
1300	23.0	7.09	16.72	3540	386	1.28	79	64.41	
1305	24.3	7.02	16.73	3540	324	1.26	81	64.41	
1310	25.6	6.94	16.62	3550	256	1.25	82	64.37	

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1315	26.9	6.87	16.64	3550	218	1.28	85	64.35	
1320	28.2	6.82	16.67	3560	176	1.23	87	64.35	
1325	29.5	6.78	16.68	3550	157	1.25	87	64.38	
1330	30.8	6.74	16.69	3550	128	1.19	86	64.36	
1335	32.1	6.71	16.59	3550	112	1.18	87	64.36	
1340	33.4	6.69	16.50	3550	104	1.16	86	64.32	
1345	34.7	6.68	16.59	3550	99.3	1.14	86	64.32	
1350	36.0	6.66	16.55	3540	92.4	1.12	87	64.32	
1355	37.3	6.65	16.56	3540	91.0	1.12	86	64.35	
1400	---	---	---	---	---	---	---	---	Adjusted flow rate to 200ml/min
1405	37.3	6.67	16.63	3530	90.1	1.19	82	64.31	
1410	38.3	6.66	16.87	3520	95.8	1.27	82	64.25	
1415	39.3	6.64	16.86	3520	94.3	1.33	83	64.26	
1420	40.3	6.63	16.86	3520	71.4	1.25	81	64.23	
1425	41.3	6.63	16.83	3520	69.6	1.27	81	64.25	
1430	42.3	6.63	16.91	3360	66.4	1.34	102	64.25	
1435	43.3	6.63	18.22	3370	64.1	1.26	90	64.28	
1440	44.3	6.62	18.18	3380	61.4	1.13	85	64.26	
1445	45.3	6.63	18.08	3390	59.5	1.04	82	64.22	
1450	46.3	6.66	18.59	3370	55.8	1.07	80	64.27	
1455	47.3	6.66	18.54	3360	49.9	1.07	80	64.26	
1500	48.3	6.66	18.85	3350	47.7	1.05	80	64.25	
1505	49.3	6.64	19.03	3320	46.9	1.08	84	64.26	
1520	50.3	6.77	17.45	3430	1000	2.33	130	64.27	Horiba reconnected due to spike in
1525	51.3	6.63	16.57	3400	780	1.38	97	64.27	turbidity
1530	52.3	6.60	16.51	3390	584	1.32	94	64.25	
1535	53.3	6.59	16.66	3370	426	1.34	95	64.27	

Key:

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ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1540	54.3	6.58	16.75	3340	334	1.29	95	64.26	
1545	55.3	6.57	16.16	3340	233	1.29	95	64.22	
1550	56.3	6.56	16.05	3320	205	1.33	95	64.25	
1555	57.3	6.55	16.18	3300	170	1.36	97	64.23	
1600	58.3	6.55	15.96	3290	139	1.37	98	64.27	
1605	59.3	6.54	15.92	3270	107	1.38	99	64.24	
1610	60.3	6.53	15.91	3250	109	1.40	101	64.23	
1615	61.3	---	---	---	---	---	---	---	Cleaned flow cell
1620	62.3	6.56	16.60	3150	74.7	1.66	123	64.24	
1625	63.3	6.52	16.26	3190	66.4	1.47	111	64.21	
1630	64.3	6.51	16.17	3190	59.0	1.48	106	64.25	
1635	65.3	6.50	16.15	3180	58.1	1.47	104	64.24	
1640	66.3	6.50	16.08	3160	57.4	1.46	103	64.22	
1645	67.3	6.50	16.08	3150	55.5	1.51	102	64.20	
1650	68.3	6.50	16.12	3140	49.8	1.47	101	64.23	
1655	69.3	6.50	16.17	3130	49.7	1.55	100	64.16	
1700	70.3	6.50	16.08	3120	49.0	1.55	100	64.20	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22I
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):63.34
Final Water Level (feet TOIC):63.37
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-22I-R1
Sample Time: 0950
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 320
Purge Rate d/sampling (ml/min): 170
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0920	3.79	6.27	17.01	1210	1.4	8.96	213	63.35	
0925	5.4	5.78	15.61	1170	0.0	6.57	224	63.34	
0930	7.0	5.74	15.32	1160	0.0	6.41	235	63.34	
0935	8.6	5.73	15.29	1170	0.0	6.22	243	63.35	
0940	10.2	5.72	15.32	1170	0.0	6.07	242	63.34	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22S
Sample Date: 6/8/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.07
Final Water Level (feet TOIC):63.14
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-22S-R1
Sample Time: 0900
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0835	0.5	6.09	15.64	637	7.0	8.03	245	63.11	
0840	3.0	6.05	15.19	666	5.2	6.57	241	63.10	
0845	5.5	6.04	15.08	679	3.1	5.97	240	63.10	
0850	8.0	6.04	14.97	681	2.0	5.55	241	63.12	
0855	10.5	6.04	14.99	679	1.3	5.51	241	63.14	

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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23D
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC):330-340
Initial Water Level (Feet TOIC):61.00
Final Water Level (feet TOIC):61.00
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-23D-R1
Sample Time: 1430
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 30.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1400	12.0	3.34	15.39	1230	445	2.61	-50	61.01	
1405	14.0	6.01	15.24	1400	178	2.87	-12	61.01	
1410	16.0	5.99	15.29	1420	66.3	2.84	-35	61.01	
1415	18.0	6.02	15.32	1430	41.3	2.54	-51	61.01	
1420	20.0	6.03	15.27	1440	35.7	2.52	-50	61.01	
1425	22.0	6.01	15.20	1440	30.4	2.54	-45	61.01	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23I
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 180
Screen Interval (feet TOIC):170-180
Initial Water Level (Feet TOIC):60.68
Final Water Level (feet TOIC):60.68
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-23I-R1
Sample Time: 1645
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1540	5.0	5.64	15.85	948	4.3	8.03	145	60.68	
1545	7.0	5.62	15.86	961	3.7	3.18	148	60.68	
1550	9.0	5.62	15.79	968	3.0	2.33	148	60.68	
1555	11.0	5.57	15.74	972	2.4	1.97	148	60.68	
1600	13.0	5.61	15.85	971	2.2	1.61	152	60.68	
1605	15.0	5.61	15.78	973	2.8	1.33	153	60.68	
1610	17.0	5.61	15.74	978	2.8	1.14	154	60.68	
1615	19.0	5.57	15.66	977	2.4	1.01	156	60.68	
1620	21.0	5.58	15.57	978	2.0	0.92	158	60.68	
1625	23.0	5.61	15.62	977	2.1	0.81	159	60.68	
1630	25.0	5.61	15.56	977	1.1	0.73	163	60.68	
1635	27.0	5.60	15.43	981	1.5	0.72	162	60.68	
1640	29.0	5.61	15.65	977	0.8	0.68	163	60.68	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23S
Sample Date: 6/8/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):60.91
Final Water Level (feet TOIC):60.90
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-23S-R1
Sample Time: 1105
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1044	0.5	6.40	17.21	82	2.7	7.24	216	60.91	
1049	2.2	6.16	16.70	81	1.2	6.82	224	60.91	
1054	3.9	6.08	16.66	80	0.0	6.57	229	60.91	
1059	5.6	6.08	16.68	80	0.0	6.53	231	60.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-24DD
Sample Date: 6/20/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC):65.03
Final Water Level (feet TOIC):65.08
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-24DD-R1
Sample Time: 0850
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 23.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 470
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0815	7.2	5.75	18.72	439	37.0	5.81	217	65.05	
0820	9.6	5.38	16.10	419	93.7	3.40	234	65.04	
0825	12.0	5.29	15.72	407	52.4	4.90	263	65.04	
0830	14.4	5.27	15.87	413	27.9	5.19	280	65.08	
0835	16.8	5.27	15.86	415	23.5	5.19	289	65.06	
0840	19.2	5.26	15.51	420	24.3	5.26	296	65.03	
0845	21.6	5.26	15.73	421	23.9	5.42	298	65.04	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-24S
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):61.32
Final Water Level (feet TOIC):61.34
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-24S-R1
Sample Time: 1640
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1615	0.5	6.57	16.35	129	2.6	9.09	214	61.31	
1620	---	---	---	---	---	---	---	---	Stopped purging to adjust Horiba
1625	3.0	6.08	15.73	127	1.7	7.76	233	61.31	
1630	5.5	6.04	15.61	127	0.7	7.70	239	61.34	
1635	8.0	6.04	15.55	127	1.6	7.42	243	61.34	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25D
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 350
Screen Interval (feet TOIC):340-350
Initial Water Level (Feet TOIC):61.75
Final Water Level (feet TOIC):61.75
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-25D-R1
Sample Time: 1045
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.1
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 325
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1015	9.185	7.22	15.49	1470	50.3	5.52	-155	61.75	
1020	10.81	6.36	15.42	1410	26.7	5.16	-26	61.75	
1025	12.435	6.11	15.38	1380	6.1	5.01	19	61.75	
1030	14.06	6.03	15.41	1370	1.0	4.93	38	61.75	
1035	15.685	5.99	15.39	1360	0.2	4.81	39	61.75	
1040	17.31	5.96	15.45	1350	0.1	4.61	35	61.75	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25I
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):61.35
Final Water Level (feet TOIC):61.35
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-25I-R1
Sample Time: 0905
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 325
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0830	9.45	5.62	15.41	930	0.5	9.70	220	61.35	
0835	11.075	5.41	15.24	904	0.3	9.18	234	61.35	
0840	12.7	5.41	15.12	902	0.1	8.76	267	61.35	
0845	14.325	5.41	15.06	906	0.1	8.57	288	61.35	
0850	15.95	5.41	15.05	909	0.1	8.35	302	61.35	
0855	17.575	5.40	15.03	911	0.1	8.29	308	61.35	
0900	19.2	5.41	15.01	911	0.1	8.19	311	61.35	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25S
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 115
Screen Interval (feet TOIC):105-115
Initial Water Level (Feet TOIC):61.41
Final Water Level (feet TOIC):61.41
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-25S-R1
Sample Time: 1200
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1135	3.3	5.92	17.20	493	1.8	9.56	241	61.41	
1140	4.8	5.46	16.56	508	0.6	7.64	260	61.41	
1145	6.3	5.44	16.08	511	0.4	7.14	271	61.41	
1150	7.8	5.43	15.97	511	0.5	7.04	277	61.41	
1155	9.3	5.42	15.99	510	0.4	6.86	280	61.41	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-26D
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 276
Screen Interval (feet TOIC):266-276
Initial Water Level (Feet TOIC):61.09
Final Water Level (feet TOIC):61.09
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-26D-R1
Sample Time: 0900
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0810	0.5	5.75	16.24	317	0.0	1.03	195	61.07	
0815	3.0	5.68	15.77	315	0.0	0.81	181	61.09	
0820	5.5	5.50	15.80	446	5.9	1.73	200	61.11	
0825	8.0	5.37	15.61	689	8.5	3.10	238	61.09	
0830	10.5	5.37	15.49	701	3.1	2.98	251	61.20	
0835	13.0	5.36	15.57	700	0.5	3.12	259	61.09	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-26S
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):61.28
Final Water Level (feet TOIC):61.29
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-26S-R1
Sample Time: 1010
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 470
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0950	0.5	5.97	17.87	238	0.9	4.56	225	61.27	
0955	2.85	5.54	16.71	467	6.6	4.88	244	61.28	
1000	5.20	5.49	16.47	468	1.7	4.86	253	61.27	
1005	7.55	5.46	16.34	458	0.2	4.82	261	61.29	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27D
Sample Date: 6/15/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):60.51
Final Water Level (feet TOIC):60.61
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-27D-R1
Sample Time: 1410
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 49.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 220/270
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1025	5.7	5.22	21.27	2510	339	2.61	257	60.55	
1030	6.8	4.87	20.49	2630	433	1.47	327	60.56	
1035	7.9	4.69	19.34	2730	450	1.53	366	60.51	
1040	9.0	4.66	18.51	2790	353	1.60	378	60.57	
1045	10.1	4.65	18.44	2800	317	1.62	386	60.56	
1050	11.2	4.65	18.46	2800	252	1.58	390	60.55	
1055	12.0	4.65	18.43	2790	199	1.56	393	60.50	
1100	12.1	4.76	17.34	2810	151	1.58	386	60.61	Adjusted flow rate to 270ml/min
1105	12.4	4.71	17.07	2830	123	1.79	392	60.65	
1110	13.8	4.69	17.05	2830	100	1.78	397	60.60	
1115	15.2	4.68	16.54	2860	95.6	1.76	400	60.60	
1120	16.6	4.68	16.83	2840	86.9	1.65	400	60.61	
1125	18.0	4.69	16.55	2850	78.2	1.90	403	60.60	
1130	19.4	4.69	16.52	2860	76.1	1.88	403	60.61	
1135	20.8	4.69	16.93	2830	77.0	1.78	405	60.61	
1140	22.2	4.68	16.83	2840	76.7	2.00	406	60.61	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1145	23.6	4.68	16.83	2840	75.3	1.81	407	60.61	
1150	25.0	4.67	16.89	2830	77.3	1.90	409	60.62	
1155	26.4	4.71	17.48	2810	74.2	2.22	382	60.61	
1200	27.8	4.67	17.20	2810	75.0	1.77	402	60.61	
1205	29.2	4.67	17.14	2830	76.3	1.86	407	60.61	
1210	30.6	4.67	17.18	2820	76.0	2.05	409	60.58	
1215	32.0	4.66	17.07	2830	72.6	2.00	410	60.60	
1220	33.4	4.67	17.18	2820	68.0	1.84	411	60.60	
1225	34.8	4.66	17.19	2840	61.1	1.92	413	60.60	
1230	36.2	4.66	17.11	2830	61.9	1.93	414	60.60	
1235	37.6	4.66	17.15	2830	59.9	1.95	415	60.59	
1240	39.0	4.66	17.11	2840	60.6	1.95	415	60.60	
1245	40.4	4.66	17.45	2820	59.9	1.92	415	60.59	
1250	41.8	4.66	17.55	2810	58.8	1.85	415	60.58	
1255	43.2	4.66	17.39	2840	57.8	1.88	416	60.61	
1300	44.6	4.66	17.47	2830	54.6	1.90	417	60.61	
1305	46.0	4.66	17.32	2820	58.2	1.92	417	60.59	
1310	47.4	4.66	17.49	2820	50.3	1.91	417	60.59	
1315	48.8	4.66	17.58	2830	54.7	1.91	417	60.61	
1320	50.2	4.66	17.46	2820	55.1	1.89	418	60.61	
1325	51.6	4.66	17.63	2820	54.2	1.94	417	60.60	
1330	53.0	4.66	17.55	2820	53.2	1.92	416	60.60	
1335	54.4	4.66	17.73	2820	52.1	1.99	417	60.58	
1340	55.8	4.66	17.59	2820	52.9	1.99	417	60.60	
1345	57.2	4.66	17.69	2830	54.3	1.98	417	60.61	
1350	58.6	4.68	18.18	2750	51.8	2.02	403	60.59	
1355	60.0	4.68	17.86	2780	48.7	2.06	407	60.59	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1400	61.4	4.68	17.45	2810	49.9	2.01	411	60.57	
1405	62.8	4.68	17.47	2820	49.4	2.05	413	60.61	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27DD
Sample Date: 6/15/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC):365-375
Initial Water Level (Feet TOIC):61.06
Final Water Level (feet TOIC):61.12
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-27DD-R1
Sample Time: 0930
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 32.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 290/260
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0830	7.2	5.91	21.10	235	20.1	4.33	209	61.10	
0835	8.7	5.51	19.58	207	147	2.73	225	61.13	
0840	10.2	5.32	18.67	281	155	3.15	249	61.11	
0845	11.7	5.23	17.99	364	277	3.60	266	61.12	
0850	13.2	5.23	17.42	396	183	4.04	275	61.13	
0855	14.7	5.24	17.33	403	128	4.02	281	61.13	
0900	16.2	5.24	17.40	403	86.3	3.83	285	61.12	
0905	17.7	5.26	17.37	403	41.7	4.28	290	61.16	
0910	19.0	5.25	17.39	403	38.1	4.11	294	61.14	Adjusted flow rate to 260ml/min
0915	20.3	5.25	17.36	403	35.5	4.08	299	61.13	
0920	21.6	5.25	17.27	403	32.1	4.09	302	61.15	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27S
Sample Date: 6/20/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 88
Screen Interval (feet TOIC):78-88
Initial Water Level (Feet TOIC):60.62
Final Water Level (feet TOIC):60.64
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-27S-R1
Sample Time: 1005
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 440
Purge Rate d/sampling (ml/min): 130
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0930	1.9	5.76	19.77	111	4.3	8.11	218	60.64	
0935	4.1	5.97	16.37	113	0.8	9.71	237	60.63	
0940	6.3	5.94	16.28	113	0.7	9.50	246	60.64	
0945	8.5	5.97	16.48	113	0.4	7.58	252	60.64	
0950	10.7	5.98	16.42	113	0.2	7.53	254	60.64	
0955	12.9	5.98	16.45	113	0.2	7.13	257	60.64	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28D
Sample Date: 6/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 287
Screen Interval (feet TOIC):277-287
Initial Water Level (Feet TOIC):66.39
Final Water Level (feet TOIC):66.41
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-28D-R1
Sample Time: 1610
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 45.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 230
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1330	5.7	6.23	19.46	2040	162	1.93	81	66.41	
1335	6.8	6.31	18.69	2060	159	1.30	70	66.42	
1340	7.9	6.31	17.56	2110	143	1.20	82	66.40	
1345	9.0	6.30	17.13	2130	130	1.17	92	66.44	
1350	10.1	6.30	16.80	2150	127	1.22	102	66.44	
1355	11.2	6.29	16.56	2150	126	1.24	112	66.43	
1400	12.3	6.29	16.31	2160	125	1.24	118	66.41	
1405	13.4	6.29	16.34	2150	129	1.27	125	66.41	
1410	14.5	6.29	16.25	2160	119	1.24	129	66.46	
1415	15.6	6.29	16.15	2160	114	1.25	133	66.41	
1420	16.7	6.29	16.12	2160	95.8	1.22	136	66.41	
1425	17.8	6.29	16.14	2160	96.0	1.20	138	66.41	
1430	18.9	6.29	16.13	2160	87.2	1.17	141	66.44	
1435	20.0	6.29	16.11	2170	86.4	1.17	144	66.44	
1440	21.1	6.29	16.02	2170	84.0	1.15	146	66.41	
1445	22.2	6.29	16.00	2170	81.4	1.16	148	66.41	

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1450	23.3	6.29	15.93	2170	82.9	1.17	150	66.41	
1455	24.4	6.29	15.91	2170	78.2	1.16	157	66.41	
1500	25.5	6.29	15.97	2170	77.6	1.17	152	66.41	
1505	26.6	6.29	16.04	2160	76.3	1.18	153	66.42	
1510	27.7	6.29	16.01	2170	74.4	1.17	154	66.42	
1515	28.8	6.29	16.00	2160	70.7	1.17	155	66.41	
1520	29.9	6.29	16.03	2160	67.4	1.16	156	66.41	
1525	31.0	6.29	15.98	2170	63.1	1.16	156	66.43	
1530	32.1	6.29	15.93	2170	61.1	1.16	157	66.41	
1535	33.2	6.29	15.87	2170	58.0	1.17	158	66.42	
1540	34.3	6.29	15.88	2170	57.0	1.17	158	66.42	
1545	35.4	6.29	15.84	2170	53.0	1.17	158	66.41	
1550	36.5	6.29	15.90	2170	52.7	1.17	159	66.41	
1555	37.6	6.29	15.86	2170	48.5	1.16	159	66.41	
1600	38.7	6.29	15.85	2170	47.2	1.17	159	66.41	
1605	39.8	6.29	15.82	2170	45.0	1.18	159	66.41	Collected duplicate sample
									MW-807-GW-R1

Key:

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NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28I
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 159
Screen Interval (feet TOIC):149-159
Initial Water Level (Feet TOIC):66.21
Final Water Level (feet TOIC):66.24
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-28I-R1
Sample Time: 1650
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 420
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1603	0.5	8.36	17.86	1030	0.0	2.65	-2	66.21	
1608	2.6	7.49	16.60	1240	3.7	3.31	58	66.23	
1613	4.7	6.81	16.25	1450	2.8	4.30	126	66.22	
1618	6.8	6.53	15.84	1510	2.4	5.13	149	66.22	
1623	8.9	6.43	16.48	1570	2.3	5.27	166	66.22	
1628	11.0	6.36	16.56	1590	1.2	4.67	179	66.21	
1633	13.1	6.31	16.09	1650	0.7	5.47	195	66.23	
1638	15.2	6.28	15.96	1650	0.8	5.45	206	66.22	
1643	17.3	6.29	15.68	1660	0.9	5.33	209	66.24	

Key:
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28S
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 100.18
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):63.58
Final Water Level (feet TOIC):63.58
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-28S-R1
Sample Time: 1150
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1125	2.0	5.87	15.63	356	10.3	9.18	221	63.58	
1130	4.0	5.84	15.28	342	6.6	7.37	226	63.58	
1135	6.0	5.83	15.32	340	2.6	6.60	234	63.58	
1140	8.0	5.83	15.20	343	0.1	6.27	236	63.58	
1145	10.0	5.82	15.20	345	0.0	6.29	240	63.58	

Key:
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NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-29S
Sample Date: 6/21/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 76
Screen Interval (feet TOIC):66-76
Initial Water Level (Feet TOIC):61.41
Final Water Level (feet TOIC):61.41
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-29S-R1
Sample Time: 1520
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 310
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1455	1.5	6.27	17.24	285	5.2	7.46	206	61.45	
1500	3.0	6.27	17.23	286	5.0	7.21	209	61.46	
1505	4.5	6.27	16.92	287	4.5	6.84	217	61.41	
1510	6.0	6.27	16.76	286	4.5	6.64	222	61.42	
1515	7.5	6.28	16.68	289	2.9	6.58	225	61.42	

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DO = Dissolved oxygen.
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30D
Sample Date: 6/21/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC):330-340
Initial Water Level (Feet TOIC):60.86
Final Water Level (feet TOIC):60.94
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-30D-R1
Sample Time: 1135
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 5.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300/290
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1045	10.6	6.17	23.88	843	49.0	3.26	110	60.86	
1050	12.1	5.78	19.09	952	47.6	3.05	56	60.86	
1055	13.6	5.64	18.88	963	36.4	3.25	69	60.86	
1100	15.1	5.62	18.71	966	25.8	2.84	81	60.91	
1105	16.6	5.66	18.16	984	15.6	2.96	87	60.97	Adjusted flow rate to 290ml/min
1110	18.0	5.64	17.89	994	10.6	3.11	96	60.91	
1115	19.4	5.63	18.28	993	8.7	3.21	104	60.90	
1120	20.8	5.62	18.08	1010	6.5	3.26	111	60.84	
1125	22.2	5.61	18.14	1010	5.8	3.33	114	60.89	

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
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Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30I
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):60.41
Final Water Level (feet TOIC):60.41
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-30I-R1
Sample Time: 0855
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0820	5.0	6.19	16.20	692	0.0	6.32	232	60.41	
0825	6.75	6.00	16.02	651	0.0	6.11	245	60.41	
0830	8.5	5.96	16.00	639	0.0	6.19	241	60.41	
0835	10.25	5.95	15.94	634	0.0	6.17	252	60.41	
0840	12.0	5.96	16.00	634	0.0	6.01	261	60.41	
0845	13.75	5.96	16.06	635	0.0	6.08	266	60.41	
0850	15.5	5.96	16.03	635	0.0	6.07	267	60.41	

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mg/L = Milligrams per liter
mV = Millivolts.
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ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30S
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):60.37
Final Water Level (feet TOIC):60.37
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-30S-R1
Sample Time: 1440
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1415	2.5	5.44	17.09	126	0.0	8.63	271	60.37	
1420	3.5	5.43	16.71	125	0.0	7.51	284	60.37	
1425	4.5	5.42	16.63	124	0.0	7.02	292	60.37	
1430	5.5	5.42	16.64	126	0.0	7.20	298	60.37	
1435	6.5	5.40	16.69	126	0.0	7.15	299	60.37	

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-31D
Sample Date: 6/21/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 330
Screen Interval (feet TOIC):320-330
Initial Water Level (Feet TOIC):60.87
Final Water Level (feet TOIC):60.88
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-31D-R1
Sample Time: 1415
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 39.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 320
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1305	6.4	6.22	19.31	2420	517	1.71	134	60.89	
1310	8.0	5.95	18.41	2180	1000	2.45	140	60.85	
1315	9.6	5.73	17.67	1980	715	2.48	158	60.86	
1320	11.2	5.67	17.24	1930	423	2.70	174	60.88	
1325	12.8	5.65	17.26	1910	167	2.51	185	60.87	
1330	14.0	5.64	17.38	1900	110	2.64	188	60.87	
1335	15.4	5.63	17.27	1900	83.6	2.43	194	60.88	
1340	16.8	5.63	17.28	1890	64.8	2.30	198	60.88	
1345	18.2	5.63	17.25	1910	74.9	2.44	200	60.87	
1350	19.6	5.64	17.41	1890	53.0	2.28	201	60.88	
1355	21.0	5.65	17.36	1890	43.1	2.35	203	60.88	
1400	22.4	5.65	17.21	1900	41.8	2.48	204	60.88	
1405	23.8	5.65	17.20	1890	39.3	2.37	206	60.88	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-31I
Sample Date: 6/20/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC):180-190
Initial Water Level (Feet TOIC):60.13
Final Water Level (feet TOIC):60.14
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-31I-R1
Sample Time: 1530
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1450	3.8	5.86	19.41	495	2.4	6.39	245	60.13	
1455	5.2	5.86	18.33	506	2.2	6.27	245	60.13	
1500	6.6	5.84	18.27	501	2.9	5.21	249	60.14	
1505	8.0	5.81	18.17	499	3.5	5.15	252	60.14	
1510	9.4	5.79	17.59	504	3.2	5.60	255	60.13	
1515	10.8	5.78	17.27	504	2.5	5.59	258	60.13	
1520	12.2	5.77	17.44	503	2.5	5.54	258	60.14	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-32D
Sample Date: 6/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 305
Screen Interval (feet TOIC):295-305
Initial Water Level (Feet TOIC):61.21
Final Water Level (feet TOIC):61.30
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-32D-R1
Sample Time: 1120
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 47.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 240/220
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0825	4.5	6.51	20.22	1770	5.2	2.71	-152	61.31	
0830	5.7	6.62	19.48	1800	5.4	1.42	-171	61.30	
0835	6.9	6.43	17.82	1850	11.1	1.67	-146	61.27	
0840	7.0	6.23	18.75	1810	11.1	1.63	-113	61.27	Flow rate decreased due to Horiba
0845	7.1	5.95	18.80	1820	13.2	1.62	-84	61.27	Connection
0850	7.3	5.80	18.83	1810	14.3	1.36	-68	61.27	
0855	7.6	5.67	18.73	1770	16.1	1.48	-29	61.35	Adjusted flow rate to 220ml/min
0900	8.7	5.63	18.62	1700	74.1	2.05	-13	61.31	
0905	9.8	5.61	18.45	1660	112	2.24	-16	61.30	
0910	10.9	5.58	18.48	1610	100	2.27	12	61.31	
0915	12.0	5.49	18.49	1580	115	2.23	56	61.25	
0920	13.1	5.42	18.50	1570	119	2.20	85	61.30	
0925	14.2	5.40	18.54	1560	118	2.21	103	61.29	
0930	15.3	5.40	18.57	1550	119	2.20	112	61.29	
0935	16.4	5.42	18.60	1540	112	2.19	117	61.31	
0940	17.5	5.41	18.52	1540	111	2.68	120	61.30	

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mV = Millivolts.
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ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0945	18.6	5.40	18.74	1510	106	3.11	133	61.25	
0950	19.7	5.39	18.90	1510	107	3.05	138	61.30	
0955	20.8	5.38	19.03	1500	80.8	2.96	143	61.29	
1000	21.9	5.36	19.13	1500	78.8	2.90	148	61.30	
1005	23.0	5.35	19.20	1500	92.4	2.87	152	61.26	
1010	24.1	5.33	19.31	1500	89.7	2.84	158	61.30	
1015	25.2	5.38	19.39	1490	90.2	2.82	154	61.31	
1020	26.3	5.43	19.46	1490	79.7	2.75	150	61.30	
1025	27.4	5.44	19.54	1500	79.5	2.72	151	61.26	
1030	28.5	5.43	19.63	1500	67.5	2.68	154	61.26	
1035	29.6	5.42	19.77	1500	66.9	2.64	156	61.30	
1040	30.7	5.40	19.90	1490	58.7	2.63	160	61.26	
1045	31.8	5.41	20.01	1490	57.5	2.57	162	61.27	
1050	32.9	5.38	20.19	1490	56.1	2.52	167	61.30	
1055	34.0	5.39	20.27	1490	55.9	2.50	167	61.26	
1100	35.1	5.37	20.39	1480	53.9	2.47	172	61.28	
1105	36.2	5.36	20.50	1480	49.7	2.45	173	61.31	
1110	37.3	5.36	20.62	1480	49.8	2.43	174	61.30	
1115	38.4	5.35	20.80	1470	47.9	2.41	178	61.30	

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-33D
Sample Date: 6/20/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 300
Screen Interval (feet TOIC):290-300
Initial Water Level (Feet TOIC):55.18
Final Water Level (feet TOIC):55.18
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: MW-33D-R1
Sample Time: 1550
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1430	7.0	5.99	26.56	573	10.1	1.32	175	55.28	
1440	8.5	5.79	23.61	580	4.8	0.86	179	55.28	
1450	10.0	5.75	22.46	572	3.7	0.87	183	55.28	
1500	11.5	5.73	22.23	551	2.4	0.80	191	55.28	
1510	13.0	5.77	22.40	534	1.9	0.75	191	55.28	
1520	14.5	5.80	22.35	527	1.6	0.72	192	55.27	
1530	16.0	5.81	22.43	524	1.2	0.73	194	55.28	
1540	17.5	5.81	22.51	518	1.0	0.74	198	55.28	

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ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-33S
Sample Date: 6/21/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):54.79
Final Water Level (feet TOIC):54.79
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: MW-33S-R1
Sample Time: 0930
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0830	2.0	4.59	19.08	91	8.4	9.79	266	54.81	
0835	2.75	4.29	17.58	86	5.9	9.14	307	54.81	
0840	3.5	4.25	17.34	86	3.4	8.94	343	54.81	
0845	4.25	4.25	17.20	86	1.1	8.72	377	54.81	
0850	5.0	4.25	17.15	86	0.8	8.66	380	54.81	
0855	5.75	4.26	17.18	86	0.0	8.63	393	54.81	
0900	6.5	4.27	17.25	86	0.0	8.56	404	54.81	
0905	7.25	4.29	17.27	86	0.0	8.63	410	54.81	
0910	8.0	4.28	17.22	86	0.0	8.71	411	54.81	
0915	8.75	4.30	17.25	86	0.0	8.83	411	54.81	
0920	9.5	4.31	17.30	86	0.0	8.79	416	54.81	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-34D
Sample Date: 6/19/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC):270-280
Initial Water Level (Feet TOIC):55.54
Final Water Level (feet TOIC):55.52
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: MW-34D-R1
Sample Time: 1620
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 31.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1445	11.0	6.03	16.63	271	466	5.14	236	55.95	
1500	13.25	6.04	16.29	288	275	5.15	242	55.95	
1515	15.5	6.04	16.06	273	158	5.23	247	55.92	
1530	17.75	6.04	15.91	273	90.8	5.35	250	55.95	
1545	20.0	6.05	15.78	273	56.9	5.48	255	55.95	
1600	22.25	6.05	15.76	273	48.6	5.50	259	55.91	
1605	23.0	6.04	15.75	273	36.6	5.48	261	55.95	
1610	23.75	6.05	15.78	272	31.4	5.45	261	55.93	

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ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-34S
Sample Date: 6/19/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):55.71
Final Water Level (feet TOIC):55.71
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: MW-34S-R1
Sample Time: 1710
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1645	7.5	5.57	14.84	67	0.0	12.48	279	55.74	
1650	10.0	5.53	14.75	68	0.0	12.33	290	55.74	
1655	12.5	5.52	14.66	70	0.0	12.26	298	55.74	
1700	15.0	5.51	14.66	71	0.0	12.19	303	55.74	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-39S
Sample Date: 6/20/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 86
Screen Interval (feet TOIC):76-86
Initial Water Level (Feet TOIC):60.21
Final Water Level (feet TOIC):60.21
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: MW-39S-R1
Sample Time: 1555
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 11.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1410	1.1	5.82	19.99	146	64.7	10.46	244	60.22	
1415	2.2	5.79	20.02	130	49.6	9.43	234	60.22	
1420	3.3	5.76	21.15	128	40.0	8.55	238	60.22	
1425	4.4	5.76	21.78	133	36.0	8.77	236	60.22	
1430	5.5	5.81	25.75	132	28.9	7.63	233	60.22	
1435	6.6	5.79	21.32	132	25.0	8.15	243	60.22	
1440	7.7	5.83	23.13	132	16.2	7.63	241	60.22	
1445	8.8	5.82	22.95	132	15.7	7.85	242	60.22	
1450	9.9	5.79	21.06	130	15.8	8.03	250	60.22	
1455	11.0	5.81	25.21	125	15.1	6.51	245	60.22	
1500	12.1	5.81	22.36	132	11.8	7.61	249	60.22	
1505	13.2	5.82	22.01	134	11.4	7.62	252	60.22	
1510	14.3	5.81	22.88	133	11.4	7.81	257	60.22	
1515	---	---	---	---	---	---	---	---	Compressor overheated and
1520	15.4	5.82	21.55	136	10.4	7.40	246	60.22	changed to a new one
1525	---	---	---	---	---	---	---	---	

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1535	16.5	5.82	22.03	134	5.3	6.78	251	60.22	
1540	17.6	5.82	20.91	133	5.6	6.92	257	60.22	
1545	18.7	5.81	20.74	134	6.1	6.95	260	60.22	
1550	19.7	5.81	20.73	135	6.1	6.66	262	60.22	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-41S
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 76
Screen Interval (feet TOIC):66-76
Initial Water Level (Feet TOIC):62.42
Final Water Level (feet TOIC):62.45
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-41S-R1
Sample Time: 1155
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1115	0.5	6.32	15.66	373	11.7	5.63	202	62.45	
1120	3.0	6.31	15.52	390	6.1	5.32	169	62.45	
1125	5.5	6.33	15.47	399	2.7	5.26	156	62.43	
1130	8.0	6.34	15.33	409	1.2	5.11	150	62.44	
1135	10.5	6.34	15.31	425	0.8	5.02	154	62.44	
1140	13.0	6.35	15.38	440	0.6	4.95	162	62.49	
1145	15.5	6.35	15.47	441	0.3	4.89	172	62.44	
1150	18.0	6.36	15.47	439	0.2	4.86	175	62.45	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-42I
Sample Date: 6/8/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):62.58
Final Water Level (feet TOIC):62.61
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-42I-R1
Sample Time: 1330
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 5.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 430
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1222	0.5	6.54	15.62	1010	2.2	1.79	127	62.60	
1227	2.65	5.65	15.44	1080	413	5.83	228	62.60	
1232	4.8	5.56	15.39	1080	353	5.93	248	62.60	
1237	6.95	5.57	15.42	1060	161	5.88	256	62.61	
1242	8.1	5.57	15.34	1040	70.6	5.85	263	62.61	
1247	10.25	5.59	15.37	1020	37.2	5.78	269	62.61	
1252	12.4	5.59	15.39	1010	23.8	5.71	272	62.61	
1257	14.55	5.60	15.35	1010	15.9	5.67	275	62.61	
1316	15.05	5.64	15.37	1000	6.8	5.62	273	62.61	
1321	17.2	5.60	15.33	1000	5.1	5.66	278	62.61	

Key:
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-43S
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 73
Screen Interval (feet TOIC):63-73
Initial Water Level (Feet TOIC):62.87
Final Water Level (feet TOIC):62.89
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-43S-R1
Sample Time: 1430
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 130
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1415	0.5	6.60	15.53	1100	0.0	6.41	196	62.89	
1420	3.0	6.59	15.45	1120	0.0	6.19	193	62.89	
1425	5.5	6.58	15.51	1130	0.0	5.96	191	62.89	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-44S
Sample Date: 6/8/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):61.75
Final Water Level (feet TOIC):61.80
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Carlo

Sample ID: MW-44S-R1
Sample Time: 1005
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0934	0.5	6.51	15.92	362	2.9	6.70	221	61.79	
0939	3.0	6.53	15.83	416	1.1	6.58	222	61.82	
0944	5.5	6.53	15.80	438	0.9	6.42	223	61.80	
0949	8.0	6.53	15.80	465	0.8	6.22	224	61.79	
0954	10.5	6.53	15.81	456	0.5	6.20	225	61.80	
0959	13.0	6.53	15.82	455	0.4	6.16	225	61.80	

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-49S
Sample Date: 6/5/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):62.87
Final Water Level (feet TOIC):62.87
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-49S-R1
Sample Time: 0845
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 325
Purge Rate d/sampling (ml/min): 225
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0755	0.4	6.56	16.54	158	1.7	7.12	206	62.88	
0800	1.6	5.86	16.22	128	2.1	6.91	209	62.89	
0805	3.2	5.28	15.76	213	10.5	8.07	223	62.87	Adjusted flow rate to 225ml/min
0810	4.3	5.29	15.61	232	6.9	7.73	234	62.87	
0815	5.4	5.31	15.55	226	3.9	7.49	241	62.87	
0820	6.5	5.31	15.55	215	2.6	7.38	248	62.87	
0825	7.6	5.32	15.52	210	2.0	7.23	252	62.87	
0830	8.7	5.33	15.47	205	2.1	7.08	256	62.87	
0835	9.8	5.34	15.49	203	1.8	7.10	257	62.87	
0840	10.9	5.34	15.57	200	1.6	7.05	259	62.87	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-50I
Sample Date: 6/20/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):60.69
Final Water Level (feet TOIC):60.72
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-50I-R1
Sample Time: 1130
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 11.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 360
Purge Rate d/sampling (ml/min): 130
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1045	3.6	5.60	17.90	493	81.2	8.00	271	60.70	
1050	5.4	5.54	17.19	507	63.8	7.52	273	60.71	
1055	7.2	5.50	16.96	510	37.4	6.45	284	60.70	
1100	9.0	5.49	16.82	508	30.9	5.57	290	60.69	
1105	10.8	5.49	16.82	504	23.2	5.46	294	60.70	
1110	12.6	5.48	16.51	504	18.6	5.59	296	60.69	
1115	14.4	5.50	16.78	499	14.8	5.69	296	60.70	
1120	16.2	5.50	16.73	496	11.2	5.30	297	60.70	

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-51I
Sample Date: 6/20/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 140
Screen Interval (feet TOIC):130-140
Initial Water Level (Feet TOIC):59.68
Final Water Level (feet TOIC):59.71
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-51I-R1
Sample Time: 1350
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 430
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1300	3.0	5.72	18.24	456	1.4	10.20	250	59.70	
1305	5.2	5.68	17.40	465	0.0	9.74	259	59.71	
1310	7.4	5.62	17.09	475	0.0	9.09	266	59.71	
1315	9.6	5.59	17.56	482	0.4	7.96	278	59.68	
1320	11.8	5.58	17.13	490	0.4	7.31	283	59.70	
1325	14.0	5.57	17.10	498	0.0	6.69	287	59.86	
1330	16.2	5.57	17.22	502	0.0	6.20	289	59.68	
1335	18.4	5.60	16.98	510	0.0	5.74	290	59.70	
1340	20.6	5.61	16.92	512	0.0	6.68	290	59.69	

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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-52D
Sample Date: 6/20/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):56.77
Final Water Level (feet TOIC):56.85
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: MW-52D-R1
Sample Time: 1020
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 22.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0915	7.0	5.87	18.03	205	56.7	2.24	206	56.98	
0925	9.0	5.47	16.60	203	81.9	1.62	232	56.98	
0935	11.0	5.39	16.65	198	67.5	1.56	251	56.98	
0945	13.0	5.29	16.77	196	54.9	1.58	260	56.98	
0955	15.0	5.41	16.83	193	36.6	1.53	268	56.98	
1000	16.0	5.44	16.91	191	30.1	1.52	268	56.98	
1005	17.0	5.47	16.86	191	24.2	1.46	267	56.98	
1010	18.0	5.48	16.83	191	22.2	1.45	268	56.98	Collected duplicate sample
									MW-816-GW-R1

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-53S
Sample Date: 6/20/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):56.26
Final Water Level (feet TOIC):56.26
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: MW-53S-R1
Sample Time: 1140
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1105	2.0	4.85	20.38	90	3.2	10.20	303	56.28	
1110	3.0	4.80	18.15	91	0.0	9.59	358	56.28	
1115	4.0	4.82	18.08	91	0.0	9.43	376	56.28	
1120	5.0	4.85	17.97	91	0.0	9.36	381	56.28	
1125	6.0	4.93	18.04	90	0.0	9.21	377	56.28	
1130	7.0	5.01	18.10	89	0.0	9.08	373	56.28	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-55S
Sample Date: 6/21/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 95.5
Screen Interval (feet TOIC):85.5-95.5
Initial Water Level (Feet TOIC):55.41
Final Water Level (feet TOIC):55.40
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: MW-55S-R1
Sample Time: 1120
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1030	2.0	6.07	16.59	947	0.0	8.81	239	55.42	
1035	3.0	6.07	16.85	946	0.0	8.63	239	55.42	
1040	4.0	6.08	16.70	949	0.0	8.25	237	55.42	
1045	5.0	6.10	16.71	950	0.0	8.19	234	55.42	
1050	6.0	6.10	16.65	949	0.0	8.22	235	55.42	
1055	7.0	6.10	16.63	948	0.0	8.18	237	55.42	
1100	8.0	6.10	16.66	949	0.0	8.10	237	55.42	
1105	9.0	6.10	16.60	947	0.0	8.03	237	55.42	
1110	10.0	6.11	16.61	947	0.0	7.95	237	55.42	Collected duplicate sample
									MW-817-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-201-220
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 220
Screen Interval (feet TOIC):210-220
Initial Water Level (Feet TOIC):61.27
Final Water Level (feet TOIC):61.27
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-201-220-R1
Sample Time: 1140
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1100	4.5	6.50	18.33	424	0.0	5.34	225	61.27	
1105	5.25	6.27	18.08	411	3.4	5.11	236	61.27	
1110	6.0	6.16	17.61	400	3.1	5.58	240	61.27	
1115	6.75	6.14	17.59	396	1.9	5.46	244	61.27	
1120	7.5	6.10	17.63	390	1.6	5.30	248	61.27	
1125	8.25	6.07	17.77	380	0.5	5.18	252	61.27	
1130	9.0	6.06	17.85	378	0.0	5.12	255	61.27	
1135	9.75	6.05	17.82	378	0.3	5.01	256	61.27	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-220
Sample Date: 6/26/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 222.15
Screen Interval (feet TOIC):210-220
Initial Water Level (Feet TOIC):54.68
Final Water Level (feet TOIC):54.70
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-202-220-R1
Sample Time: 1150
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 225
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1105	1.125	7.23	15.54	196	8.3	10.54	76	54.70	
1110	2.25	6.37	15.48	191	5.6	10.28	94	54.70	
1115	3.375	5.77	15.44	190	4.4	12.05	127	54.70	
1120	4.5	5.51	15.48	190	4.6	13.32	146	54.70	
1125	5.625	5.40	15.21	190	3.6	13.57	155	54.70	> 1 system volume removed
1130	6.75	5.43	15.23	190	3.7	13.40	163	54.70	
1135	7.875	5.40	15.17	189	3.2	13.29	175	54.70	
1140	9.0	5.41	15.34	188	2.2	13.29	184	54.70	> 2 system volumes removed
1145	10.125	5.41	15.45	190	2.2	13.12	191	54.70	
									Collected duplicate sample
									MW-818-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-380
Sample Date: 6/25/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 383.25
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):55.28
Final Water Level (feet TOIC):55.28
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-202-380-R1
Sample Time: 1610
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 15.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1500	6.6	7.34	16.87	273	125	5.49	-99	55.28	> 1 system volume removed
1505	7.6	6.80	16.73	282	122	6.63	-50	55.28	
1510	8.6	6.49	16.52	287	97.5	7.41	-42	55.28	
1515	9.6	6.27	16.70	289	76.5	7.81	-24	55.28	
1520	10.6	6.20	16.50	289	67.6	8.73	-26	55.28	
1525	11.6	6.13	16.37	294	54.2	9.12	-9	55.28	
1530	12.6	6.06	16.71	299	48.0	9.62	-16	55.28	
1535	13.6	6.00	16.68	299	28.2	10.38	2	55.28	> 2 system volumes removed
1540	14.6	5.98	16.67	299	24.5	10.01	16	55.28	
1545	15.6	5.98	16.38	300	23.1	11.42	5	55.28	
1550	16.6	6.03	16.43	300	22.5	12.70	9	55.28	
1555	17.6	5.96	16.74	299	18.3	10.92	6	55.28	
1600	18.6	5.95	16.78	298	17.9	10.86	4	55.28	
1605	19.6	5.96	16.58	300	15.6	10.98	10	55.28	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-495
Sample Date: 6/26/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 497.90
Screen Interval (feet TOIC):485-495
Initial Water Level (Feet TOIC):55.37
Final Water Level (feet TOIC):55.40
Casing Type: **PVC** Steel (circle one)
Personnel: J. Nelson & P. Lamont

Sample ID: MW-202-495-R1
Sample Time: 1010
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 22.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0900	3.75	11.31	15.35	560	2.4	11.23	-365	55.39	
0905	5.00	11.16	15.13	471	16.3	8.24	-346	55.39	
0910	6.25	10.84	14.89	369	23.5	8.80	-337	55.39	
0915	7.5	10.39	14.80	294	28.9	9.61	-326	55.39	
0920	8.75	10.18	14.82	261	26.6	10.59	-319	55.39	
0925	10.0	10.04	14.85	251	24.5	11.07	-303	55.39	> 1 system volume removed
0930	11.25	9.91	14.88	242	25.2	11.33	-290	55.39	
0935	12.5	9.80	14.83	233	25.2	11.42	-278	55.39	
0940	13.75	9.93	14.83	225	23.2	11.21	-274	55.39	
0945	15.0	9.90	14.86	222	.54	14.81	-262	55.39	
0950	16.25	9.89	14.93	220	.52	14.64	-269	55.39	
0955	17.5	9.87	14.95	218	23.1	14.54	-249	55.39	
1000	18.75	9.85	14.95	217	23.3	14.39	-241	55.39	
1005	20.0	9.81	14.92	214	22.9	14.28	-239	55.39	> 2 system volumes removed

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-160
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC):150-160
Initial Water Level (Feet TOIC):58.43
Final Water Level (feet TOIC):58.43
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-203-160-R1
Sample Time: 1650
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 15.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1610	3.2	6.36	15.35	261	41.4	4.52	172	58.43	
1615	5.45	5.71	15.20	264	134	3.21	181	58.43	
1620	7.7	5.69	15.13	260	142	3.08	184	58.43	
1625	9.95	5.67	15.09	259	117	2.91	191	58.43	
1630	12.2	5.68	15.05	260	76.3	2.85	194	58.43	
1635	14.45	5.67	15.06	262	46.8	2.73	196	58.43	
1640	16.7	5.65	15.04	262	28.0	2.54	199	58.43	
1645	18.95	5.60	14.93	261	15.1	2.69	204	58.43	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-360
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 360
Screen Interval (feet TOIC):350-360
Initial Water Level (Feet TOIC):59.26
Final Water Level (feet TOIC):59.34
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-203-360-R1
Sample Time: 0920
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 16.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350-275
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0820	7.11	11.73	15.42	962	49.1	1.82	-260	59.26	
0825	8.86	11.43	15.15	700	30.8	2.03	-197	59.26	
0830	10.61	11.19	15.38	571	22.8	2.22	-161	59.26	
0835	12.36	10.85	15.40	473	21.0	2.50	-134	59.29	
0840	14.11	10.56	15.58	435	18.9	2.64	-118	59.29	
0845	15.86	10.40	15.50	416	19.7	2.79	-111	59.29	
0850	17.61	10.29	15.58	406	18.7	2.83	-107	59.29	
0855	19.36	10.25	15.60	400	15.9	2.79	-101	59.29	
0900	21.11	10.14	15.57	393	15.0	2.82	-98	59.30	
0905	22.49	10.03	15.73	391	14.6	2.86	-91	59.33	Adjusted flow rate to 275ml/min
0910	23.86	9.98	15.46	388	16.5	2.95	-91	59.33	
0915	25.24	9.93	15.48	387	16.8	2.96	-90	59.33	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-440
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 440
Screen Interval (feet TOIC):430-440
Initial Water Level (Feet TOIC):59.00
Final Water Level (feet TOIC):59.00
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: MW-203-440-R1
Sample Time: 1540
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 10.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200/250
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1400	8.7	11.70	16.45	974	4.7	1.58	-121	59.00	
1405	9.7	11.64	16.46	923	17.6	1.46	-120	59.00	
1410	10.7	11.54	16.46	811	24.7	1.39	-110	59.00	
1415	11.7	11.41	16.17	677	22.8	1.44	-100	59.00	
1420	12.7	11.27	16.30	546	20.3	1.42	-90	59.00	
1425	13.7	11.15	16.79	472	19.5	1.50	-81	59.00	
1430	14.7	11.03	16.83	430	18.1	1.69	-72	59.00	
1435	15.7	10.94	16.56	400	17.2	1.91	-65	59.00	
1440	16.7	10.86	16.13	373	16.6	2.10	-60	59.00	
1445	17.7	10.75	15.91	341	16.5	2.26	-53	59.00	
1450	18.7	10.59	15.89	314	15.1	2.38	-43	59.00	
1455	19.7	10.44	16.26	289	14.8	2.40	-35	59.00	
1500	20.7	10.56	15.82	288	15.8	3.00	-40	59.00	Adjusted flow rate to 250ml/min
1505	21.95	10.13	15.70	266	12.6	3.36	-23	59.00	
1510	22.3	9.63	15.65	246	9.2	3.74	12	59.00	
1515	23.55	9.48	15.65	244	9.8	3.86	25	59.00	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1520	24.8	9.41	15.83	241	8.2	3.84	33	59.00	
1525	26.05	9.28	15.66	240	6.8	4.14	43	59.00	
1530	27.3	9.26	15.43	240	7.3	4.39	44	59.00	
1535	28.55	9.31	15.29	241	10.3	4.47	44	59.00	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-204-320
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):60.01
Final Water Level (feet TOIC):60.15
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-204-320-R1
Sample Time: 0950
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 270
Purge Rate d/sampling (ml/min): 210
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0840	4.9	12.30	16.90	4050	87.0	2.48	180	60.15	
0845	6.3	12.26	16.96	3370	78.3	1.06	-224	60.24	
0850	7.7	12.18	16.27	2870	30.9	0.85	-245	60.18	
0855	9.1	12.15	16.21	2690	17.3	0.82	-231	60.19	
0900	10.5	12.13	16.30	2590	12.1	0.82	-210	60.16	
0905	11.9	11.88	17.00	2410	19.3	1.28	-171	60.17	
0910	13.3	12.09	16.47	2350	9.6	1.22	-168	60.15	
0915	14.7	12.08	16.44	2250	4.8	1.12	-160	60.16	
0920	16.1	12.06	16.23	2160	4.3	1.19	-152	60.17	
0925	17.5	12.05	16.16	2070	2.6	1.25	-143	60.15	
0930	18.9	12.03	16.15	1980	2.7	1.28	-137	60.16	
0935	19.3	12.02	16.12	1930	2.2	1.27	-132	60.15	
0940	20.1	12.00	16.18	1940	2.2	1.30	-128	60.18	Collected duplicate sample
									MW-810-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-204-470
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):59.70
Final Water Level (feet TOIC):59.79
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-204-470-R1
Sample Time: 1150
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 33.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 310
Purge Rate d/sampling (ml/min): 210
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1055	9.1	11.47	17.63	1280	83.3	2.97	-59	59.79	
1100	10.6	11.43	16.96	1230	83.8	1.59	-63	59.78	
1105	12.1	11.38	16.70	1190	88.0	1.57	-57	59.80	
1110	13.6	11.32	16.52	1150	85.9	1.64	-53	59.82	
1115	15.1	11.26	17.01	1110	73.5	1.72	-49	59.80	
1120	16.6	11.20	16.73	1090	65.9	1.79	-45	59.81	
1125	18.1	11.17	16.77	1060	62.3	1.79	-43	59.80	
1130	19.6	11.10	16.26	1050	41.2	1.93	-39	59.80	
1135	21.1	11.01	16.16	1020	37.3	1.96	-36	59.80	
1140	22.6	10.96	16.14	1010	35.4	2.02	-34	59.80	
1145	24.1	10.91	16.21	990	33.6	2.06	-31	59.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-205-285
Sample Date: 6/13/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):62.29
Final Water Level (feet TOIC):63.25
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-205-285-R1
Sample Time: 1620
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 9.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1550	8.7	11.64	20.16	2810	12.6	1.44	22	63.55	*more than 1 volume removed
1555	9.8	11.88	17.54	2960	11.5	0.88	-89	63.41	before connecting Horiba, due to
1600	10.9	11.87	17.19	2930	9.6	0.75	-86	63.35	trouble stabilizing draw-down
1605	12.0	11.85	17.00	2880	8.6	0.69	-82	63.30	with flow rate
1610	13.1	11.82	16.95	2820	8.1	0.68	-78	63.28	
1615	14.2	11.79	16.90	2850	9.2	0.69	-74	63.21	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-205-470
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):62.67
Final Water Level (feet TOIC):62.90
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-205-470-R1
Sample Time: 1540
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 3.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 240
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1425	7.6	9.60	20.75	538	23.0	2.72	-26	62.95	
1430	8.8	11.25	18.44	486	16.2	1.08	-88	62.81	
1435	10.0	11.13	18.12	415	14.6	1.13	-66	62.90	
1440	11.2	11.07	18.16	387	14.4	1.31	-57	62.90	
1445	12.4	10.98	18.28	346	12.5	1.33	-49	62.91	
1450	13.6	10.89	17.17	321	10.0	1.55	-40	62.91	
1455	14.8	10.78	17.19	292	4.9	1.73	-35	62.90	
1500	16.0	10.63	18.34	257	3.3	1.72	-28	62.90	
1505	17.2	10.58	18.40	249	2.6	1.88	-25	62.91	
1510	18.4	10.52	17.46	246	3.1	2.14	-22	62.89	
1515	19.6	10.46	16.70	239	2.4	2.28	-20	62.81	
1520	20.8	10.49	17.39	240	2.8	2.23	-18	62.86	
1525	22.0	10.45	17.38	240	3.0	2.35	-15	62.86	
1530	23.2	10.43	17.56	242	3.1	2.32	-14	62.85	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-206-320
Sample Date: 6/13/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):61.76
Final Water Level (feet TOIC):61.75
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-206-320-R1
Sample Time: 1350
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 320
Purge Rate d/sampling (ml/min): 100/250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1305	6.8	5.57	17.05	540	11.9	3.01	228	61.80	
1310	8.4	5.23	16.07	556	8.9	2.37	208	61.76	
1315	10.0	5.20	15.84	553	5.5	2.15	206	61.75	
1320	11.6	5.19	15.83	550	3.9	2.03	211	61.76	
1325	13.2	5.19	15.85	550	4.0	1.93	217	61.76	
1330	14.8	5.18	15.83	550	2.9	1.89	224	61.76	
1335	16.4	5.18	15.86	549	2.0	1.88	231	61.75	
1340	18.0	5.17	15.77	550	1.8	1.83	234	61.75	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-206-470
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):61.76
Final Water Level (feet TOIC):61.77
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-206-470-R1
Sample Time: 1755
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 4.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 230
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1655	9.1	9.40	20.19	797	5.9	5.32	70	61.77	
1700	10.3	9.32	17.37	821	4.3	4.15	1	61.80	
1705	11.5	9.08	16.91	828	4.1	3.97	10	61.78	
1710	12.7	8.81	17.35	827	3.8	3.77	16	61.77	
1715	13.9	8.55	16.99	840	3.8	3.88	25	61.77	
1720	15.1	8.38	17.10	846	4.3	3.70	29	61.77	
1725	16.3	8.30	16.92	854	4.5	3.72	33	61.76	
1730	17.5	8.20	16.84	866	4.5	3.73	38	61.76	
1735	18.7	8.07	16.22	893	4.6	4.07	44	61.78	
1740	19.9	8.00	16.18	899	4.0	4.08	47	61.76	
1745	21.1	7.98	16.01	906	4.3	3.90	50	61.78	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-170
Sample Date: 6/21/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):54.50
Final Water Level (feet TOIC):54.50
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: MW-207-170-R1
Sample Time: 1355
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 270
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1250	1.35	5.65	18.01	218	6.7	9.99	169	54.62	
1255	2.7	5.65	18.04	219	4.7	9.10	166	54.62	
1300	4.05	5.67	17.42	219	2.9	8.67	167	54.62	
1305	5.4	5.66	17.43	217	2.2	7.84	165	54.62	
1310	6.75	5.67	17.36	216	2.2	7.15	165	54.62	
1315	8.1	5.65	17.27	219	1.6	6.63	167	54.62	
1320	9.45	5.64	17.18	217	1.5	6.11	167	54.62	
1325	10.8	5.63	17.18	216	1.2	5.58	169	54.62	
1330	12.15	5.64	17.25	214	1.1	5.01	169	54.62	
1335	13.5	5.64	17.29	213	1.0	4.72	170	54.62	
1340	14.85	5.63	17.45	211	0.9	4.53	171	54.62	
1345	16.2	5.61	17.45	212	0.9	4.34	173	54.62	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-250
Sample Date: 6/21/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 250
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.45
Final Water Level (feet TOIC):55.45
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: MW-207-250-R1
Sample Time: 1125
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1020	1.1	6.88	18.59	230	2.2	8.02	93	55.50	
1025	2.2	5.76	18.41	294	1.8	7.72	174	55.50	
1030	3.3	5.46	18.37	308	1.8	8.00	219	55.50	
1035	4.4	5.44	18.87	310	1.6	7.75	231	55.50	
1040	5.5	5.42	18.94	310	1.7	8.02	234	55.50	
1045	6.6	5.43	18.72	313	1.7	7.80	237	55.50	
1050	7.7	5.41	18.81	311	1.4	7.84	239	55.50	
1055	8.8	5.42	19.04	308	1.4	7.96	242	55.50	
1100	9.9	5.43	18.95	308	1.5	7.93	243	55.50	
1105	11.0	5.42	19.00	307	1.4	8.02	244	55.50	
1110	12.1	5.44	19.21	307	1.6	7.87	245	55.50	
1115	13.2	5.43	19.17	307	1.4	7.87	246	55.50	
1120	14.3	5.43	19.22	307	1.4	7.97	246	55.50	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-230
Sample Date: 6/21/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.55
Final Water Level (feet TOIC):55.55
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: MW-207-320-R1
Sample Time: 0945
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 5.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 280
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0800	1.4	7.72	17.04	254	3.2	7.51	200	55.74	
0805	2.8	7.08	16.72	244	47.8	7.45	-73	55.74	
0810	4.2	7.13	16.67	452	116	6.61	-127	55.74	
0815	5.6	7.10	16.73	463	100	5.75	-139	55.74	
0820	7.0	6.92	16.63	496	103	5.26	-125	55.74	
0825	8.4	6.76	16.79	422	90.8	4.83	-110	55.74	
0830	9.8	6.62	16.94	401	58.4	4.52	-95	55.74	
0835	11.2	6.57	16.43	392	29.7	4.39	-85	55.74	
0840	12.6	6.50	16.47	379	22.5	4.25	-77	55.74	
0845	14.0	6.47	16.39	369	17.6	4.10	-70	55.74	
0850	15.4	6.42	16.39	363	14.2	3.98	-65	55.74	
0855	16.8	6.40	16.40	354	12.0	3.93	-58	55.74	
0900	18.2	6.38	16.40	352	11.2	3.87	-52	55.74	
0905	19.6	6.34	16.37	345	9.5	3.86	-46	55.74	
0910	21.0	6.33	16.36	342	8.8	3.81	-42	55.74	
0915	22.4	6.32	16.38	339	7.6	3.79	-38	55.74	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0920	34.0	6.29	16.43	335	6.5	3.79	-35	55.74	
0925	25.4	6.28	16.44	333	6.1	3.82	-31	55.74	
0930	26.8	6.26	16.50	329	5.8	3.84	-27	55.74	
0935	28.2	6.25	16.52	328	5.7	3.87	-24	55.74	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-208-350
Sample Date: 6/13/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 350
Screen Interval (feet TOIC):340-350
Initial Water Level (Feet TOIC):57.22*
Final Water Level (feet TOIC):*
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-208-350-R1
Sample Time: 1130
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 5.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1030	6.8	6.10	20.27	1280	24.2	4.41	189	*	
1035	8.05	6.01	16.19	1490	14.7	2.03	118	*	
1040	9.3	5.94	15.80	1500	11.5	8.09	103	*	
1045	10.55	5.90	15.60	1520	10.8	7.48	99	*	
1050	11.8	5.83	15.57	1530	9.4	6.50	104	*	
1055	13.05	5.76	15.57	1540	7.2	5.53	114	*	
1100	14.3	5.72	15.58	1540	7.2	4.88	122	*	
1105	15.55	5.70	15.72	1540	6.0	4.34	129	*	
1110	16.8	5.68	15.57	1550	6.2	3.97	134	*	
1115	18.05	5.66	15.66	1550	5.2	3.64	138	*	
1120	19.3	5.64	15.73	1550	5.0	3.34	143	*	
1125	20.55	5.63	15.69	1560	5.2	3.28	146	*	*= No initial depth to water or
									water levels able to be obtained
									due to damaged PVC casing.
									Used initial water level based on
									5/30/2012 measurement

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-208-540
Sample Date: 6/18/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 540
Screen Interval (feet TOIC):530-540
Initial Water Level (Feet TOIC):57.51
Final Water Level (feet TOIC):57.57
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-208-540-R1
Sample Time: 1030
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 9.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300/260
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0915	10.6	11.98	18.58	3020	11.6	4.90	116	57.55	
0920	12.1	12.06	16.12	2960	15.7	2.68	30	57.54	
0925	13.6	11.99	16.03	2680	17.5	2.33	-101	57.55	
0930	15.1	11.93	15.81	2440	21.8	2.25	-98	57.55	
0935	16.6	11.87	16.14	2240	14.4	2.29	-96	57.55	
0940	18.1	11.83	16.26	2060	56.7	2.29	-90	57.56	Adjusted flow rate to 260ml/min
0945	19.4	11.78	16.65	1870	25.2	2.14	-86	57.56	
0950	20.7	11.73	16.87	1720	19.2	2.05	-79	57.56	
0955	22.0	11.70	16.78	1600	18.6	1.99	-75	57.55	
1000	23.3	11.66	16.73	1500	8.0	2.09	-73	57.55	
1005	24.6	11.63	17.31	1420	7.7	2.05	-69	57.57	
1010	25.9	11.60	17.25	1350	5.8	2.05	-66	57.57	
1015	27.2	11.59	16.56	1310	14.4	2.09	-65	57.58	
1020	28.5	11.56	16.73	1280	9.0	2.20	-62	57.57	
1025	29.8	11.53	16.43	1290	9.9	2.23	-61	57.56	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-209-380
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):39.59
Final Water Level (feet TOIC):39.57
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-209-380-R1
Sample Time: 1605
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 19.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1510	7.9	11.97	16.77	1990	20.5	2.06	21	38.58	
1515	9.3	11.99	16.00	1880	19.2	0.94	-52	38.58	
1520	10.7	11.91	15.60	1610	15.6	0.75	-84	38.58	
1525	12.1	11.82	15.65	1410	14.0	0.67	-80	38.58	
1530	13.5	11.74	15.61	1240	15.7	0.67	-70	38.59	
1535	14.9	11.66	15.52	1130	12.6	0.67	-63	38.58	
1540	16.3	11.57	15.51	1000	16.6	0.68	-54	38.60	
1545	17.7	11.51	15.53	946	19.0	0.71	-50	38.57	
1550	19.1	11.45	15.31	892	18.6	0.72	-46	38.58	
1555	20.5	11.41	15.24	868	20.4	0.73	-43	38.58	
1600	21.9	11.36	15.14	876	19.3	0.77	-40	38.59	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-209-530
Sample Date: 6/7/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 530
Screen Interval (feet TOIC):520-530
Initial Water Level (Feet TOIC):39.35
Final Water Level (feet TOIC):39.19
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-209-530-R1
Sample Time: 1220
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 270/250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1100	6.75	11.38	21.94	745	12.0	2.18	190	39.41	
1105	8.1	11.40	18.80	740	9.8	2.05	191	39.41	
1110	9.5	11.39	17.02	638	12.8	1.89	159	39.38	
1115	10.9	11.52	16.63	775	9.7	2.18	75	39.38	
1120	12.3	11.62	16.53	970	5.0	2.33	-15	39.35	
1125	13.7	11.62	16.57	1010	3.8	2.40	-27	39.36	
1130	15.1	11.57	16.55	935	3.2	2.58	-31	39.35	
1135	16.5	11.51	16.55	819	2.0	2.69	-31	39.34	
1140	17.9	11.43	16.49	703	2.3	2.90	-30	39.29	
1145	19.3	11.21	18.15	574	4.1	3.92	-4	39.30	Adjusted flow rate to 250ml/min
1150	20.6	11.28	16.84	521	1.7	3.44	23	39.29	
1155	21.9	11.22	16.91	475	1.2	3.38	-21	39.28	
1200	23.2	11.16	16.88	425	1.2	3.43	-24	39.29	
1205	24.5	11.11	16.87	375	0.5	3.51	-25	39.29	
1210	25.8	11.09	16.82	365	0.5	3.58	-23	39.29	
1215	27.1	11.05	16.84	347	0.7	3.63	-24	39.19	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-280
Sample Date: 6/19/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC):270-280
Initial Water Level (Feet TOIC):45.71
Final Water Level (feet TOIC):45.74
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-210-280-R1
Sample Time: 0955
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 410
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0925	5.7	5.36	14.82	387	9.0	3.32	203	45.72	
0930	7.8	5.31	14.65	379	8.4	1.04	204	45.73	
0935	9.9	5.28	14.34	374	5.4	0.88	213	45.73	
0940	12.0	5.27	14.26	370	3.1	0.77	218	45.74	
0945	14.1	5.26	14.26	369	2.2	0.72	218	45.74	
0950	16.2	5.26	14.34	366	1.3	0.71	219	45.72	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-380
Sample Date: 6/19/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):45.46
Final Water Level (feet TOIC):45.52
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-210-380-R1
Sample Time: 0855
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 9.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0825	7.6	5.86	15.17	874	14.7	5.12	228	45.50	
0830	9.9	5.88	15.29	834	13.8	2.95	212	45.50	
0835	12.2	5.88	14.59	844	12.8	2.85	207	45.51	
0840	14.5	5.86	14.60	841	12.3	2.76	209	45.51	
0845	16.8	5.88	14.84	836	9.4	2.73	212	45.51	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-470
Sample Date: 6/18/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):45.62
Final Water Level (feet TOIC):45.97
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-210-470-R1
Sample Time: 1725
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 19.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 260
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1625	9.5	12.09	15.10	2430	15.0	1.41	-249	46.10	
1630	10.8	12.09	14.66	2410	17.2	1.00	-242	46.08	
1635	12.1	12.07	14.52	2350	19.6	0.84	-226	46.10	
1640	13.4	12.06	14.29	2290	20.1	0.81	-213	46.10	
1645	14.7	12.04	14.33	2190	21.9	0.77	-198	46.04	
1650	16.0	12.02	14.48	2120	25.0	0.78	-189	46.02	
1655	17.3	12.01	14.47	2040	24.8	0.84	-180	46.03	
1700	18.6	12.00	14.27	1950	24.2	0.90	-171	46.19	
1705	19.9	11.97	14.61	1860	26.1	0.92	-161	46.04	
1710	21.2	11.96	14.66	1820	24.5	0.96	-156	46.04	
1715	22.5	11.94	14.71	1850	19.2	1.01	-152	46.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-190
Sample Date: 6/8/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC):180-190
Initial Water Level (Feet TOIC):50.89
Final Water Level (feet TOIC):50.94
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-211-190-R1
Sample Time: 1020
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 100/200
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0915	1.0	6.38	27.36	1	115	7.73	265	50.91	
0920	1.5	6.14	19.69	437	1.9	2.11	161	20.90	
0925	2.0	6.14	18.85	438	1.6	1.84	136	50.92	
0930	2.5	6.14	18.71	436	1.5	1.74	129	50.89	
0935	3.0	6.13	18.72	434	1.1	1.70	130	50.91	Adjusted flow rate to 200ml/min
0940	4.0	6.25	21.98	393	2.3	2.07	125	50.94	
0945	5.0	6.22	17.78	403	1.1	1.79	130	50.94	
0950	6.0	6.21	17.64	412	1.0	1.82	129	50.94	
0955	7.0	6.18	16.42	424	1.4	1.75	98	50.93	
1000	8.0	6.18	16.93	429	1.3	1.69	101	50.95	
1005	9.0	6.18	17.38	429	1.2	1.75	105	50.94	
1010	10.0	6.19	17.21	430	1.2	1.70	107	50.91	Collected duplicate sample
									MW-804-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-250
Sample Date: 6/19/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 250
Screen Interval (feet TOIC):240-250
Initial Water Level (Feet TOIC):51.16
Final Water Level (feet TOIC):51.16
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-211-250-R1
Sample Time: 1150
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 3.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 360
Purge Rate d/sampling (ml/min): 170
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1115	5.7	6.06	16.13	591	2.7	3.64	131	51.16	
1120	7.5	6.12	15.71	610	2.5	1.55	74	51.17	
1125	9.3	6.12	15.62	614	3.9	1.45	80	51.17	
1130	11.1	6.12	15.45	619	3.5	1.51	85	51.17	
1135	12.9	6.12	15.49	617	4.2	1.47	90	51.16	
1140	14.7	6.12	15.79	620	3.6	1.41	94	51.17	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-455
Sample Date: 6/8/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 455
Screen Interval (feet TOIC):445-455
Initial Water Level (Feet TOIC):52.55
Final Water Level (feet TOIC):52.58
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & B. Kroon

Sample ID: MW-211-455-R1
Sample Time: 1530
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 36.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1300	9.5	12.06	21.39	2430	180	0.96	-155	52.90	
1305	10.5	12.18	17.95	2590	149	0.90	-295	52.85	
1310	11.5	12.13	17.17	2590	215	0.76	-377	52.84	
1315	12.5	12.07	16.90	2610	201	0.66	-428	52.84	
1320	13.5	12.05	16.68	2610	103	0.62	-430	52.85	
1325	14.5	12.04	16.53	2600	167	0.58	-449	52.90	
1330	15.5	12.03	16.58	2510	245	0.56	-479	52.90	
1335	16.5	12.04	16.59	2430	334	0.52	-503	52.95	
1340	17.5	12.03	16.62	2320	235	0.49	-515	52.99	
1345	---	---	---	---	---	---	---	---	Replace CO2 cylinder for
1355	18.5	11.93	17.01	2100	153	0.73	-509	52.50	compressor
1400	19.5	12.04	17.03	2140	98.6	0.41	-500	52.51	
1405	20.5	12.05	16.75	2140	95.7	0.40	-496	52.51	
1410	21.5	12.11	16.80	2220	93.0	0.27	-498	52.52	
1415	22.5	12.09	16.88	2230	102	0.25	-501	52.52	
1420	23.5	12.13	16.91	2190	244	0.22	-366	52.61	

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1425	24.5	12.06	17.05	2010	663	0.21	-425	52.60	
1430	25.5	12.04	17.31	1970	580	0.23	-433	52.58	
1435	26.5	11.94	17.33	1830	1000	0.24	-435	52.61	
1440	27.5	11.98	17.41	1950	1000	0.25	-436	52.60	
1445	28.5	12.08	18.17	2110	353	0.22	-405	52.57	
1450	29.5	12.08	18.00	2060	297	0.23	-403	52.60	
1455	30.5	12.03	17.76	1900	239	0.25	-411	52.58	
1500	31.5	12.05	17.87	1980	155	0.23	-409	52.59	
1505	32.5	12.05	17.86	1960	415	0.21	-406	52.61	
1510	33.5	12.04	17.88	1900	88.7	0.26	-408	52.59	
1515	34.5	12.00	17.82	1900	39.2	0.23	-411	52.60	
1520	35.5	12.01	17.83	1950	35.4	0.22	-409	52.58	
1525	36.5	11.99	17.81	1860	36.8	0.23	-411	52.58	

Key:

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-212-580
Sample Date: 6/18/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 580
Screen Interval (feet TOIC):570-580
Initial Water Level (Feet TOIC):45.60
Final Water Level (feet TOIC):46.17
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & T. Dillon

Sample ID: MW-212-580-R1
Sample Time: 1250
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 15.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 340/300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1205	11.4	8.96	20.08	304	25.1	4.42	17	46.35	
1210	13.1	8.58	17.90	306	20.6	3.35	6	46.32	
1215	14.8	8.42	16.41	313	20.9	3.49	13	46.31	
1220	16.5	8.39	16.11	316	19.9	3.35	15	46.30	Adjusted flow rate to 300ml/min
1225	18.0	8.49	16.11	316	18.2	3.11	17	46.26	
1230	19.5	8.45	16.91	309	17.2	2.74	20	46.21	
1235	21.0	8.47	16.07	314	16.8	2.78	20	46.21	
1240	22.5	8.48	16.19	310	17.0	2.63	21	46.20	
1245	24.0	8.47	16.11	309	15.5	2.58	22	46.17	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-213-570
Sample Date: 6/8/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 570
Screen Interval (feet TOIC):560-570
Initial Water Level (Feet TOIC):48.28
Final Water Level (feet TOIC):48.50
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-213-570-R1
Sample Time: 1025
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0828	3.0	11.18	14.77	290	3.1	12.63	-211	48.28	
0833	4.0	11.13	14.88	303	1.3	10.15	-294	48.30	
0838	5.0	11.06	14.76	278	1.5	9.38	-301	48.32	
0843	6.0	10.68	14.67	200	1.7	8.48	-297	48.35	
0848	7.0	10.07	14.40	170	1.9	8.16	-292	48.35	
0858	8.0	8.61	14.43	137	2.1	6.70	-217	48.40	
0903	9.0	8.00	14.36	122	5.0	6.38	-160	48.45	
0908	10.0	7.59	14.49	112	8.0	5.87	-126	48.49	
0913	11.0	7.30	14.59	102	8.7	5.54	-97	48.50	
0918	12.0	7.10	14.69	94	6.2	5.28	-74	48.55	
0923	13.0	6.75	14.75	84	3.2	4.83	-29	48.58	
0928	14.0	6.68	14.86	82	3.1	4.74	-19	48.55	
0933	15.0	6.60	14.82	79	2.3	4.65	-7	48.50	
0938	16.0	6.54	14.74	78	1.7	4.60	2	48.50	
0943	17.0	6.49	14.67	77	2.1	4.58	11	48.50	
0948	18.0	6.42	14.74	75	1.7	4.55	18	48.50	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0953	19.0	6.41	14.76	73	1.5	4.49	25	48.50	
0958	20.0	6.40	14.86	73	1.2	4.45	27	48.50	
1003	21.0	6.37	15.36	71	1.2	4.48	36	48.50	
1008	22.0	6.33	15.10	70	1.1	4.47	39	48.50	
1013	23.0	6.34	14.96	70	1.3	4.38	39	48.50	
1018	24.0	6.30	14.91	70	1.3	4.42	42	48.50	

Key:

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-214-570
Sample Date: 6/8/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 570
Screen Interval (feet TOIC):560-570
Initial Water Level (Feet TOIC):47.66
Final Water Level (feet TOIC):47.60
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-214-570-R1
Sample Time: 1310
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1155	3.0	6.74	17.50	121	0.3	4.41	7	47.60	
1200	4.5	6.65	19.16	115	0.3	3.77	40	47.60	
1205	6.0	6.41	17.48	108	1.1	3.16	79	47.60	
1210	7.5	6.32	17.28	102	0.7	2.94	99	47.60	
1215	9.0	6.34	19.27	94	3.0	3.06	107	47.60	
1220	10.5	6.24	19.21	90	3.2	3.04	116	47.60	
1225	12.0	6.27	17.27	90	4.7	2.96	121	47.60	
1230	13.5	6.31	17.32	85	3.8	2.78	126	47.60	
1235	15.0	6.31	17.97	81	1.5	2.94	136	47.60	
1240	16.5	6.24	18.05	75	1.0	3.23	140	47.60	
1245	18.0	6.13	18.92	72	1.0	3.30	140	47.60	
1250	19.5	6.13	18.99	73	0.9	3.41	144	47.60	
1255	21.0	6.12	19.00	69	0.9	3.48	155	47.60	
1300	22.5	6.11	18.97	70	0.9	3.58	159	47.60	
1305	24.0	6.10	18.92	69	0.9	3.67	162	47.60	Collected duplicate sample
									MW-805-GW-R1

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P110-355
Sample Date: 6/7/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC): 355
Screen Interval (feet TOIC):345-355
Initial Water Level (Feet TOIC):45.12
Final Water Level (feet TOIC):49.28
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-P110-440-R1
Sample Time: 1405
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 10.1
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1310	2.0	6.14	15.98	314	6.5	3.51	222	47.04	
1315	3.0	6.06	15.77	219	7.8	3.03	218	47.55	
1320	4.0	6.06	15.81	214	8.6	2.79	214	47.75	
1325	5.0	5.96	15.73	306	13.0	2.55	189	48.18	
1330	6.0	5.95	15.47	305	14.1	2.49	174	48.31	
1335	7.0	5.94	15.41	305	13.5	2.31	166	48.65	
1340	8.0	5.96	15.22	305	12.0	2.17	166	48.95	
1345	9.0	5.96	15.45	304	11.3	2.05	168	49.05	
1350	10.0	5.98	15.20	305	10.6	1.96	169	49.20	
1355	11.0	5.98	15.20	304	10.5	1.90	170	49.23	
1400	12.0	5.97	15.20	304	10.1	1.87	171	49.28	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P110-440
Sample Date: 6/7/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC): 444
Screen Interval (feet TOIC):434-444
Initial Water Level (Feet TOIC):46.70
Final Water Level (feet TOIC):46.80
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-P110-440-R1
Sample Time: 1700
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 37.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1508	1.0	5.83	15.58	435	0.4	8.90	222	46.80	
1513	2.0	5.76	15.57	430	0.4	4.79	234	46.80	
1518	3.0	5.73	15.63	433	0.7	4.22	240	46.80	
1528	5.0	5.62	15.20	433	1.2	4.10	253	46.80	
1533	6.0	5.64	15.36	435	1.3	4.00	257	46.80	
1538	7.0	5.62	15.37	434	5.7	3.98	261	46.80	
1543	8.0	5.99	15.39	435	50.1	3.84	249	46.80	
1548	9.0	6.10	15.29	435	66.0	3.72	242	46.80	
1553	10.0	6.18	15.32	437	72.6	3.66	234	46.80	
1603	11.0	6.16	15.33	434	66.8	3.59	200	46.80	
1608	12.0	6.08	15.20	435	62.3	3.55	212	46.80	
1613	13.0	6.03	15.07	435	56.4	3.40	217	46.80	
1618	14.0	5.97	15.07	435	50.4	3.30	222	46.80	
1623	15.0	5.92	15.01	433	49.8	3.31	227	46.80	
1628	16.0	5.87	14.94	432	43.2	3.06	232	46.80	
1633	17.0	5.82	15.03	433	42.7	3.29	237	46.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1638	18.0	5.75	14.98	432	40.0	3.23	244	46.80	
1643	19.0	5.67	14.98	431	39.1	3.31	252	46.80	
1648	20.0	5.64	14.93	430	38.9	3.30	258	46.80	
1653	21.0	5.61	14.85	431	37.6	3.39	264	46.80	
1658	22.0	5.60	14.86	430	37.0	3.45	268	46.80	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P114-170
Sample Date: 6/6/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC):160-170
Initial Water Level (Feet TOIC):46.81
Final Water Level (feet TOIC):46.86
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-P114-170-R1
Sample Time: 1440
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 19.1
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1333	1.1	6.21	17.40	598	38.4	6.37	176	46.86	
1338	2.2	5.95	16.62	578	59.1	3.35	185	46.86	
1343	3.3	5.89	16.18	569	60.5	2.61	196	46.86	
1348	4.4	5.87	16.00	569	57.8	2.42	200	46.86	
1353	5.5	5.87	16.44	568	51.2	2.28	203	46.86	
1358	6.6	5.89	16.04	569	48.8	2.06	206	46.86	
1403	7.7	5.90	17.15	565	31.0	1.81	205	46.86	
1408	8.8	5.95	16.78	566	30.9	1.87	205	46.86	
1413	9.9	5.92	16.80	564	26.9	1.77	205	46.86	
1418	11.0	5.92	17.25	562	22.8	1.62	205	46.86	
1423	12.1	5.95	17.76	559	18.1	1.53	205	46.86	
1428	13.3	5.96	17.64	558	18.0	1.45	205	46.86	
1433	14.4	5.97	17.61	553	19.1	1.40	206	46.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P114-290
Sample Date: 6/6/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):47.12
Final Water Level (feet TOIC):47.15
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & J. Lacanlale

Sample ID: MW-P114-290-R1
Sample Time: 1900
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 31.2
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200/400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1534	1.0	6.47	19.51	463	5.8	8.04	174	47.12	
1539	2.0	6.20	16.74	459	5.7	3.89	193	47.12	
1544	3.0	6.08	16.17	442	5.6	3.22	198	47.12	
1549	4.0	5.96	15.88	430	4.7	3.01	190	47.12	
1554	5.0	5.88	15.53	421	7.5	2.71	98	47.12	
1559	6.0	5.88	15.46	422	120	2.36	81	47.12	
1604	7.0	5.91	15.55	424	285	2.20	73	47.12	
1609	8.0	5.92	15.69	424	430	2.08	71	47.12	
1614	9.0	---	---	---	---	---	---	---	Cleaned flow cell
1619	10.0	5.95	16.29	411	440	7.01	76	47.12	
1624	11.0	5.92	15.61	415	382	6.00	83	47.12	
1629	12.0	5.91	15.26	415	302	5.86	91	47.15	Adjusted flow rate to 400ml/min
1634	14.0	5.87	14.92	413	181	5.25	103	47.15	
1639	16.0	5.87	14.85	412	180	5.09	107	47.15	
1644	18.0	5.85	14.79	412	145	4.82	110	47.15	
1649	20.0	5.83	14.67	410	144	4.48	116	47.15	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1654	22.0	5.80	14.65	409	148	4.19	119	47.15	
1659	24.0	5.79	14.68	407	164	3.96	121	47.15	
1704	26.0	5.78	14.65	405	156	3.76	123	47.15	
1709	28.0	5.75	14.62	403	151	3.53	126	47.15	
1714	30.0	---	---	---	---	---	---	---	Cleaned flow cell
1719	32.0	5.70	14.95	393	136	1.36	134	47.15	
1724	34.0	5.69	14.91	393	135	1.32	134	47.15	
1729	36.0	5.68	14.82	393	133	1.31	135	47.15	
1734	38.0	5.66	14.74	392	120	1.29	140	47.15	
1739	40.0	5.65	14.57	391	115	1.27	146	47.15	
1744	42.0	5.64	14.57	390	104	1.25	151	47.15	
1749	44.0	5.61	14.51	388	87.1	1.22	156	47.15	
1754	46.0	5.61	14.52	387	90.2	1.21	158	47.15	
1759	48.0	5.60	14.48	387	88.2	1.20	161	47.15	
1804	50.0	5.59	14.46	385	87.7	1.17	165	47.15	
1809	52.0	5.57	14.45	384	78.2	1.16	166	47.15	
1814	54.0	5.57	14.47	384	79.2	1.15	168	47.15	
1819	56.0	5.56	14.46	382	80.4	1.13	171	47.15	
1824	58.0	5.55	14.47	381	80.5	1.12	174	47.15	
1829	60.0	---	---	---	---	---	---	---	Cleaned flow cell
1834	62.0	5.54	14.61	374	64.5	1.20	190	47.15	
1839	64.0	5.52	14.47	370	35.3	1.16	219	47.15	
1844	66.0	5.51	14.43	370	29.4	1.13	219	47.15	
1849	68.0	5.50	14.41	371	29.6	1.10	215	47.15	
1854	70.0	5.49	14.41	371	31.2	1.09	213	47.15	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-1
Sample Date: 6/15/2012
Sampling Device: Watera
Well Depth (feet TOIC): 72.25
Screen Interval (feet TOIC):71-73
Initial Water Level (Feet TOIC):54.35
Final Water Level (feet TOIC):54.35
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-2-1-R1
Sample Time: 0920
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 25.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 125
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0850	1.4	5.61	19.91	327	202	7.62	204	----------	2 volumes removed
0855	2.025	5.54	19.39	307	97.6	7.12	204	----------	
0900	2.65	5.51	19.08	300	60.7	7.07	207	----------	> 3 volumes removed
0905	3.275	5.51	18.88	298	35.0	6.93	210	----------	
0910	3.9	5.51	18.80	296	28.0	6.82	213	----------	
0915	4.525	5.51	18.79	297	25.1	6.67	216	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-2
Sample Date: 6/12/2012
Sampling Device: Watera
Well Depth (feet TOIC): 87.20
Screen Interval (feet TOIC):86.0-88.0
Initial Water Level (Feet TOIC):54.60
Final Water Level (feet TOIC):54.65
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-2-2-R1
Sample Time: 1000
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 21.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0845	2.5	5.38	17.39	360	125	8.78	222	----------	2 volumes removed
0850	3.75	5.34	17.03	355	80.1	8.20	231	----------	
0855	5.0	5.34	16.98	393	50.5	7.95	240	----------	3 volumes removed
0900	6.25	5.32	16.94	358	38.1	7.94	248	----------	
0905	7.5	5.32	16.93	357	33.8	7.80	256	----------	
0910	8.75	5.30	16.90	357	40.3	7.77	262	----------	
0915	10.0	5.28	16.88	357	80.7	7.75	267	----------	
0920	11.25	5.27	16.87	355	58.4	7.65	268	----------	
0925	12.5	5.29	16.89	354	85.2	7.59	269	----------	
0930	13.75	5.26	16.90	354	66.7	7.59	271	----------	
0935	15.0	5.27	16.91	352	58.7	7.40	272	----------	
0940	16.25	5.29	16.93	350	56.6	7.32	270	----------	
0945	17.5	5.23	16.93	351	28.7	7.41	279	----------	
0950	18.75	5.23	16.98	349	24.4	7.53	280	----------	
0955	20.0	5.21	17.04	348	21.4	7.46	282	----------	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-3
Sample Date: 6/13/2012
Sampling Device: Watera
Well Depth (feet TOIC): 102.15
Screen Interval (feet TOIC):101-103
Initial Water Level (Feet TOIC):54.52
Final Water Level (feet TOIC):54.55
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-2-3-R1
Sample Time: 1520
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 31.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 75
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1445	3.60	5.23	18.00	399	41.0	9.07	288	----------	2 volumes removed
1452	4.125	5.22	17.82	404	37.5	7.13	292	----------	
1459	4.65	5.22	17.71	401	33.5	6.64	296	----------	
1506	5.175	5.21	17.65	400	31.4	6.48	299	----------	
1513	5.7	5.22	17.65	399	31.1	6.42	300	----------	> 3 volumes removed

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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-4
Sample Date: 6/13/2012
Sampling Device: Watera
Well Depth (feet TOIC): 117.20
Screen Interval (feet TOIC):116-118
Initial Water Level (Feet TOIC):54.50
Final Water Level (feet TOIC):54.55
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-2-4-R1
Sample Time: 1550
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 16.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 75
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1455	4.74	5.68	18.81	138	28.9	5.82	231	----------	2 volumes removed
1502	5.265	5.67	18.65	132	32.5	5.39	252	----------	
1509	5.79	5.68	18.57	128	19.2	5.18	272	----------	
1516	6.315	5.67	18.56	126	25.4	5.05	286	----------	
1523	6.84	5.68	18.63	126	22.7	4.93	296	----------	
1530	7.365	5.68	18.59	126	20.5	4.84	303	----------	
1537	7.89	5.69	18.59	125	20.0	4.84	307	----------	> 3 volumes removed
1544	8.415	5.69	18.62	124	16.6	4.85	311	----------	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-5
Sample Date: 6/12/2012
Sampling Device: Watera
Well Depth (feet TOIC): 132.25
Screen Interval (feet TOIC):131-133
Initial Water Level (Feet TOIC):54.65
Final Water Level (feet TOIC):54.65
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-2-5-R1
Sample Time: 1425
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 33.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1330	5.9	5.49	19.72	248	120	7.40	274	----------	2 volumes removed
1335	6.4	5.50	19.38	247	104	5.51	286	----------	
1340	6.9	5.53	19.21	246	84.4	5.35	298	----------	
1345	7.4	5.53	19.10	246	74.7	4.67	306	----------	
1350	7.9	5.52	19.06	246	58.2	5.21	312	----------	
1355	8.4	5.52	19.00	246	52.9	5.13	317	----------	
1400	8.9	5.52	18.94	246	51.4	5.09	322	----------	> 3 volumes removed
1405	9.4	5.53	18.93	245	51.6	4.98	325	----------	
1410	9.9	5.53	18.92	245	45.2	4.97	328	----------	
1415	10.4	5.53	18.95	245	39.0	5.11	330	----------	
1420	10.9	5.52	18.96	245	33.4	4.96	333	----------	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
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Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-6
Sample Date: 6/13/2012
Sampling Device: Watera
Well Depth (feet TOIC): 147.30
Screen Interval (feet TOIC):146-148
Initial Water Level (Feet TOIC):54.60
Final Water Level (feet TOIC):54.65
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-2-6-R1
Sample Time: 1115
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 35.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 75
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1020	7.0	5.33	18.84	310	94.5	7.32	229	----------	2 volumes removed
1027	7.525	5.32	18.85	310	76.7	6.62	235	----------	
1034	8.05	5.30	18.88	309	58.1	6.45	245	----------	
1041	8.575	5.30	18.87	309	57.4	6.24	251	----------	
1048	9.1	5.30	18.79	308	45.8	6.11	257	----------	
1055	9.625	5.30	18.78	307	39.8	6.07	260	----------	
1102	10.15	5.30	18.68	306	37.6	6.04	266	----------	
1109	10.675	5.30	18.63	306	35.2	5.94	269	----------	> 3 volumes removed

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-7
Sample Date: 6/11/2012
Sampling Device: Watera
Well Depth (feet TOIC): 162.30
Screen Interval (feet TOIC):162.5-163.0
Initial Water Level (Feet TOIC):55.05
Final Water Level (feet TOIC):55.50
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-2-7-R1
Sample Time: 1805
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 925
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 75
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1540	8.10	5.80	25.78	287	685	5.85	278	----------	2 volumes removed
1547	8.625	5.75	25.31	297	609	3.63	283	----------	
1554	9.15	5.72	24.71	298	537	3.10	289	----------	
1601	9.675	5.71	27.40	294	527	2.78	293	----------	
1608	10.2	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1615	10.725	5.69	22.71	276	469	2.91	308	----------	
1622	11.25	5.68	22.73	289	433	2.78	301	----------	
1629	11.775	5.68	22.70	291	426	2.67	299	----------	
1636	12.3	5.61	22.62	316	424	2.87	296	----------	>3 volumes removed
1643	12.825	5.64	20.64	285	647	2.87	295	----------	
1650	13.35	5.74	20.38	276	1000	2.74	280	----------	Meter reads 0.0 NTU – error for
1657	13.875	5.62	20.58	276	1000	2.69	285	----------	high turbidity
1704	14.4	5.62	20.59	275	1000	2.66	290	----------	
1711	14.925	5.59	20.48	275	1000	2.67	294	----------	
1718	15.45	5.62	20.11	273	873	2.62	300	----------	
1725	15.975	5.63	19.85	271	909	2.57	306	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1732	16.5	5.64	19.61	270	933	2.59	309	----------	
1739	17.025	5.64	19.40	269	909	2.54	312	----------	
1746	17.55	5.64	19.18	268	955	2.56	316	----------	
1753	18.075	5.65	19.11	267	906	2.54	318	----------	
1800	18.6	5.65	19.06	266	925	2.52	319	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-1
Sample Date: 6/8/2012
Sampling Device: Watera
Well Depth (feet TOIC): 86.92
Screen Interval (feet TOIC):85-87
Initial Water Level (Feet TOIC):54.26
Final Water Level (feet TOIC):54.26
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-3-1-R1
Sample Time: 1215
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 27.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1125	1.23	5.80	18.57	321	160	5.00	246	----------	1volume removed
1130	2.47	---------	----------	----------	----------	---------	----------	----------	2 volumes removed and cleaned
1135	3.72	5.81	18.49	311	170	5.16	253	----------	flow cell
1140	4.97	5.74	18.23	329	115	4.76	264	----------	>3 volumes removed
1145	6.22	5.71	18.16	322	96.0	4.59	268	----------	
1150	7.47	5.72	18.22	315	64.0	4.44	267	----------	
1155	8.72	5.69	18.14	313	45.0	4.25	268	----------	
1200	9.97	5.69	18.10	312	39.0	4.21	268	----------	
1205	11.22	5.71	18.17	310	27.7	4.15	268	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-2
Sample Date: 6/11/2012
Sampling Device: Watera
Well Depth (feet TOIC): 102.03
Screen Interval (feet TOIC):100-102
Initial Water Level (Feet TOIC):54.45
Final Water Level (feet TOIC):54.65
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-3-2-R1
Sample Time: 1150
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 45.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0915	3.6	5.43	18.37	161	900	8.43	248	----------	2 volumes removed
0920	4.6	5.41	18.09	164	872	7.22	251	----------	
0925	5.6	5.41	18.00	166	561	6.99	253	----------	3 volumes removed
0930	6.6	5.42	17.98	167	443	6.74	257	----------	
0935	7.6	5.41	18.05	167	339	6.65	259	----------	
0940	8.6	5.42	18.72	168	260	6.60	287	----------	
0945	9.6	5.42	18.19	168	260	6.64	279	----------	
0950	10.6	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
0955	11.6	5.46	18.44	160	140	7.21	266	----------	
1000	12.6	5.43	18.43	164	121	6.78	264	----------	
1005	13.6	5.45	18.42	165	118	6.45	267	----------	
1010	14.6	5.43	18.37	166	106	6.37	272	----------	
1015	15.6	5.43	18.42	167	100	6.30	274	----------	
1020	16.6	5.42	18.70	167	98.4	6.09	275	----------	
1025	17.6	5.42	18.70	167	89.1	6.07	277	----------	
1030	18.6	5.43	18.70	166	79.0	5.84	279	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	19.6	5.42	18.91	166	94.0	5.92	280	----------	
1040	20.6	5.43	18.91	166	95.1	6.04	281	----------	
1045	21.6	5.44	18.72	165	94.7	6.10	283	----------	
1050	22.6	5.43	18.67	165	95.2	6.08	284	----------	
1055	23.6	5.42	18.55	165	95.8	6.09	284	----------	
1100	24.6	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1105	25.6	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1110	26.6	5.41	18.82	166	93.6	6.89	282	----------	
1115	27.6	5.40	18.60	167	86.3	6.70	275	----------	
1120	28.6	5.41	18.50	167	68.9	6.52	277	----------	
1125	29.6	5.40	18.41	166	67.6	6.57	284	----------	
1130	30.6	5.40	18.45	168	58.5	6.49	286	----------	
1135	31.6	5.42	18.61	167	49.7	6.50	286	----------	
1140	32.6	5.40	18.70	166	44.5	6.36	288	----------	
1145	33.6	5.41	18.74	167	45.6	6.37	289	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-3
Sample Date: 6/8/2012
Sampling Device: Watera
Well Depth (feet TOIC): 116.82
Screen Interval (feet TOIC):115-117
Initial Water Level (Feet TOIC):54.30
Final Water Level (feet TOIC):54.37
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-3-3-R1
Sample Time: 1035
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 596 (Sample filtered)
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 175
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0850	2.36	---	---	---	---	---	---	---	1volume removed
0905	4.73	6.16	18.97	331	458	8.24	281	---	2 volumes removed
0910	5.61	6.10	18.60	278	403	7.39	292	---	
0915	6.49	---	---	---	---	---	---	---	Cleaned flow cell
0920	7.37	6.09	18.85	293	514	6.18	156	---	
0925	8.25	6.06	18.46	294	602	5.52	154	---	
0930	9.12	6.05	18.24	291	576	5.44	152	---	
0935	10.00	6.05	18.32	288	644	5.18	152	---	>3 volumes removed
0940	10.87	6.04	18.41	295	533	5.14	152	---	
0945	11.75	6.03	18.25	296	530	5.23	156	---	Moved inlet up 5’
0950	12.62	6.02	17.86	295	727	4.87	155	---	
0955	13.50	6.03	17.80	290	721	4.63	148	---	
1000	14.37	6.01	17.87	305	540	4.79	145	---	
1005	15.25	6.01	17.89	312	499	4.80	146	---	
1010	16.12	---	---	---	---	---	---	---	Cleaned flow cell
1015	17.00	5.98	17.62	323	412	4.27	153	---	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1020	17.87	6.01	17.66	314	454	4.14	151	----------	
1025	18.75	6.03	17.64	310	515	4.09	149	----------	
1030	19.62	6.06	17.94	317	596	4.17	148	----------	Sample was filtered – Total and
									Dissolved portions collected

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-4
Sample Date: 6/11/2012
Sampling Device: Watera
Well Depth (feet TOIC): 131.85
Screen Interval (feet TOIC):130-132
Initial Water Level (Feet TOIC):54.46
Final Water Level (feet TOIC):54.62
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-3-4-R1
Sample Time: 1105
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 5.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1000	5.85	5.73	21.89	312	8.2	6.31	208	----------	2 volumes removed
1005	6.35	5.70	21.61	312	6.5	5.30	213	----------	
1010	6.85	5.70	21.32	308	7.9	4.92	221	----------	
1015	7.35	5.67	21.18	301	7.0	4.47	236	----------	
1020	7.85	5.66	21.27	298	6.2	4.19	248	----------	
1025	8.35	5.66	21.22	296	6.2	4.26	266	----------	
1030	8.85	5.65	21.33	295	5.7	4.18	280	----------	3 volumes removed
1035	9.35	5.66	21.54	293	6.4	4.00	293	----------	
1040	9.85	5.66	21.64	302	5.6	3.94	304	----------	
1045	10.35	5.65	21.54	308	6.7	3.83	311	----------	
1050	10.85	5.66	21.44	307	6.2	3.79	317	----------	
1055	11.35	5.67	21.15	304	5.8	3.61	320	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-5
Sample Date: 6/8/2012
Sampling Device: Watera
Well Depth (feet TOIC): 146.82
Screen Interval (feet TOIC):145-147
Initial Water Level (Feet TOIC):54.21
Final Water Level (feet TOIC):54.25
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-3-5-R1
Sample Time: 1210
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 36.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 125/75
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1020	7.0	5.80	24.05	222	287	4.45	318	----------	2 volumes removed and rate
1027	7.375	5.78	23.77	240	222	3.81	318	----------	decreased to 75ml/min
1034	7.75	5.76	23.33	251	181	3.39	320	----------	
1041	8.125	5.74	22.90	240	143	3.18	322	----------	
1048	8.5	5.73	22.54	233	112	3.06	327	----------	
1055	8.875	5.72	22.05	233	89.5	2.93	329	----------	
1102	9.25	5.73	21.87	250	80.8	2.76	330	----------	
1109	9.625	5.73	21.97	247	68.3	2.80	329	----------	
1116	10.0	5.73	22.13	244	63.7	2.67	330	----------	
1123	10.375	5.74	22.13	227	56.9	2.64	329	----------	
1130	10.75	5.76	22.06	219	55.9	2.58	333	----------	
1137	11.125	5.77	22.15	214	47.9	2.61	333	----------	
1144	11.5	5.76	22.06	231	46.4	2.42	334	----------	
1151	11.875	5.76	21.98	219	38.8	2.30	334	----------	
1158	12.25	5.76	21.87	216	36.3	2.20	336	----------	
1205	12.625	5.76	21.86	213	36.8	2.21	340	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-6
Sample Date: 6/8/2012
Sampling Device: Watera
Well Depth (feet TOIC): 72.10
Screen Interval (feet TOIC):70-72
Initial Water Level (Feet TOIC):54.12
Final Water Level (feet TOIC):54.57
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-3-6-R1
Sample Time: 0855
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 8.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 225
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0830	1.0	5.73	17.96	382	13.6	10.16	230	----------	
0835	2.125	5.59	17.41	374	13.4	8.59	230	----------	
0840	3.25	5.51	16.91	371	7.9	7.90	235	----------	
0845	4.38	5.49	16.85	372	8.6	7.91	241	----------	
0850	5.5	5.49	16.83	370	8.0	7.69	242	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-7
Sample Date: 6/7/2012
Sampling Device: Watera
Well Depth (feet TOIC): 163
Screen Interval (feet TOIC):162.5-163
Initial Water Level (Feet TOIC):54.36
Final Water Level (feet TOIC):54.65
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-3-7-R1
Sample Time: 1755
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 41.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 50
Purge Rate d/sampling (ml/min): 50
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1500	---------	--------	----------	----------	----------	---------	----------	----------	1 volume removed
1620	8.08	5.77	24.35	258	89.1	5.77	155	----------	2 volumes removed
1630	8.58	5.61	22.75	243	73.6	4.00	170	----------	
1640	9.08	5.57	21.75	227	66.3	3.52	181	----------	
1650	9.58	5.55	21.02	219	61.0	3.39	188	----------	
1700	10.08	5.56	20.59	216	55.8	3.27	192	----------	
1710	10.58	5.53	20.22	220	52.2	3.24	195	----------	
1720	11.08	5.54	19.96	221	51.2	3.24	198	----------	
1730	11.58	5.53	19.78	218	47.4	3.26	201	----------	
1740	12.08	5.53	19.68	216	43.7	3.28	204	----------	3 volumes removed
1750	12.58	5.52	19.58	215	41.6	3.30	206	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-4-1
Sample Date: 6/20/2012
Sampling Device: Watera
Well Depth (feet TOIC): 72.70
Screen Interval (feet TOIC):71-73
Initial Water Level (Feet TOIC):50.95
Final Water Level (feet TOIC):50.97
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-4-1-R1
Sample Time: 1530
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 11.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1410	1.7	5.77	28.33	346	173	1.29	240	----------	> 2 volumes removed
1415	2.2	5.75	27.78	347	154	1.27	245	----------	
1420	2.7	5.73	26.28	348	118	1.26	253	----------	> 3 volumes removed
1425	3.2	5.68	25.17	350	91.1	1.36	262	----------	
1430	3.7	5.66	24.49	351	73.7	1.48	270	----------	
1435	4.2	5.62	24.19	351	66.7	1.55	275	----------	
1440	4.7	5.63	23.97	351	63.9	1.61	277	----------	
1445	5.2	5.67	23.56	349	62.1	1.70	279	----------	
1450	5.7	5.68	23.29	348	54.5	1.82	282	----------	
1455	6.2	5.68	23.15	349	52.1	1.81	283	----------	
1500	6.7	5.68	23.03	349	50.7	1.86	284	----------	
1505	7.2	5.67	22.80	348	55.2	1.90	286	----------	
1510	7.7	5.65	22.70	347	51.3	1.98	289	----------	
1515	8.2	5.67	22.70	346	15.7	2.09	290	----------	
1520	8.7	5.68	22.69	346	13.3	2.17	290	----------	
1525	9.2	5.64	22.77	346	11.2	2.23	292	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-4-2
Sample Date: 6/21/2012
Sampling Device: Watera
Well Depth (feet TOIC): 87.65
Screen Interval (feet TOIC):86-88
Initial Water Level (Feet TOIC):50.80
Final Water Level (feet TOIC):50.82
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-4-2-R1
Sample Time: 1010
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 14.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200/100
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVNZU

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0820	3.0	5.48	18.20	287	246	4.96	261	----------	> 2 volumes removed
0825	4.0	5.48	18.23	285	221	5.10	265	----------	
0830	5.0	5.52	18.31	282	206	5.57	272	----------	> 3 volumes removed
0835	6.0	5.50	18.41	281	162	6.02	279	----------	
0840	7.0	5.50	18.59	278	134	6.73	284	----------	
0845	8.0	5.51	18.65	278	117	7.17	285	----------	
0850	9.0	5.47	18.74	276	113	7.66	288	----------	
0855	10.0	5.36	18.76	281	114	9.57	295	----------	
0900	11.0	5.37	18.74	277	98.7	9.98	297	----------	
0905	12.0	5.45	18.77	298	78.5	10.85	299	----------	
0910	13.0	5.42	18.80	291	71.7	10.90	301	----------	
0915	14.0	5.41	18.81	287	69.8	10.90	301	----------	
0920	15.0	5.39	18.81	285	67.9	10.67	303	----------	
0925	16.0	5.35	18.82	283	69.4	10.05	304	----------	
0930	17.0	5.33	18.84	280	61.7	9.70	306	----------	
0935	18.0	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0940	18.5	5.44	21.11	263	35.2	19.64	320	----------	Adjusted rate to 100ml/min
0945	19.0	5.31	21.72	270	38.6	7.60	317	----------	
0950	19.5	5.35	22.05	271	23.7	8.32	309	----------	
0955	20.0	5.41	22.19	272	22.0	9.25	305	----------	
1000	20.5	5.41	22.22	272	13.9	9.49	304	----------	
1005	21.0	5.40	22.21	272	14.7	9.58	306	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-4-3
Sample Date: 6/20/2012
Sampling Device: Watera
Well Depth (feet TOIC): 102.65
Screen Interval (feet TOIC):101-103
Initial Water Level (Feet TOIC):50.95
Final Water Level (feet TOIC):50.96
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-4-3-R1
Sample Time: 1440
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 13.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: 5WVEKS9V

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1415	4.0	5.64	23.30	177	27.3	8.45	219	----------	> 2 volumes removed
1420	4.75	5.63	22.90	182	19.7	8.29	225	----------	
1425	5.5	5.59	22.67	183	10.5	8.13	233	----------	
1430	6.25	5.53	22.48	180	13.2	8.12	239	----------	> 3 volumes removed
1435	7.0	5.50	22.42	177	13.2	8.07	242	----------	
									MS/MSD collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-4-4
Sample Date: 6/20/2012
Sampling Device: Watera
Well Depth (feet TOIC): 117.65
Screen Interval (feet TOIC):116-118
Initial Water Level (Feet TOIC):51.03
Final Water Level (feet TOIC):51.00
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-4-4-R1
Sample Time: 1220
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 8.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 175/100
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: 5WVEKS9V

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0910	5.1	5.57	19.73	242	155	8.63	212	----------	> 2 volumes removed
0915	5.975	5.50	19.67	237	162	8.10	216	----------	
0920	6.85	5.52	19.57	236	123	8.07	218	----------	
0925	7.725	5.47	19.53	236	117	8.01	225	----------	> 3 volumes removed
0930	8.6	5.52	19.49	238	115	7.85	228	----------	
0935	9.475	5.52	19.53	240	100	7.78	232	----------	
0940	10.35	5.48	19.60	237	105	7.71	237	----------	
0945	11.225	5.48	19.67	235	106	7.64	237	----------	
0950	12.1	5.50	19.65	235	107	7.58	238	----------	
0955	12.975	5.40	19.62	235	114	7.54	246	----------	
1000	13.85	5.43	19.62	233	98.0	7.53	245	----------	
1005	14.725	5.41	19.60	232	107	7.44	246	----------	
1010	15.6	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1015	16.475	5.44	19.73	231	147	7.90	244	----------	
1020	17.35	5.45	19.71	233	115	7.83	246	----------	
1025	18.225	5.44	19.73	237	120	7.59	247	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1030	19.1	5.45	19.77	239	112	7.57	252	----------	
1035	19.975	5.46	19.77	239	132	7.60	254	----------	
1040	20.85	5.41	19.76	236	138	7.54	257	----------	
1045	21.725	5.43	19.77	235	114	7.55	256	----------	
1050	22.6	5.43	19.86	236	136	7.52	257	----------	
1055	23.475	5.43	19.86	237	150	7.50	259	----------	
1100	24.35	5.40	19.95	237	134	7.49	260	----------	
1105	25.225	5.39	20.05	236	139	7.52	261	----------	
1110	26.1	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1115	26.975	5.35	20.30	230	126	7.83	262	----------	
1120	27.85	5.34	20.36	232	126	7.78	263	----------	
1125	28.725	5.36	19.93	233	144	7.47	265	----------	
1130	29.6	5.35	20.29	233	142	7.46	266	----------	Adjusted flow rate to 100ml/min
1135	30.1	5.28	21.63	231	136	7.27	266	----------	
1140	30.6	5.33	22.56	231	109	7.14	261	----------	
1145	31.1	5.35	23.28	231	97.3	6.95	259	----------	
1150	31.6	5.39	23.86	231	89.9	6.79	257	----------	
1155	32.1	5.43	24.46	231	57.9	6.64	255	----------	
1200	32.6	5.46	24.68	230	52.1	6.77	254	----------	
1205	33.1	5.48	24.98	231	34.7	6.77	255	----------	
1210	33.6	5.48	25.04	231	15.1	6.71	257	----------	
1215	34.1	5.51	25.20	231	8.7	6.67	256	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-4-5
Sample Date: 6/19/2012
Sampling Device: Watera
Well Depth (feet TOIC): 132.55
Screen Interval (feet TOIC):131-133
Initial Water Level (Feet TOIC):50.72
Final Water Level (feet TOIC):50.80
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-4-5-R1
Sample Time: 1700
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 46.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: 5WVEKS9V

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1415	6.2	5.66	17.55	288	200	8.22	274	----------	> 2 volumes removed
1420	6.95	5.64	17.63	288	1000	8.11	273	----------	
1425	7.7	---------	----------	----------	----------	---------	----------	----------	
1430	8.45	5.61	17.75	287	1000	8.35	270	----------	
1435	9.2	5.67	17.63	289	1000	7.68	268	----------	
1440	9.95	5.67	17.51	289	1000	7.64	270	----------	> 3 volumes removed
1445	10.7	5.67	17.69	288	1000	7.43	267	----------	
1450	11.45	5.70	17.61	289	1000	7.32	267	----------	
1455	12.2	5.66	17.50	288	1000	7.61	269	----------	
1500	12.95	5.65	17.53	288	601	7.37	269	----------	
1505	13.7	5.61	17.43	288	1000	7.20	273	----------	
1510	14.45	5.63	17.43	288	843	7.40	273	----------	
1515	15.2	5.62	17.35	288	687	7.22	273	----------	
1520	15.95	5.63	17.43	288	552	7.09	272	----------	
1525	16.7	5.63	17.57	288	351	7.08	272	----------	
1530	17.45	5.65	17.40	288	272	7.00	273	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1535	18.2	5.60	17.59	288	176	7.01	279	----------	
1540	18.95	5.60	17.57	287	119	7.09	279	----------	
1545	19.7	5.64	17.51	288	99.7	7.16	280	----------	
1550	20.45	5.62	17.52	287	83.0	7.14	282	----------	
1555	21.2	5.61	17.51	287	74.9	7.17	285	----------	
1600	21.95	5.62	17.51	286	63.8	7.21	284	----------	
1605	22.7	5.65	17.50	286	54.1	7.20	285	----------	
1610	23.45	5.64	17.50	286	59.6	7.20	286	----------	
1615	24.2	5.63	17.49	286	59.2	7.21	286	----------	
1620	24.95	5.63	17.45	285	58.4	7.23	288	----------	
1625	25.7	5.62	17.45	285	61.7	7.09	289	----------	
1630	26.45	5.63	17.50	285	59.0	6.89	289	----------	
1635	27.2	5.65	17.51	285	71.0	6.89	288	----------	
1640	27.95	5.59	17.51	284	67.0	6.99	292	----------	
1645	28.7	5.65	17.49	284	47.8	7.00	289	----------	
1650	29.45	5.63	17.44	284	47.8	7.06	291	----------	
1655	30.2	5.64	17.36	284	46.0	7.15	292	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-4-6
Sample Date: 6/20/2012
Sampling Device: Watera
Well Depth (feet TOIC): 147.15
Screen Interval (feet TOIC):146-148
Initial Water Level (Feet TOIC):51.05
Final Water Level (feet TOIC):51.05
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-4-6-R1
Sample Time: 1300
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 43.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150/100
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0925	7.3	5.81	21.16	315	621	7.52	203	----------	> 2 volumes removed
0930	8.05	5.75	21.07	306	520	7.35	209	----------	
0935	8.8	5.72	21.06	304	495	7.32	217	----------	
0940	9.55	5.70	21.10	303	438	7.17	228	----------	
0945	10.3	5.69	21.15	303	411	7.03	233	----------	
0950	11.05	5.65	21.20	304	373	6.92	243	----------	> 3 volumes removed
0955	11.8	5.70	21.29	304	343	6.82	245	----------	
1000	12.55	5.67	21.34	303	327	6.75	248	----------	
1005	13.3	5.65	21.44	303	302	6.70	250	----------	
1010	14.05	5.66	21.48	303	270	6.67	254	----------	
1015	14.8	5.69	21.55	303	238	6.56	254	----------	
1020	15.55	5.67	21.60	303	212	6.53	256	----------	
1025	16.3	5.66	21.66	302	199	6.49	257	----------	
1030	17.05	5.69	21.77	301	187	6.41	257	----------	
1035	17.8	5.68	21.77	302	165	6.39	260	----------	
1040	18.55	5.66	21.73	302	161	6.35	263	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1045	19.3	5.63	21.72	300	146	6.31	265	----------	
1050	20.05	5.68	21.84	299	141	6.24	264	----------	
1055	20.8	5.66	21.90	298	130	6.26	265	----------	
1100	21.55	5.67	21.95	297	118	6.20	266	----------	
1105	22.3	5.65	21.94	297	121	6.23	268	----------	
1110	23.05	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1115	23.8	5.75	22.06	295	114	4.87	264	----------	
1120	24.55	5.75	22.25	300	105	4.53	262	----------	
1125	25.3	5.73	22.26	302	98.0	5.32	264	----------	
1130	26.05	5.69	22.25	303	104	5.51	266	----------	
1135	26.8	5.71	22.31	303	97.1	5.46	266	----------	
1140	27.55	5.71	22.49	303	99.2	5.48	266	----------	Adjusted flow rate to 100ml/min
1145	28.05	5.71	22.57	303	94.1	5.56	267	----------	
1150	28.55	5.66	22.75	303	85.3	5.45	270	----------	
1155	29.05	5.69	22.80	303	85.0	5.41	269	----------	
1200	29.55	5.68	22.99	304	80.7	5.27	273	----------	
1205	30.05	5.63	23.06	303	77.5	5.18	276	----------	
1210	30.55	5.66	23.01	302	74.5	5.01	275	----------	
1215	31.05	5.64	23.17	301	75.7	4.85	276	----------	
1220	31.55	5.70	23.30	303	72.6	5.41	275	----------	
1225	32.05	5.63	23.32	304	73.2	5.32	280	----------	
1230	32.55	5.66	23.49	301	74.5	5.03	278	----------	
1235	33.05	5.62	23.72	300	73.7	5.30	279	----------	
1240	33.55	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1245	34.05	5.73	23.67	299	45.8	2.42	284	----------	
1250	34.55	5.70	23.85	306	44.1	2.22	279	----------	
1255	35.05	5.68	23.91	304	43.6	2.44	277	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-4-7
Sample Date: 6/19/2012
Sampling Device: Watera
Well Depth (feet TOIC): 162.65
Screen Interval (feet TOIC):162.5-163
Initial Water Level (Feet TOIC):50.70
Final Water Level (feet TOIC):50.70
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-4-7-R1
Sample Time: 1820
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 38.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1455	8.5	5.74	20.92	353	266	8.12	257	----------	> 2 volumes removed
1500	9.0	5.72	21.03	354	247	7.06	255	----------	
1505	9.5	5.72	20.93	354	219	6.65	256	----------	
1510	10.0	5.74	20.89	354	209	6.67	257	----------	
1515	10.5	5.73	20.66	354	224	6.60	259	----------	
1520	11.0	5.74	20.68	354	216	6.51	258	----------	
1525	11.5	5.73	20.87	353	219	6.37	259	----------	
1530	12.0	5.72	20.64	355	233	6.39	262	----------	
1535	12.5	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1540	13.0	5.73	20.26	345	223	6.46	267	----------	> 3 volumes removed
1545	13.5	5.74	20.45	347	229	6.34	267	----------	
1550	14.0	5.73	20.55	348	239	6.07	267	----------	
1555	---------	---------	----------	----------	----------	---------	----------	----------	Cut tubing 30’
1600	14.5	5.72	18.73	351	250	6.42	275	----------	
1605	15.0	5.71	17.08	342	266	6.45	285	----------	
1610	15.5	5.70	16.80	349	1000	6.37	288	----------	

Key:
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1615	16.0	5.73	16.74	348	1000	6.36	286	----------	
1620	16.5	5.72	16.76	348	745	6.38	287	----------	
1625	17.0	5.72	16.79	346	673	6.35	288	----------	
1630	17.5	5.73	16.78	346	703	6.39	287	----------	
1635	18.0	5.72	16.75	346	610	6.37	289	----------	
1640	18.5	5.70	16.74	344	512	6.37	290	----------	
1645	19.0	5.72	16.70	343	653	6.33	289	----------	
1650	19.5	5.73	16.71	342	634	6.40	290	----------	
1655	---------	---------	----------	----------	----------	---------	---------	----------	Cut 40’ of tubing and cleaned
1700	20.0	5.70	16.58	339	429	6.41	296	----------	flow cell
1705	20.5	5.63	16.38	355	263	6.28	304	----------	
1710	21.0	5.62	16.28	356	191	6.24	307	----------	
1715	21.5	5.61	16.29	356	188	6.29	308	----------	
1720	22.0	5.61	16.30	356	201	6.29	309	----------	
1725	22.5	5.63	16.26	357	180	6.39	309	----------	
1730	23.0	5.62	16.15	354	233	6.28	310	----------	
1735	23.5	5.64	16.10	354	150	6.17	311	----------	
1740	24.0	5.64	16.09	352	149	6.14	312	----------	
1745	24.5	5.65	16.08	351	127	6.29	314	----------	
1750	25.0	5.65	16.02	352	76.0	6.26	316	----------	
1755	25.5	5.65	16.00	351	87.1	6.32	317	----------	
1800	26.0	5.66	15.98	351	88.1	6.42	318	----------	
1805	26.5	5.65	16.27	349	40.8	6.92	322	----------	Cleaned flow cell
1810	27.0	5.62	16.06	349	45.4	6.67	325	----------	
1815	27.5	5.62	16.02	351	38.1	6.61	325	----------	

Key:

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NTU = Nephelometric turbidity unit.
ORP = Redox potential.
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TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-1
Sample Date: 6/28/2012
Sampling Device: Watera
Well Depth (feet TOIC): 71.36
Screen Interval (feet TOIC):70-72
Initial Water Level (Feet TOIC):52.41
Final Water Level (feet TOIC):52.46
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont & J. Nelson

Sample ID: PW-6-1-R1
Sample Time: 0200
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 49.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0105	2.0	5.96	18.54	91	101	10.22	387	----------	
0110	2.5	5.80	17.83	93	103	4.93	374	----------	
0115	3.0	5.88	17.66	94	86.5	7.20	340	----------	> 3 volumes removed
0120	3.5	5.83	17.11	92	78.8	9.73	334	----------	
0125	4.0	5.80	17.25	92	72.9	10.37	321	----------	
0130	4.5	5.82	17.17	93	70.5	11.55	319	----------	
0135	5.0	5.80	17.06	93	63.7	12.15	324	----------	
0140	5.5	5.79	16.93	93	54.6	11.95	326	----------	
0145	6.0	5.81	16.83	93	48.5	11.89	329	----------	
0150	6.5	5.75	16.69	93	46.7	11.72	333	----------	
0155	7.0	5.76	16.57	93	49.1	11.58	335	----------	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-2
Sample Date: 6/28/2012
Sampling Device: Watera
Well Depth (feet TOIC): 91.30
Screen Interval (feet TOIC):90-92
Initial Water Level (Feet TOIC):52.35
Final Water Level (feet TOIC):52.41
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont & J. Nelson

Sample ID: PW-6-2-R1
Sample Time: 2130
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 39.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2020	2.94	4.96	16.92	420	123	14.75	281	----------	2 volumes removed
2025	3.69	4.94	16.80	424	107	14.89	303	----------	
2030	4.44	4.89	16.72	426	99.7	15.09	317	----------	> 3 volumes removed
2035	5.19	4.92	16.61	429	74.8	15.38	329	----------	
2040	5.94	4.90	16.52	431	73.4	15.73	340	----------	
2045	6.69	4.94	16.52	432	66.1	16.19	347	----------	
2050	7.44	4.92	16.51	432	71.9	16.37	352	----------	
2055	8.19	4.93	16.56	432	70.5	16.48	355	----------	
2100	8.94	4.94	16.48	433	76.5	16.59	359	----------	
2105	9.69	5.09	19.80	391	35.2	19.42	358	----------	Cleaned flow cell
2110	10.44	4.89	16.83	433	41.5	16.93	358	----------	
2115	11.19	4.90	16.70	435	33.7	15.56	363	----------	
2120	11.94	4.92	16.63	435	36.6	15.14	364	----------	
2125	12.69	4.91	16.59	435	39.9	15.15	367	----------	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-3
Sample Date: 6/27-28/2012
Sampling Device: Watera
Well Depth (feet TOIC): 119.30
Screen Interval (feet TOIC):118-120
Initial Water Level (Feet TOIC):52.45
Final Water Level (feet TOIC):52.47
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont & J. Nelson

Sample ID: PW-6-3-R1
Sample Time: 0100
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 30.3
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: 5WVEKS9V

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2120	9.43	5.31	17.45	290	949	6.17	233	----------	>2 volumes removed
2125	10.18	5.32	17.32	290	857	6.10	237	----------	
2130	10.93	5.33	17.14	290	711	6.00	242	----------	
2135	11.68	5.33	17.12	290	636	6.01	246	----------	
2140	12.43	5.33	17.08	291	522	5.94	251	----------	
2145	13.18	5.31	17.10	291	498	5.88	255	----------	> 3 volumes removed
2150	13.93	5.31	17.01	291	469	5.83	258	----------	
2155	14.68	5.30	17.02	291	429	5.82	260	----------	
2200	15.43	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
2205	16.18	5.30	17.38	289	310	6.55	265	----------	
2210	16.93	5.28	17.26	292	317	6.14	266	----------	
2215	17.68	5.28	17.12	293	305	6.21	267	----------	
2220	18.43	5.28	17.05	293	392	6.10	268	----------	
2225	19.18	5.25	17.05	293	347	6.12	267	----------	
2230	19.93	5.24	17.28	294	368	5.87	271	----------	
2235	20.68	5.23	17.21	293	394	5.86	269	----------	

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NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2240	21.43	5.23	17.05	292	515	6.76	267	----------	
2245	22.18	5.26	16.96	292	673	6.84	264	----------	
2250	22.93	5.27	16.88	292	755	5.82	264	----------	
2255	23.68	5.29	16.90	293	583	5.86	266	----------	
2300	24.43	5.29	16.90	293	579	5.76	268	----------	
2305	25.18	5.28	16.85	293	499	5.71	269	----------	
2310	25.93	5.29	16.79	293	462	5.80	272	----------	
2315	26.68	5.28	16.81	294	408	5.74	274	----------	
2320	27.43	5.29	16.78	294	384	5.77	275	----------	
2325	28.18	5.28	16.73	294	345	5.76	276	----------	
2330	28.93	5.28	16.71	294	344	5.82	277	----------	
2335	29.68	5.28	16.68	294	315	5.75	278	----------	
2340	30.43	5.29	16.66	294	307	5.76	279	----------	
2345	31.18	5.29	16.72	294	271	5.70	280	----------	
2350	31.93	5.28	16.73	294	254	5.67	282	----------	
2355	32.68	5.28	16.70	294	230	5.64	282	----------	
0000	33.43	5.28	16.68	294	224	5.59	283	----------	
0005	34.18	5.28	16.68	294	183	5.55	284	----------	
0010	34.93	5.28	16.63	294	164	5.50	284	----------	
0015	35.68	5.28	16.75	294	112	5.47	285	----------	
0020	36.43	5.28	16.81	294	80.8	5.40	285	----------	
0025	37.18	5.30	16.78	294	76.5	5.53	285	----------	
0030	37.93	5.28	16.84	294	61.4	5.46	287	----------	
0035	38.68	5.27	17.06	288	45.4	5.41	288	----------	
0040	39.43	5.27	17.10	294	33.2	5.35	288	----------	
0045	40.18	5.27	17.10	294	30.3	5.37	289	----------	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-4
Sample Date: 6/28-29/2012
Sampling Device: Watera
Well Depth (feet TOIC): 151.25
Screen Interval (feet TOIC):150-152
Initial Water Level (Feet TOIC):52.44
Final Water Level (feet TOIC):52.44
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont & J. Nelson

Sample ID: PW-6-4-R1
Sample Time: 0105
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 33.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150/100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: 5WVEKS9V

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2050	7.56	5.13	16.93	262	835	5.41	231	----------	2 volumes removed
2055	8.31	5.01	16.76	259	759	5.03	247	----------	
2100	9.06	5.00	16.55	259	816	4.88	260	----------	
2105	9.81	4.99	16.44	258	725	4.84	269	----------	
2110	10.56	5.00	16.36	258	706	4.74	274	----------	
2115	11.31	5.04	16.32	258	672	4.69	279	----------	3 volumes removed
2120	12.06	5.02	16.29	258	571	4.65	284	----------	
2125	12.81	5.02	16.31	258	624	4.63	286	----------	
2130	13.56	---------	----------	----------	----------	---------	----------	----------	Sampling nearby well
2135	14.31	5.02	16.20	258	479	4.62	296	----------	
2140	15.06	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
2145	15.81	4.95	16.51	257	510	4.97	293	----------	
2150	16.56	4.99	16.43	259	411	4.68	294	----------	
2155	17.31	5.03	16.29	259	362	4.57	303	----------	
2200	18.06	5.03	16.24	259	417	4.59	305	----------	
2205	18.81	5.04	16.24	259	390	4.53	308	----------	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2210	19.56	5.02	16.21	259	430	4.45	311	----------	
2215	20.31	4.99	16.24	259	335	4.52	316	----------	
2220	21.06	5.00	16.21	259	326	4.50	317	----------	
2225	21.81	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
2230	22.56	5.01	16.40	257	287	4.66	317	----------	
2235	23.31	5.02	16.40	257	289	4.62	317	----------	
2240	24.06	5.02	16.31	257	269	4.60	317	----------	
2245	24.81	5.02	16.27	257	240	4.59	317	----------	
2250	25.56	5.03	16.40	255	240	4.50	319	----------	
2255	26.31	5.00	16.22	250	240	4.42	323	----------	
2300	27.06	5.01	16.18	256	269	4.42	325	----------	
2305	27.81	5.01	16.14	256	228	4.45	327	----------	
2310	28.56	5.01	16.13	256	213	4.43	329	----------	
2315	29.31	5.01	16.16	256	232	4.39	329	----------	
2320	30.06	5.00	16.32	258	220	4.46	331	----------	
2325	30.81	4.97	16.35	258	210	4.53	327	----------	
2330	31.56	4.99	16.46	258	207	4.45	327	----------	Cleaned flow cell
2335	32.31	5.02	16.65	256	202	5.02	317	----------	
2340	33.06	5.00	16.40	259	207	4.47	321	----------	
2345	33.81	5.03	16.50	259	193	4.36	323	----------	
2350	34.56	5.03	16.53	259	177	4.29	324	----------	
2355	35.31	5.00	16.52	259	175	4.38	326	----------	
0000	36.06	5.05	17.20	258	166	3.77	324	----------	
0005	36.81	5.09	17.58	258	153	3.22	323	----------	Adjusted flow rate to 100ml/min
0010	37.31	5.11	17.54	259	198	3.64	322	----------	
0015	37.81	5.12	17.75	258	160	3.59	321	----------	
0020	38.31	5.12	17.53	259	139	3.94	321	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0025	38.81	5.12	17.43	259	127	3.95	322	----------	
0030	39.31	5.12	17.52	258	112	3.92	322	----------	Cleaned flow cell
0035	39.81	5.11	17.99	257	84.0	4.63	327	----------	
0040	40.31	5.09	18.02	258	56.0	4.38	318	----------	
0045	40.81	5.09	17.74	258	54.0	4.32	317	----------	
0050	41.31	5.11	17.72	258	41.8	4.23	316	----------	
0055	41.81	5.07	17.65	259	45.2	4.19	317	----------	
0100	42.31	5.10	17.51	258	33.6	4.18	315	----------	

Key:

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-5
Sample Date: 6/27-28/2012
Sampling Device: Watera
Well Depth (feet TOIC): 167.20
Screen Interval (feet TOIC):166-168
Initial Water Level (Feet TOIC):52.40
Final Water Level (feet TOIC):52.39
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont & J. Nelson

Sample ID: PW-6-5-R1
Sample Time: 2350
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 49.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2120	9.56	5.13	18.36	252	131	7.34	309	----------	> 3 volumes removed
2125	10.31	5.14	18.32	253	119	7.76	312	----------	
2130	11.06	5.10	18.18	252	128	8.13	318	----------	
2135	11.81	5.07	18.09	252	130	8.41	323	----------	
2140	12.56	5.07	18.05	252	127	8.68	326	----------	
2145	13.31	5.07	18.03	252	102	8.93	329	----------	
2150	14.06	5.02	17.92	251	103	9.21	333	----------	
2155	14.81	5.05	17.89	251	94.8	9.40	334	----------	
2200	15.56	5.07	17.88	247	79.2	12.31	334	----------	Cleaned flow cell
2205	16.31	5.08	17.60	250	73.6	8.82	333	----------	
2210	17.06	5.07	17.50	251	73.2	8.64	324	----------	
2215	17.81	5.05	17.27	252	67.6	8.77	339	----------	
2220	18.56	5.06	17.25	252	61.4	9.18	341	----------	
2225	19.31	5.08	17.32	252	69.4	10.56	342	----------	
2230	20.06	5.03	17.55	252	64.6	10.98	346	----------	
2235	20.81	5.02	17.59	252	88.6	10.73	346	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2240	21.56	5.01	17.49	252	69.4	10.84	346	----------	
2245	22.31	5.01	17.39	252	67.3	11.01	350	----------	
2250	23.06	5.02	17.34	252	59.4	11.11	352	----------	
2255	23.81	5.02	17.43	252	79.5	10.54	353	----------	
2300	24.56	5.03	17.50	251	75.2	10.30	354	----------	
2305	25.31	5.04	17.48	251	71.2	10.57	354	----------	
2310	26.06	5.04	17.38	252	64.8	12.13	354	----------	
2315	26.81	5.06	17.27	251	54.1	17.59	358	----------	
2320	27.56	5.06	17.22	251	52.2	17.57	361	----------	
2325	28.31	5.06	17.11	251	51.9	16.76	363	----------	
2330	29.06	5.07	17.11	251	49.8	16.16	364	----------	
2335	29.81	4.96	17.17	251	48.8	7.70	366	----------	
2340	30.56	5.01	17.15	250	47.5	7.70	362	----------	
2345	31.31	5.04	17.17	250	49.6	8.17	361	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-6
Sample Date: 6/26-27/2012
Sampling Device: Watera
Well Depth (feet TOIC): 181.30
Screen Interval (feet TOIC):180-182
Initial Water Level (Feet TOIC):52.55
Final Water Level (feet TOIC):52.60
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont & J. Nelson

Sample ID: PW-6-6-R1
Sample Time: 0135
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 49.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150/100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: 5WVEKS9V

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2150	9.68	5.29	16.22	285	173	5.24	222	----------	2 volumes removed
2155	10.43	5.25	16.04	285	143	5.18	225	----------	
2200	11.18	5.22	15.95	280	126	4.98	229	----------	
2205	11.93	5.24	15.90	283	150	5.06	232	----------	
2210	12.68	5.20	15.80	281	123	5.08	237	----------	
2215	13.43	5.19	15.85	280	107	5.02	241	----------	
2220	14.18	5.18	15.80	280	112	5.10	244	----------	
2225	14.93	5.19	15.78	279	101	5.06	245	----------	3 volumes removed
2230	15.68	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
2235	16.43	5.15	15.63	278	88.9	5.25	250	----------	
2240	17.18	5.15	15.58	278	91.4	5.20	253	----------	
2245	17.93	5.13	15.63	278	91.8	5.13	256	----------	
2250	18.68	5.12	15.61	277	78.5	5.13	259	----------	
2255	19.43	5.13	15.67	277	76.7	5.13	259	----------	
2300	20.18	5.11	15.71	277	82.8	5.13	261	----------	
2305	20.93	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2310	21.68	5.14	15.74	274	68.9	5.21	261	----------	
2315	22.43	5.16	15.72	276	64.8	5.17	261	----------	
2320	24.18	---------	----------	----------	----------	---------	----------	----------	Adjusted flow rate to 100ml/min
2325	24.93	5.19	16.16	275	62.0	4.72	262	----------	Cleaned flow cell
2330	25.68	5.20	16.30	276	77.4	4.69	262	----------	
2335	26.43	---------	----------	----------	----------	---------	----------	----------	Low Battery
2340	27.18	---------	----------	----------	----------	---------	----------	----------	Low Battery
2345	27.93	---------	----------	----------	----------	---------	----------	----------	Low Battery
2350	28.68	---------	----------	----------	----------	---------	----------	----------	Low Battery
2355	29.43	---------	----------	----------	----------	---------	----------	----------	Low Battery
0000	30.18	---------	----------	----------	----------	---------	----------	----------	Low Battery
0030	34.68	5.16	16.09	275	101	6.75	266	----------	Replace batteries
0035	35.43	---------	----------	----------	----------	---------	----------	----------	Low battery
0115	41.43	5.19	15.98	274	62.2	7.11	263	----------	New batteries replaced
0120	42.18	5.14	15.99	273	46.7	5.80	265	----------	
0125	42.93	5.18	16.10	273	49.9	5.37	265	----------	
0130	43.68	5.21	16.08	273	49.0	5.28	265	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-7
Sample Date: 6/26-27/2012
Sampling Device: Watera
Well Depth (feet TOIC): 221.15
Screen Interval (feet TOIC):221.5-222
Initial Water Level (Feet TOIC):52.55
Final Water Level (feet TOIC):52.55
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont & J. Nelson

Sample ID: PW-6-7-R1
Sample Time: 0250
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 69.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2215	12.68	5.04	16.53	250	0.0	6.65	331	----------	2 volumes removed
2220	13.43	5.03	16.09	249	0.0	6.94	339	----------	
2225	14.18	5.03	15.98	249	0.0	7.37	341	----------	
2230	14.93	5.24	15.94	249	0.0	8.27	330	----------	
2235	15.68	5.18	15.80	249	0.0	8.93	334	----------	
2240	16.43	5.26	15.78	249	0.0	9.44	331	----------	
2245	17.18	5.21	15.75	248	0.0	9.51	334	----------	
2250	17.93	5.41	17.30	238	0.0	21.63	345	----------	
2255	18.68	5.35	16.14	247	0.0	21.22	367	----------	
2300	19.43	5.33	17.22	242	0.0	19.37	356	----------	> 3 volumes removed
2305	20.18	---------	----------	----------	----------	---------	----------	----------	Missed reading
2310	20.93	5.30	17.50	238	359	21.21	332	----------	
2315	21.68	5.11	15.92	250	321	8.55	336	----------	
2320	22.43	5.13	15.82	250	436	9.12	336	----------	
2325	23.18	5.15	15.81	250	605	9.62	339	----------	
2330	23.93	5.24	15.79	250	454	10.30	337	----------	

Key:
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2335	24.68	5.01	15.73	254	759	5.63	349	----------	
2340	25.43	5.08	15.65	264	770	23.57	368	----------	
2345	26.18	5.04	15.58	253	905	23.38	350	----------	
2350	26.93	5.06	15.55	252	1000	23.10	349	----------	
2355	27.68	5.10	15.53	251	905	20.51	347	----------	
0000	28.43	5.12	15.50	251	733	19.41	347	----------	
0005	29.18	5.16	15.50	250	991	18.74	347	----------	
0010	29.93	5.13	15.57	250	1000	14.92	350	----------	
0015	30.68	5.20	15.74	250	1000	15.30	348	----------	
0020	31.43	5.26	16.04	250	1000	16.08	343	----------	
0025	32.18	5.38	16.88	236	903	24.94	364	----------	
0030	32.93	5.07	16.39	250	783	13.65	354	----------	Cleaned flow cell
0035	33.68	5.07	16.49	252	797	11.06	351	----------	
0040	34.43	5.07	16.53	252	735	10.56	352	----------	
0045	35.18	5.15	16.21	252	545	10.74	350	----------	
0050	35.93	5.26	16.12	252	338	12.51	346	----------	
0055	36.68	5.23	16.06	252	249	13.30	349	----------	
0100	37.43	5.20	16.10	252	249	13.18	349	----------	
0105	38.18	5.20	16.27	250	232	13.37	350	----------	
0110	38.93	5.29	16.28	250	232	13.87	345	----------	
0115	39.68	5.27	16.29	250	137	14.24	349	----------	
0120	40.43	5.25	16.28	250	152	14.31	350	----------	
0125	41.18	5.23	16.35	250	120	14.53	352	----------	
0130	41.93	5.22	16.31	249	132	14.69	352	----------	
0135	42.68	5.23	16.30	249	105	14.78	352	----------	
0140	43.43	5.25	16.41	249	118	14.98	350	----------	
0145	44.18	5.23	16.41	249	98.7	14.98	351	----------	

Key:

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0150	44.93	5.19	16.38	249	93.1	15.12	354	----------	
0155	45.68	5.16	16.45	249	89.5	15.07	356	----------	
0200	46.43	5.18	16.61	248	74.1	15.10	355	----------	
0205	47.18	5.19	16.55	248	68.9	15.25	355	----------	
0210	47.93	5.19	16.50	248	69.7	15.21	357	----------	
0215	48.68	5.17	16.54	248	61.3	15.17	355	----------	
0220	49.43	5.17	16.55	248	66.2	15.28	356	----------	
0225	50.18	5.18	16.49	248	67.2	15.37	353	----------	
0230	50.93	5.19	16.37	247	70.3	15.37	351	----------	
0235	51.68	5.16	16.43	247	71.7	15.30	348	----------	
0240	52.43	5.21	16.36	248	70.2	15.32	351	----------	
0245	53.18	5.18	16.35	248	69.2	15.27	354	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-1
Sample Date: 6/15/2012
Sampling Device: Watera
Well Depth (feet TOIC): 70.85
Screen Interval (feet TOIC):70-72
Initial Water Level (Feet TOIC):49.45
Final Water Level (feet TOIC):49.48
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-7-1-R1
Sample Time: 1355
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 48.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 300/125
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1140	1.7	5.20	22.57	493	795	5.75	1493	----------	2 volumes removed
1145	3.2	5.13	21.74	495	855	5.03	199	----------	> 3 volumes removed
1150	4.7	5.08	21.04	495	805	4.87	201	----------	
1155	6.2	5.03	20.58	496	821	4.83	205	----------	
1200	7.7	4.92	20.20	497	747	4.84	211	----------	
1205	9.2	4.89	19.96	497	878	4.84	217	----------	
1210	10.7	4.80	19.11	498	992	5.02	222	----------	
1215	12.2	4.64	18.55	496	0.0	5.02	225	----------	Turbidity >999
1220	13.7	4.47	17.72	485	0.0	4.80	205	----------	Turbidity >999
1225	---------	---------	----------	----------	----------	---------	----------	----------	Changed ball valve and slowed
1300	20.0	4.76	21.27	488	393	5.54	233	----------	purge rate to 125ml/min
1305	20.625	4.74	20.93	489	272	5.20	238	----------	
1310	21.28	4.77	20.53	488	132	5.07	239	----------	
1315	21.905	4.81	20.56	489	108	4.91	242	----------	
1320	22.53	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1325	23.155	4.86	20.06	488	54.3	5.23	248	----------	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1330	23.78	4.86	19.92	491	63.7	4.88	252	----------	
1335	24.405	4.84	19.84	491	57.5	4.60	254	----------	
1340	25.03	4.85	19.79	491	49.8	4.80	256	----------	
1345	25.655	4.85	19.75	491	49.1	4.85	257	----------	
1350	26.28	4.85	19.72	491	48.7	4.81	258	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-2
Sample Date: 6/18/2012
Sampling Device: Watera
Well Depth (feet TOIC): 95.80
Screen Interval (feet TOIC):95-97
Initial Water Level (Feet TOIC):49.50
Final Water Level (feet TOIC):49.54
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-7-2-R1
Sample Time: 1510
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 31.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1410	3.5	5.48	18.04	225	480	8.71	248	----------	2 volumes removed
1415	4.5	5.46	17.66	226	334	7.99	253	----------	
1420	5.5	5.47	17.52	225	245	7.53	254	----------	
1425	6.5	5.47	17.73	225	150	7.29	256	----------	
1430	7.5	5.41	17.45	225	125	7.32	257	----------	> 3 volumes removed
1435	8.5	5.40	17.41	225	107	7.15	256	----------	
1440	9.5	5.40	17.26	225	89.9	7.07	255	----------	
1445	10.5	5.42	17.37	224	70.5	6.81	251	----------	
1450	11.5	5.43	17.34	224	55.8	6.75	250	----------	
1455	12.5	5.43	17.29	224	44.5	6.57	247	----------	
1500	13.5	5.45	17.20	223	37.9	6.53	246	----------	
1505	14.5	5.44	17.21	224	31.0	6.62	243	----------	Collected duplicate sample
									MW-812-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-3
Sample Date: 6/18/2012
Sampling Device: Watera
Well Depth (feet TOIC): 120.85
Screen Interval (feet TOIC):120-122
Initial Water Level (Feet TOIC):49.60
Final Water Level (feet TOIC):49.60
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-7-3-R1
Sample Time: 1440
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 17.3
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1420	5.5	5.33	17.15	217	36.0	4.42	237	----------	2 volumes removed
1425	6.5	5.37	16.88	215	25.3	4.20	239	----------	
1430	7.5	5.40	16.81	215	22.0	4.01	241	----------	
1435	8.5	5.42	16.78	214	17.3	3.91	244	----------	> 3 volumes removed

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-4
Sample Date: 6/19/2012
Sampling Device: Watera
Well Depth (feet TOIC): 145.70
Screen Interval (feet TOIC):145-147
Initial Water Level (Feet TOIC):49.65
Final Water Level (feet TOIC):49.72
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-7-4-R1
Sample Time: 0930
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 42.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 175
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: CAKHVN2U

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0900	8.0	5.55	17.66	237	68.0	7.17	206	----------	> 2 volumes removed
0905	8.875	5.52	17.55	234	54.9	6.50	212	----------	
0910	9.75	5.50	17.54	233	52.3	6.18	218	----------	
0915	10.625	5.50	17.60	233	46.3	6.00	222	----------	
0920	11.5	5.50	17.62	233	45.5	5.93	224	----------	> 3 volumes removed
0925	12.375	5.50	17.65	233	42.8	5.85	226	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-5
Sample Date: 6/18/2012
Sampling Device: Watera
Well Depth (feet TOIC): 170.75
Screen Interval (feet TOIC):170-172
Initial Water Level (Feet TOIC):49.68
Final Water Level (feet TOIC):49.72
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-7-5-R1
Sample Time: 1050
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 12.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 125
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1005	9.2	4.99	17.68	306	18.8	6.29	223	----------	2 volumes removed
1010	9.825	5.02	17.25	305	19.7	6.14	223	----------	
1015	10.45	5.03	17.03	305	16.8	6.00	227	----------	
1020	11.075	5.02	16.98	305	15.3	5.74	230	----------	
1025	11.7	5.06	17.09	305	14.0	5.79	231	----------	
1030	12.325	5.07	17.10	306	16.4	5.63	233	----------	
1035	12.95	5.05	17.16	305	16.0	5.52	237	----------	
1040	13.575	5.08	17.30	305	13.6	5.42	237	----------	
1045	14.2	5.10	17.34	305	12.9	5.34	238	----------	> 3 volumes removed

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-6
Sample Date: 6/19/2012
Sampling Device: Watera
Well Depth (feet TOIC): 195.85
Screen Interval (feet TOIC):197-199
Initial Water Level (Feet TOIC):50.20
Final Water Level (feet TOIC):50.20
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-7-6-R1
Sample Time: 1105
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #: 5WVEKS9V

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1005	11.1	5.37	18.93	540	0.0	6.90	210	----------	> 2 volumes removed
1010	11.6	5.36	18.71	538	0.0	6.52	215	----------	
1015	12.1	5.38	18.55	538	0.0	6.43	218	----------	
1020	12.6	5.39	18.49	538	0.0	6.13	221	----------	
1025	13.1	5.40	18.40	538	0.0	6.03	223	----------	
1030	13.6	5.41	18.39	538	0.0	5.90	226	----------	
1035	14.1	5.41	18.38	539	0.0	5.86	231	----------	
1040	14.6	5.41	18.39	539	0.0	5.84	234	----------	
1045	15.1	5.41	18.40	539	0.0	5.79	236	----------	
1050	15.6	5.42	18.39	539	0.0	5.84	239	----------	
1055	16.1	5.42	18.40	539	0.0	5.77	241	----------	
1100	16.6	5.42	18.41	540	0.0	5.81	244	----------	> 3 volumes removed

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-7
Sample Date: 6/18/2012
Sampling Device: Watera
Well Depth (feet TOIC): 221
Screen Interval (feet TOIC):220.5-221
Initial Water Level (Feet TOIC):49.59
Final Water Level (feet TOIC):49.62
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & P. Lamont

Sample ID: PW-7-7-R1
Sample Time: 1250
Tubing Type: **Teflon** : Teflon/Poly : Poly (circle one)
Final Turbidity (NTUs) : 105 (filtered sample)
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 125
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1040	13.0	5.45	19.09	647	108	7.01	206	----------	2 volumes removed
1045	13.625	5.42	18.44	630	102	5.79	204	----------	
1050	14.25	5.36	17.98	622	97.2	5.44	210	----------	
1055	14.875	5.37	17.98	627	90.3	5.11	214	----------	
1100	15.5	5.37	17.73	626	88.5	4.88	217	----------	
1105	16.125	5.36	17.75	630	86.6	4.66	222	----------	
1110	16.75	5.36	17.92	632	95.4	4.45	226	----------	
1115	17.375	5.34	17.98	629	94.3	4.32	229	----------	
1120	18	5.34	17.83	631	92.9	4.22	232	----------	
1125	18.625	5.35	17.90	631	98.7	4.13	234	----------	
1130	19.25	5.35	17.98	631	104	4.06	236	----------	
1135	19.875	5.34	17.80	632	111	3.88	239	----------	> 3 volumes removed
1140	20.5	5.35	17.76	631	106	3.78	242	----------	
1145	21.125	5.34	18.07	627	103	3.64	246	----------	
1150	21.75	5.37	18.28	626	75.9	3.37	247	----------	
1155	22.375	5.37	18.13	625	69.7	3.37	250	----------	

Key:
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NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1200	23	5.36	17.92	624	83.5	3.55	252	----------	
1205	23.625	5.36	17.95	624	88.1	3.53	255	----------	
1210	24.25	5.36	17.84	623	105	3.50	258	----------	
1215	24.875	5.37	17.87	623	101	3.42	259	----------	
1220	25.5	5.38	17.91	621	105	3.28	261	----------	
1225	26.125	5.38	17.87	622	102	3.28	261	----------	
1230	26.75	5.39	17.83	621	101	3.00	263	----------	
1235	27.375	5.40	17.70	621	107	3.01	265	----------	
1240	28	5.40	17.71	620	105	3.00	266	----------	
1245	28.625	5.40	17.80	619	105	3.04	266	----------	4hr of purge from 0845-1245

Key:

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-325
Sample Date: 6/18/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC):285-325
Initial Water Level (Feet TOIC):47.35
Final Water Level (feet TOIC):47.35
Casing Type: PVC **Steel** (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: S-1-325-R1
Sample Time: 1600
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 27.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1450	1.5	6.99	19.87	372	61.5	2.86	-103	47.35	
1455	3.0	7.01	18.51	379	56.1	2.70	-112	47.35	
1500	4.5	6.74	17.82	373	91.2	2.61	-59	47.35	
1505	6.0	5.78	18.01	356	107	2.95	75	47.35	
1510	7.5	5.69	17.74	355	80.4	3.18	95	47.35	
1515	9.0	5.61	17.54	353	54.2	3.47	116	47.35	
1520	10.5	5.57	17.41	352	40.9	3.62	130	47.35	
1525	12.0	5.56	17.25	358	42.4	3.65	134	47.35	
1530	13.5	5.57	16.73	358	42.0	3.78	135	47.35	
1535	15.0	5.54	16.37	361	35.1	3.82	142	47.35	
1540	16.5	5.52	16.39	361	29.7	3.92	147	47.35	
1545	18.0	5.51	16.42	360	28.8	3.93	153	47.35	
1550	19.5	5.52	16.35	359	27.8	3.94	154	47.35	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-450
Sample Date: 6/18/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 450
Screen Interval (feet TOIC):410-450
Initial Water Level (Feet TOIC):49.20
Final Water Level (feet TOIC):49.20
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: S-1-450-R1
Sample Time: 1110
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 7.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1003	1.4	9.10	17.09	130	8.8	4.11	146	49.20	
1008	2.8	9.15	16.86	129	14.6	3.94	126	49.20	
1013	4.2	9.16	16.82	123	36.3	3.66	98	49.20	
1018	5.6	7.78	16.91	137	37.6	4.19	-68	49.20	
1023	7.0	6.20	17.03	155	12.9	5.99	130	49.20	
1028	8.4	5.73	17.34	174	12.7	6.01	133	49.20	
1033	9.8	5.53	17.32	175	9.3	6.25	165	49.20	
1038	11.2	5.50	17.23	175	8.1	6.37	171	49.20	
1043	12.6	5.49	17.12	176	8.3	6.39	176	49.20	
1048	14.0	5.47	17.03	176	8.0	6.53	179	49.20	
1053	15.4	5.47	16.91	177	8.0	6.48	180	49.20	
1058	16.8	5.47	16.91	177	7.6	6.48	181	49.20	
1103	18.2	5.46	16.96	177	7.7	6.46	183	49.20	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-1-75
Sample Date: 6/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):56.75
Final Water Level (feet TOIC):56.79
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-1-75-R1
Sample Time: 0915
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.9
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0845	6.0	5.90	17.46	61	0.7	1.85	111	56.91	
0850	7.5	5.85	17.19	66	0.6	1.79	110	56.91	
0855	9.0	5.84	17.13	74	0.5	1.84	109	56.91	
0900	10.5	5.82	17.08	80	0.7	1.92	109	56.91	
0905	12.0	5.83	17.07	85	0.9	1.98	108	56.91	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-1-120
Sample Date: 6/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):58.78
Final Water Level (feet TOIC):58.79
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-1-120-R1
Sample Time: 1225
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 33.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1100	13.75	6.39	17.75	261	283	0.69	-77	58.81	
1115	17.65	6.41	17.75	260	154	0.58	-77	58.81	
1130	21.35	6.42	17.81	260	79.4	0.50	-77	58.81	
1145	25.45	6.43	17.96	259	57.8	0.44	-77	58.81	
1200	29.35	6.44	17.85	258	47.5	0.41	-77	58.81	
1205	30.65	6.42	17.83	258	41.4	0.39	-77	58.81	
1210	31.95	6.41	17.83	258	34.3	0.76	-77	58.81	
1215	33.25	6.42	17.85	254	33.0	0.69	-77	58.81	Split samples collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-2-70
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):58.80
Final Water Level (feet TOIC):58.80
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-2-70-R1
Sample Time: 1655
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 4.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1615	2.0	6.04	18.45	741	133	8.22	169	58.80	
1620	4.0	6.04	17.51	742	36.5	7.91	150	58.80	
1625	6.0	6.02	17.57	750	18.2	7.86	151	58.80	
1630	8.0	6.02	17.49	742	11.0	7.89	147	58.80	
1635	10.0	6.02	17.34	735	8.0	7.90	142	58.80	
1640	12.0	6.03	17.24	725	4.6	7.63	136	58.80	
1645	14.0	6.03	17.22	723	4.2	7.64	134	58.80	
1650	16.0	6.03	17.25	721	4.2	7.53	134	58.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-3-72
Sample Date: 6/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC):62-72
Initial Water Level (Feet TOIC):59.91
Final Water Level (feet TOIC):60.82
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-3-72-R1
Sample Time: 0900
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.2
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0810	1.0	7.25	17.56	336	4.6	9.31	226	60.40	
0815	2.0	7.16	16.77	335	3.7	8.89	224	60.50	
0820	3.0	7.13	16.54	334	3.2	8.98	216	60.60	
0825	4.0	7.12	16.37	332	3.0	8.51	212	60.70	
0830	5.0	7.12	16.33	331	2.5	8.57	209	60.75	
0835	6.0	7.12	16.28	331	2.2	8.42	209	60.78	
0840	7.0	7.11	16.27	329	2.2	8.36	209	60.80	
0845	8.0	7.10	16.25	328	2.2	8.05	209	60.82	
0850	9.0	7.10	16.28	326	2.2	8.03	210	60.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-3-112
Sample Date: 6/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 112
Screen Interval (feet TOIC):102-112
Initial Water Level (Feet TOIC):59.90
Final Water Level (feet TOIC):60.62
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-3-112-R1
Sample Time: 1103
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 9.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1005	2.1	6.16	16.31	229	9.0	4.65	162	60.55	
1010	3.6	6.16	16.00	229	7.9	4.11	105	60.60	
1015	5.1	6.13	15.81	230	7.3	3.79	84	60.62	
1020	6.6	6.11	15.80	230	7.1	3.57	66	60.62	
1025	8.1	6.11	15.75	231	7.3	3.46	58	60.62	
1030	9.6	6.11	15.77	231	8.1	3.29	47	60.62	
1035	11.1	6.11	15.71	231	9.9	3.12	35	60.62	
1040	12.6	6.12	15.73	232	11.4	2.97	18	60.62	
1045	14.1	6.14	15.79	232	12.1	2.77	1	60.62	
1050	15.6	6.14	15.75	231	10.7	2.60	-5	60.62	
1055	16.1	6.12	15.83	231	10.2	2.53	-8	60.62	
1100	17.6	6.12	15.80	230	9.2	2.43	-13	60.62	Collected duplicate sample
									MW-808-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-5-78
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):68-78
Initial Water Level (Feet TOIC):60.80
Final Water Level (feet TOIC):61.21
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-5-78-R1
Sample Time: 1040
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.1
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0950	1.5	6.06	17.48	314	0.8	8.60	201	61.19	
0955	3.0	6.00	17.10	315	0.8	8.36	200	61.21	
1000	4.5	5.99	17.19	325	1.0	7.65	198	61.21	
1005	6.0	5.99	17.15	334	1.2	7.81	190	61.21	
1010	7.5	5.99	17.05	338	1.4	7.81	181	61.21	
1015	9.0	6.00	17.06	341	1.8	7.82	160	61.21	
1020	10.5	6.02	17.26	341	2.2	7.72	147	61.21	
1025	12.0	6.02	17.48	341	2.2	7.13	144	61.21	
1030	13.5	6.03	17.86	342	2.0	6.79	143	61.21	
1035	15.0	6.04	17.97	342	2.1	6.74	143	61.21	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-6-79
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 79
Screen Interval (feet TOIC):69-79
Initial Water Level (Feet TOIC):60.25
Final Water Level (feet TOIC):60.25
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-6-79-R1
Sample Time: 1210
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.6
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 240
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1132	1.2	5.41	19.04	68	2.0	6.91	186	60.27	
1137	2.4	5.35	18.37	63	2.3	6.78	227	60.27	
1142	3.6	5.34	18.34	62	2.7	6.19	244	60.27	
1147	4.8	5.35	18.13	61	2.7	6.45	256	60.27	
1152	6.0	5.34	18.31	61	2.4	6.02	259	60.27	
1157	7.2	5.36	18.15	61	1.7	6.12	265	60.27	
1202	8.4	5.35	18.28	61	1.6	5.77	266	60.27	
1207	9.6	5.37	18.23	61	1.6	5.98	268	60.27	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-8-71
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC):61-71
Initial Water Level (Feet TOIC):60.53
Final Water Level (feet TOIC):60.55
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-8-71-R1
Sample Time: 1705
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 8.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1640	3.50	5.75	16.41	145	85.0	9.74	47	60.55	
1645	5.25	5.81	15.90	156	41.8	9.04	45	60.55	
1650	7.0	5.80	15.80	155	17.5	8.95	55	60.55	
1655	8.75	5.80	15.72	153	9.6	8.88	60	60.55	
1700	9.5	5.80	15.67	153	8.6	8.94	61	60.55	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-71
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC):61-71
Initial Water Level (Feet TOIC):58.42
Final Water Level (feet TOIC):58.43
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-10-71-R1
Sample Time: 1015
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 3.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 420
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0945	2.0	5.57	17.23	788	10.7	7.01	32	58.46	
0950	4.0	5.58	16.82	796	7.3	6.24	51	58.46	
0955	6.0	5.57	16.71	795	5.7	5.97	58	58.45	
1000	8.0	5.58	16.73	789	4.0	5.90	66	58.45	
1005	10.0	5.58	16.68	751	3.3	5.63	71	58.45	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-120
Sample Date: 6/15/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):58.99
Final Water Level (feet TOIC):58.99
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-10-120-R1
Sample Time: 1645
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) N/A
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1605	105.0	5.58	17.33	504	0.0	10.77	192	58.93	
1610	107.0	5.58	17.27	505	0.0	10.83	193	58.93	
1615	109.0	5.58	17.20	503	0.0	10.82	194	58.93	
1620	111.0	5.58	17.10	502	0.0	10.85	195	58.93	
1625	113.0	5.58	17.05	502	0.0	10.74	195	58.98	*no low flow due to obstruction
1630	115.0	5.57	17.07	502	0.0	10.80	195	58.98	@72' – 3 well volumes were
									Purged = 114.8 liters

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-11-70
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):58.91
Final Water Level (feet TOIC):58.91
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-11-70-R1
Sample Time: 1505
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 5.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1418	1.25	5.20	19.76	294	33.2	7.99	284	58.91	
1423	2.5	5.23	19.22	293	39.5	7.96	302	58.91	
1428	3.75	5.22	19.26	293	46.7	7.69	311	58.91	
1433	5.0	5.22	19.07	294	38.8	7.76	316	58.91	
1438	6.25	5.23	19.03	294	29.1	7.60	319	58.91	
1443	7.5	5.25	18.91	297	16.8	7.87	322	58.91	
1448	8.75	5.25	18.75	323	11.9	7.90	323	58.91	
1453	10.0	5.25	18.71	300	7.8	7.59	325	58.91	
1458	11.25	5.26	18.61	299	6.0	7.79	326	58.91	
1503	12.5	5.27	18.76	297	5.7	7.61	326	58.91	Collected duplicate sample
									MW-806-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-12-70
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):58.04
Final Water Level (feet TOIC):58.04
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-12-70-R1
Sample Time: 1530
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 9.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 410
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1505	4.0	4.75	16.97	25	36.0	9.85	137	58.05	
1510	6.0	4.61	16.87	24	20.5	9.32	163	58.05	
1515	8.0	4.59	16.68	23	13.7	8.49	176	58.05	
1520	10.0	4.61	16.68	23	10.5	8.40	182	58.05	
1525	12.0	4.61	16.63	23	9.8	8.33	183	58.05	Collected MS/MSD

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-12-120
Sample Date: 6/13/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 120/116 Obstruction
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):58.23
Final Water Level (feet TOIC):58.22
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-12-120-R1
Sample Time: 1110
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 10.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0945	4.0	5.54	18.01	74	6.8	8.04	252	58.22	
0950	4.75	5.47	17.54	75	4.4	8.31	271	58.22	
0955	5.5	5.35	16.38	71	123	8.47	311	58.22	Replaced pump
1045	7.0	5.30	17.71	72	22.2	8.09	290	58.22	
1050	7.75	5.40	17.63	75	16.1	6.98	303	58.22	
1055	8.50	5.40	17.53	76	13.0	6.92	309	58.22	
1100	9.25	5.39	17.45	77	10.6	7.23	312	58.22	Collected duplicate sample
									MW-809-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-14-150
Sample Date: 6/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):59.09
Final Water Level (feet TOIC):59.08
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-14-150-R1
Sample Time: 1700
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 31.5
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1535	3.0	5.98	20.66	383	86.5	5.92	74	59.06	
1545	4.5	5.92	19.10	401	79.3	2.26	63	59.06	
1600	6.75	5.91	18.92	406	62.9	1.85	61	59.06	
1610	7.5	5.90	18.54	404	58.9	1.54	63	59.08	
1620	9.75	5.89	18.55	403	54.1	1.24	66	59.06	
1630	11.25	5.89	18.36	401	50.3	1.95	76	59.06	
1640	12.75	5.88	18.36	392	44.6	2.65	89	59.08	
1645	13.5	5.88	18.25	392	32.1	3.03	93	59.06	
1650	14.25	5.88	18.27	390	31.5	3.38	96	59.06	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-16-148
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 148
Screen Interval (feet TOIC):138-148
Initial Water Level (Feet TOIC):59.38
Final Water Level (feet TOIC):59.41
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-16-148-R1
Sample Time: 1505
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 13.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1440	7.5	5.66	17.59	231	21.9	12.43	258	59.45	
1445	8.8	5.63	17.44	234	14.8	12.41	269	59.45	
1450	10.1	5.62	17.56	236	14.1	12.14	272	59.45	
1455	11.3	5.61	17.74	238	13.3	12.26	276	59.41	
1500	12.6	5.61	17.40	241	13.6	12.32	281	59.45	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-17-130
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):59.20
Final Water Level (feet TOIC):59.22
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-17-130-R1
Sample Time: 1015
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 32.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0945	5.0	5.87	16.11	98	37.7	7.51	226	59.26	
0950	5.75	5.76	15.97	96	32.1	7.66	246	59.26	
0955	6.5	5.76	15.94	96	31.4	7.64	247	59.26	
1000	7.25	5.71	15.93	95	32.9	7.55	256	59.27	
1005	8.0	5.69	15.85	95	32.7	7.51	259	59.27	RB-03-R1 collected prior to start
									of purging

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-18-150
Sample Date: 6/19/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):57.80
Final Water Level (feet TOIC):56.15
Casing Type: PVC **Steel** (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: W-18-150-R1
Sample Time: 1035
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 6.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0920	1.25	6.12	14.26	386	12.4	3.18	-20	56.15	
0925	2.5	6.18	14.04	388	10.1	2.77	-23	56.15	
0930	3.75	6.23	13.92	388	6.3	2.54	-23	56.15	
0935	5.0	6.26	13.88	390	4.3	2.37	-25	56.15	
0940	6.25	6.27	13.82	391	6.3	2.24	-25	56.15	
0945	7.5	6.27	13.73	390	8.5	2.14	-23	56.15	
0950	8.75	6.27	13.71	390	7.2	2.05	-22	56.15	
0955	10.0	6.27	13.63	389	6.8	1.96	-21	56.15	
1000	11.25	6.27	13.64	389	7.5	1.90	-21	56.15	
1005	12.5	6.27	13.62	389	6.1	1.81	-21	56.15	
1010	13.75	6.27	13.60	389	6.0	1.79	-20	56.15	
1015	15.0	6.27	13.56	389	6.7	1.73	-20	56.15	
1020	16.25	6.27	13.51	389	6.2	1.70	-20	56.15	
1025	17.5	6.27	13.52	389	6.2	1.68	-20	56.15	Collected duplicate sample
									MW-814-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-19-110
Sample Date: 6/15/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):54.90
Final Water Level (feet TOIC):54.88
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-19-110-R1
Sample Time: 0955
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 30.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0840	7.0	5.93	16.48	305	75.9	11.33	226	54.87	
0850	9.0	5.88	16.37	305	59.7	10.98	243	54.87	
0900	11.0	5.89	16.34	306	55.7	10.02	249	54.87	
0910	13.0	5.91	16.37	305	60.3	9.70	254	54.87	
0920	15.0	5.91	16.31	304	57.6	9.62	257	54.86	
0930	17.0	5.91	16.35	303	50.3	9.56	261	54.87	
0935	18.0	5.91	16.42	302	43.6	9.54	262	54.87	
0940	19.0	5.91	16.50	302	38.9	9.59	263	54.87	
0945	20.0	5.91	16.50	302	30.7	9.52	264	54.87	Collected duplicate sample
									MW-811-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-19-150
Sample Date: 6/18/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):54.94
Final Water Level (feet TOIC):54.93
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-19-150-R1
Sample Time: 1020
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 27.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0900	6.0	5.54	16.41	406	1000	3.72	264	54.98	
0915	9.75	5.50	15.99	433	656	3.66	279	54.98	
0930	13.5	5.48	15.90	458	336	3.72	291	54.98	
0945	17.25	5.46	16.09	471	110	3.64	297	54.98	
1000	21.0	5.47	16.20	474	42.2	3.56	299	54.98	
1005	22.25	5.47	16.34	474	29.8	3.57	299	54.98	
1010	24.0	5.47	16.40	474	27.2	3.54	301	54.98	Collected MS/MSD

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20-120
Sample Date: 6/18/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):55.18
Final Water Level (feet TOIC):55.25
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-20-120-R1
Sample Time: 1205
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 23.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1140	6.0	5.54	16.37	398	33.5	2.85	277	55.48	
1145	7.0	5.52	16.26	396	28.9	2.55	284	55.48	
1150	8.0	5.51	16.06	398	25.7	2.41	288	55.48	
1155	9.0	5.52	16.02	401	23.4	1.86	289	55.48	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20-160
Sample Date: 6/18/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC):150-160
Initial Water Level (Feet TOIC):55.58
Final Water Level (feet TOIC):55.55
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-20-160-R1
Sample Time: 1345
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 15.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1320	7.0	5.72	16.92	333	24.5	26.7	264	55.64	
1325	8.25	5.70	16.71	333	23.2	1.21	268	55.64	
1330	9.5	5.70	16.79	330	18.9	1.19	268	55.64	
1335	10.75	5.70	16.60	333	15.4	1.14	270	55.66	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-22-95
Sample Date: 6/11/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC):85-95
Initial Water Level (Feet TOIC):59.31
Final Water Level (feet TOIC):59.30
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-22-95-R1
Sample Time: 1230
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 26.1
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1200	2.3	5.64	19.84	433	45.6	4.13	-8	59.30	
1205	3.3	5.61	19.30	432	39.6	3.95	-12	59.30	
1210	4.3	5.60	19.10	432	34.3	3.70	-12	59.30	
1215	5.3	5.58	19.10	434	27.2	3.63	-11	59.30	
1220	6.3	5.58	19.18	435	26.1	3.58	-10	59.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-23-110
Sample Date: 6/13/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):54.55
Final Water Level (feet TOIC):54.54
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-23-110-R1
Sample Time: 1735
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 29.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1655	4.0	6.52	16.38	427	172	8.50	-64	54.53	
1705	6.0	6.61	16.21	466	58.1	7.32	-79	54.53	
1710	7.0	6.64	16.22	461	50.5	6.80	-81	54.53	
1715	8.0	6.65	16.28	458	40.7	6.34	-83	54.53	
1720	9.0	6.66	16.23	457	35.4	6.30	-86	54.53	
1725	10.0	6.68	16.20	455	29.2	6.22	-83	54.53	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-24-260
Sample Date: 6/19/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 260
Screen Interval (feet TOIC):250-260
Initial Water Level (Feet TOIC):54.10
Final Water Level (feet TOIC):54.70
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: W-24-260-R1
Sample Time: 1405
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 4.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 270
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1252	1.35	5.46	18.60	469	7.2	5.10	241	54.70	
1257	2.7	5.41	17.42	488	1.7	5.97	254	54.70	
1302	4.05	5.57	17.10	492	7.2	5.79	265	54.70	
1307	5.4	5.56	17.04	495	7.0	5.55	273	54.70	
1312	6.75	5.56	17.03	503	4.5	5.36	280	54.70	
1317	8.1	5.56	17.11	517	4.3	5.02	287	54.70	
1322	9.45	5.55	17.20	537	3.7	4.70	294	54.70	
1327	10.8	5.55	17.24	546	3.7	4.47	298	54.70	
1332	12.15	5.54	17.25	555	3.8	4.19	300	54.70	
1337	13.5	5.55	17.32	560	3.7	3.92	300	54.70	
1342	14.85	5.55	17.38	564	4.2	3.60	298	54.70	
1347	16.2	5.55	17.40	567	4.6	3.43	296	54.70	
1352	17.55	5.55	17.42	571	4.2	3.23	294	54.70	
1357	18.9	5.55	17.47	575	4.2	3.12	293	54.70	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-25-150
Sample Date: 6/18/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):52.62
Final Water Level (feet TOIC):52.60
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-25-150-R1
Sample Time: 1630
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1605	7.0	9.69	22.49	470	2.0	2.59	73	54.90	
1610	8.25	9.97	21.63	482	1.1	2.41	51	54.91	
1615	9.5	10.03	21.59	476	1.7	1.76	43	54.90	
1620	10.75	10.08	21.50	475	1.7	1.72	36	54.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-25-188
Sample Date: 6/19/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 188
Screen Interval (feet TOIC):178-188
Initial Water Level (Feet TOIC):52.98
Final Water Level (feet TOIC):53.01
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-25-188-R1
Sample Time: 0940
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 17.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0915	8.0	5.56	17.74	351	31.8	2.42	193	53.03	
0920	9.0	5.51	17.69	348	24.3	1.59	182	53.03	
0925	10.0	5.51	17.51	348	23.7	1.26	179	53.03	
0930	11.0	5.54	17.44	348	17.4	1.19	175	53.03	Collected duplicate sample
									MW-813-GW-R1

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-26-270
Sample Date: 6/14/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 270
Screen Interval (feet TOIC):260-270
Initial Water Level (Feet TOIC):42.42
Final Water Level (feet TOIC):42.42
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-26-270-R1
Sample Time: 0940
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 12.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0845	6.0	5.75	15.83	313	6.2	6.27	225	42.42	
0850	7.25	5.79	15.64	350	7.5	6.35	233	42.42	
0855	8.5	5.79	15.64	358	20.3	6.23	238	42.42	
0900	9.75	5.80	15.75	360	28.7	6.15	245	42.42	
0905	11.0	5.80	15.74	361	25.5	5.86	251	42.42	
0910	12.25	5.80	15.82	361	22.0	5.70	255	42.42	
0915	13.5	5.80	15.82	361	20.2	5.67	257	42.42	
0920	14.75	5.80	15.86	362	18.5	5.56	259	42.42	
0925	16.0	5.80	15.95	362	14.4	5.64	260	42.42	
0930	17.25	5.80	15.93	362	13.1	5.54	262	42.42	
0935	18.75	5.80	15.90	362	12.9	5.48	263	42.42	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-240
Sample Date: 6/12/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):210-240
Initial Water Level (Feet TOIC):47.31
Final Water Level (feet TOIC):47.30
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-27-240-R1
Sample Time: 1525
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 2.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1445	4.54	6.73	17.51	370	7.9	3.58	-94	47.30	Petrol odor
1450	5.79	6.30	17.27	349	15.3	3.13	-27	47.30	
1455	7.04	6.22	17.21	348	6.8	2.82	-15	47.30	
1500	9.15	6.20	17.07	348	4.1	2.62	-11	47.30	
1505	10.4	6.19	16.95	348	3.4	2.45	-10	47.30	
1510	11.65	6.19	16.91	348	3.1	2.34	-9	47.30	
1515	12.9	6.19	16.86	347	3.1	2.25	-8	47.30	
1520	14.15	6.18	16.84	346	2.8	2.18	-6	47.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-285
Sample Date: 6/13/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):47.71
Final Water Level (feet TOIC):47.80
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-27-285-R1
Sample Time: 1045
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 6.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1000	5.39	5.76	15.97	352	7.4	4.90	234	47.80	
1005	7.39	5.60	15.88	488	10.7	2.95	246	47.80	
1010	9.39	5.58	15.86	499	8.5	2.38	250	47.80	
1015	11.39	5.55	15.80	500	6.8	2.18	258	47.80	
1020	13.39	5.54	15.77	499	6.1	2.10	262	47.80	
1025	15.39	5.51	15.74	499	5.4	1.96	266	47.80	
1030	17.39	5.49	15.74	499	6.5	1.90	270	47.80	
1035	19.39	5.48	15.75	499	5.9	1.83	272	47.80	
1040	21.39	5.47	15.70	498	6.0	1.75	276	47.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-30-285
Sample Date: 6/13/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):45.80
Final Water Level (feet TOIC):45.80
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-30-285-R1
Sample Time: 1405
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 28.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1310	5.5	5.91	16.30	132	178.	5.45	159	45.80	
1315	7.0	5.77	16.13	158	7.9	5.03	199	45.80	
1320	8.5	5.75	16.07	165	19.9	4.48	219	45.80	
1325	10.0	5.75	16.03	165	48.1	4.29	240	45.80	
1330	11.5	5.75	16.02	165	56.1	3.94	251	45.80	
1335	13.0	5.75	16.02	166	47.3	3.80	252	45.80	
1340	14.5	5.75	16.00	166	39.5	3.80	253	45.80	
1345	16.0	5.75	15.99	166	36.6	3.75	253	45.80	
1350	17.5	5.75	15.99	166	27.5	3.69	254	45.80	
1355	19.0	5.75	15.98	166	30.2	3.40	256	45.80	
1400	20.5	5.75	16.01	166	28.9	3.40	257	45.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-31-95
Sample Date: 6/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC):85-95
Initial Water Level (Feet TOIC):58.80
Final Water Level (feet TOIC):58.81
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-31-95-R1
Sample Time: 1145
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 24.1
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1115	5.0	5.61	16.81	1470	56.8	9.61	259	58.82	
1120	6.0	5.60	16.72	1480	44.1	9.37	256	58.82	
1125	7.0	5.59	16.67	1480	35.0	9.28	272	58.82	
1130	8.0	5.58	16.51	1490	29.3	9.11	275	58.82	
1135	9.0	5.58	16.46	1490	24.1	8.84	278	58.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-32-110
Sample Date: 6/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):58.78
Final Water Level (feet TOIC):58.77
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & B. Kroon

Sample ID: W-32-110-R1
Sample Time: 1525
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 42.5
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1350	4.0	5.59	18.30	101	183	5.96	289	58.76	
1405	7.0	5.59	18.05	104	116	6.11	292	58.76	
1420	10.0	5.59	17.88	105	94.0	6.07	293	58.76	
1435	13.0	5.59	17.77	105	71.5	5.70	297	58.76	
1450	16.0	5.59	17.72	106	60.6	5.69	301	58.76	
1505	19.0	5.60	17.70	106	48.2	5.66	302	58.76	
1510	20.0	5.60	17.69	106	44.7	5.73	302	58.76	
1515	21.0	5.60	17.68	107	42.5	5.89	303	58.76	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-36-390
Sample Date: 6/15/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 390
Screen Interval (feet TOIC):350-390
Initial Water Level (Feet TOIC):45.42
Final Water Level (feet TOIC):45.42
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-36-390-R1
Sample Time: 1115
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 16.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 270/300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1030	7.3	6.18	16.83	706	8.6	6.72	250	45.42	
1035	8.65	6.11	16.46	702	9.8	4.14	194	45.42	
1040	10.0	6.06	16.34	698	17.0	3.69	179	45.42	Adjusted flow rate to 300ml/min
1045	11.5	6.29	16.31	723	22.8	3.23	143	45.42	
1050	13.0	6.36	16.38	727	23.8	2.89	130	45.42	
1055	14.5	6.37	16.45	727	20.1	2.73	128	45.42	
1100	16.0	6.38	16.45	726	17.6	2.52	129	45.42	
1105	17.5	6.37	16.45	722	16.3	2.44	133	45.42	
1110	19.0	6.37	16.37	719	16.0	2.40	134	45.42	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-36-448
Sample Date: 6/20/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 448
Screen Interval (feet TOIC):420-450
Initial Water Level (Feet TOIC):46.00
Final Water Level (feet TOIC):45.85
Casing Type: PVC **Steel** (circle one)
Personnel: R. Malaniak & S. Kromhout

Sample ID: W-36-448-R1
Sample Time: 1145
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 1.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 290
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0958	4.45	6.98	18.62	525	5.1	7.86	221	45.85	
1003	2.9	6.81	17.31	510	4.6	7.16	225	45.85	
1008	4.35	6.59	17.15	500	5.8	6.75	212	45.85	
1013	5.8	6.55	16.88	537	6.0	6.41	206	45.85	
1018	7.25	6.74	16.73	637	4.9	5.41	207	45.85	
1023	8.7	6.78	16.75	636	6.2	4.34	200	45.85	
1028	10.15	6.76	16.67	676	7.0	3.81	194	45.85	
1033	11.6	6.70	16.70	623	6.3	3.59	183	45.85	
1038	13.05	6.70	16.61	608	6.1	3.51	173	45.85	
1043	14.5	6.65	17.03	583	5.4	3.53	167	45.85	
1048	15.95	6.59	17.30	559	5.6	3.58	165	45.85	
1053	17.4	6.53	17.43	537	4.8	3.68	164	45.85	
1058	18.85	6.49	17.45	520	2.6	3.86	168	45.85	
1103	20.3	6.44	17.42	508	2.2	4.04	171	45.85	
1108	21.75	6.41	17.43	495	2.8	4.10	173	45.85	
1113	23.2	6.35	17.57	481	2.1	4.20	176	45.85	

Key:
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°C = Degrees centigrade.
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1118	24.65	6.34	17.67	474	2.2	4.27	178	45.85	
1123	26.1	6.31	17.79	462	1.9	4.30	181	45.85	
1128	27.55	6.30	18.03	454	1.9	4.34	183	45.85	
1133	29.0	6.28	18.12	447	1.7	4.39	186	45.85	
1138	30.45	6.26	18.02	443	1.9	4.46	188	45.85	

Key:

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-37-325
Sample Date: 6/14/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC):285-325
Initial Water Level (Feet TOIC):48.70
Final Water Level (feet TOIC):48.78
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-37-325-R1
Sample Time: 1255
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 13.5
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250/440
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1132	6.15	5.28	16.74	296	0.0	3.55	239	48.68	
1137	7.4	5.24	16.41	309	2.0	3.53	256	48.68	
1142	8.65	5.25	16.31	310	60.7	2.73	263	48.70	
1147	9.9	5.17	16.19	320	354	2.80	272	48.70	
1152	12.4	5.17	16.36	321	565	2.93	258	48.70	Cleaned flow through cell and
1157	14.6	5.16	15.54	324	435	2.11	273	48.70	adjusted flow rate to 440ml/min
1202	16.8	5.16	15.64	324	266	1.91	275	48.73	
1207	19.0	5.16	15.66	329	146	1.69	277	48.73	
1212	21.2	5.16	15.69	323	97.2	1.62	273	48.73	
1217	23.4	5.16	15.58	323	64.8	1.58	280	48.78	
1222	25.6	5.17	15.60	322	47.3	1.51	280	48.78	
1227	27.8	5.17	15.51	322	34.5	1.48	281	48.78	
1232	30.0	5.16	15.52	321	24.6	1.46	282	48.78	
1237	32.2	5.17	15.47	321	19.8	1.39	282	48.78	
1242	34.4	5.17	15.53	320	14.9	1.38	283	48.78	
1247	36.6	5.17	15.54	320	13.9	1.34	283	48.78	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1252	38.8	5.18	15.56	320	13.5	1.33	283	48.78	

Key:

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-37-385
Sample Date: 6/14/2012
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 385
Screen Interval (feet TOIC):355-385
Initial Water Level (Feet TOIC):48.74
Final Water Level (feet TOIC):48.74
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale & M. Cameron

Sample ID: W-37-385-R1
Sample Time: 1530
Tubing Type: Teflon : **Teflon/Poly** : Poly (circle one)
Final Turbidity (NTUs) : 7.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200/400
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
Equipment Serial #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1405	7.29	6.62	17.16	278	0.8	5.550	107	48.74	
1410	8.29	6.42	16.90	283	0.5	5.16	149	48.74	
1415	9.29	5.69	16.60	314	41.3	4.20	234	48.74	
1420	10.29	5.29	16.40	312	471	3.24	277	48.74	Cleaned flow through cell and
1425	12.29	5.35	16.70	262	1000	3.75	267	48.74	adjusted flow rate to 400ml/min
1430	14.29	5.32	16.62	266	760	2.66	279	48.74	
1435	16.29	5.31	16.69	255	690	2.70	283	48.74	
1440	18.29	5.31	16.47	232	221	2.89	293	48.74	
1445	20.29	5.32	16.38	221	74.7	3.03	301	48.74	
1450	22.29	5.33	16.64	212	60.4	3.16	299	48.74	
1455	24.29	5.34	16.56	201	31.7	3.30	303	48.74	
1500	26.29	5.35	16.75	189	18.8	3.56	309	48.74	
1505	28.29	5.35	16.28	186	14.0	3.63	314	48.74	
1510	30.29	5.35	16.53	181	14.6	3.75	311	48.74	
1515	32.29	5.35	16.75	177	8.5	3.78	312	48.74	
1520	34.29	5.35	16.69	175	8.5	3.84	315	48.74	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1525	36.29	5.35	16.68	173	7.9	3.87	313	48.74	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW3
Sample Date: 11/13/2012
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):58-78
Initial Water Level (Feet TOIC):61.05
Final Water Level (feet TOIC):61.05
Casing Type: **PVC** Steel (circle one)
Personnel: S. Kromhout

Sample ID: MW3-R2
Purge Start Time: 1537
Sample Time: 1622
Final Turbidity (NTUs) : 6.4
Casing Inner Diameter (inches): 4
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.29 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1547	.2	5.64	15.55	146	9.0	2.07	209.5	61.05	
1552	1	5.68	15.69	137	8.3	2.24	230.5	61.05	
1557	2	5.69	15.66	136	7.4	2.33	253.7	61.05	
1602	3	5.69	15.66	136	7.0	2.36	267.7	61.05	
1607	4	5.69	15.72	137	6.8	2.39	280.0	61.05	
1612	5	5.69	15.73	137	6.9	2.38	289.2	61.05	
1617	6	5.70	15.76	137	6.4	2.38	290.1	61.05	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW4
Sample Date: 11/14/2012
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC):76.55
Screen Interval (feet TOIC):58-78
Initial Water Level (Feet TOIC):60.68
Final Water Level (feet TOIC):60.68
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak

Sample ID: MW-4-R2
Purge Start Time:1300
Sample Time: 1425
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.15 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1305	.2	5.88	16.04	278	4.9	10.67	175.3	60.68	
1310	1	5.87	16.14	281	0	10.54	211.5	60.68	
1315	2	5.87	16.17	284	0	10.51	232.4	60.68	
1320	3	5.86	16.10	283	0	10.61	248.4	60.68	
1325	4	5.88	16.16	287	0	10.70	261.0	60.68	
1330	5	5.89	16.14	288	0	10.90	273.1	60.68	
1335	6	5.87	15.92	287	0	11.16	284.3	60.68	
1340	7	5.88	16.09	288	0	11.35	292.7	60.68	
1345	8	5.89	16.06	290	0	11.54	299.8	60.68	
1350	9	5.89	16.05	290	0	11.74	307.2	60.68	
1355	10	5.89	16.07	291	0	11.91	313	60.68	
1400	11	5.89	16.06	291	0	12.13	321	60.68	
1405	12	5.89	16.11	291	0	12.25	327	60.68	
1410	13	5.89	15.85	291	0	12.47	334	60.68	
1415	14	5.90	15.80	291	0	12.54	337	60.68	
1420	15	5.92	15.99	294	0	12.61	339	60.68	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW8
Sample Date: 11/13/2012
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):60.80
Final Water Level (feet TOIC):60.80
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak

Sample ID: MW-8-R2
Purge Start Time: 1505
Sample Time: 1610
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:7.57 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1515	.2	6.24	16.51	297	0	7.66	116.1	60.80	
1520	1	5.75	16.40	366	0	5.41	189	60.80	
1525	2	5.75	16.26	387	0	4.77	223.6	60.80	
1530	3	5.74	16.20	399	0	4.29	244.1	60.80	
1535	4	5.74	16.16	405	0	4.02	258.3	60.80	
1540	5	5.74	16.14	408	0	3.81	264.3	60.80	
1545	6	5.75	16.12	411	0	3.70	267.6	60.80	
1550	7	5.75	16.12	412	0	3.62	267.7	60.80	
1555	8	5.79	16.07	415	0	3.58	268.3	60.80	
1600	9	5.77	16.07	415	0	3.55	268.4	60.80	
1605	10	5.78	16.10	418	0	3.51	267.8	60.80	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW09
Sample Date: 11/16/2012
Sampling Device:QED Bladder Pump
Well Depth (feet TOIC):82
Screen Interval (feet TOIC):72-82
Initial Water Level (Feet TOIC):61.59
Final Water Level (feet TOIC):61.59
Casing Type: **PVC** Steel (circle one)
Personnel:S. Kromhout

Sample ID:MW-09-R2
Purge Start Time:1330
Sample Time: 1410
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):4
Purge Rate (ml/min)215
Purge Rate d/sampling (ml/min):215
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.42 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1340	.215	4.36	15.66	55	0	10.26	325.1	61.59	
1345	1.075	5.17	15.50	47	0	9.86	252.9	61.59	
1350	2.15	5.23	15.53	46	0	9.67	265.8	61.59	
1355	3.225	5.24	15.55	46	0	9.49	276.2	61.59	
1400	4.3	5.27	15.61	45	0	9.51	278.5	61.59	
1405	5.375	5.28	15.66	45	0	9.47	283.2	61.59	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW10
Sample Date: 11/16/2012
Sampling Device:QED Bladder Pump
Well Depth (feet TOIC):130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):61.48
Final Water Level (feet TOIC):61.48
Casing Type: **PVC** Steel (circle one)
Personnel:S. Kromhout

Sample ID: MW10-R2
Purge Start Time:1010
Sample Time: 1133
Final Turbidity (NTUs) : 0.6
Casing Inner Diameter (inches):4
Purge Rate (ml/min)160
Purge Rate d/sampling (ml/min):160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.24 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1028	0.16	5.70	14.73	93	1.5	8.57	168.2	61.48	
1033	0.8	5.52	14.81	116	1.9	8.23	179.1	61.48	
1038	1.6	5.47	14.58	129	2.2	8.09	191.8	61.48	
1043	2.4	5.45	14.65	121	1.9	7.89	201.9	61.48	
1048	3.2	5.45	14.70	123	1.8	7.91	210.9	61.48	
1053	4.0	5.45	14.82	125	1.1	7.90	218.8	61.48	
1058	4.8	5.44	14.68	126	1.3	7.86	226.2	61.48	
1103	5.6	5.44	14.65	126	0.9	7.82	232.6	61.48	
1108	6.4	5.44	14.71	126	1.1	7.83	237.0	61.48	
1113	7.2	5.45	14.88	127	0.7	7.80	241.1	61.48	
1118	8.0	5.44	14.90	127	0.6	7.83	244.0	61.48	
1123	8.8	5.43	14.70	127	0.5	7.82	247.6	61.48	
1128	9.6	5.43	14.67	127	0.6	7.82	250.9	61.48	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW11
Sample Date: 11/16/2012
Sampling Device:QED Bladder Pump
Well Depth (feet TOIC):81
Screen Interval (feet TOIC):71-81
Initial Water Level (Feet TOIC):61.71
Final Water Level (feet TOIC):61.71
Casing Type: **PVC** Steel (circle one)
Personnel:S.Kromhout

Sample ID: MW11-R2
Purge Start Time:0830
Sample Time: 0910
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min)200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.38 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0835	.2	5.87	14.02	93	0	10.79	124.7	61.71	
0840	1	5.97	14.37	73	0	10.24	131.2	61.71	
0845	2	5.96	14.43	74	0	10.15	140.1	61.71	
0850	3	5.95	14.46	74	0	10.09	148.2	61.71	
0855	4	5.93	14.47	75	0	9.91	156.4	61.71	
0900	5	5.93	14.38	75	0	9.82	164.0	61.71	
0905	6	5.93	14.50	77	0	9.73	164.7	61.71	MS/MSD collected

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.:MW12
Sample Date: 11/16/2012
Sampling Device: QED bladder pump
Well Depth (feet TOIC):130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):62.31
Final Water Level (feet TOIC):62.31
Casing Type**:** **PVC** Steel (circle one)
Personnel:S.Kromhout

Sample ID: _MW12-R2
Purge Start Time:1500
Sample Time: 1635
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):4
Purge Rate (ml/min)200
Purge Rate d/sampling (ml/min):200
Sample Analyses: Hydrogen
2x Purge System Volume #: 5.21 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1507	.2	6.25	15.71	573	0.5	8.78	279.1	62.31	
1512	1	6.19	15.03	569	0	8.42	272.7	62.31	
1517	2	6.17	14.80	567	0	8.36	270.2	62.31	
1522	3	6.16	14.64	568	0	8.60	268.8	62.31	
1527	4	6.17	14.87	570	0	8.36	262.0	62.31	
1532	5	6.17	14.86	571	0	8.19	260.6	62.31	
1537	6	6.17	14.60	572	0	8.18	260.3	62.31	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW12
Sample Date: 11/15/2012
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC): 120-130
Initial Water Level (Feet TOIC): 62.28
Final Water Level (feet TOIC): 62.28
Casing Type: **PVC** Steel (circle one)
Personnel: S.Kromhout

Sample ID: MW12-R2
Purge Start Time: 1510
Sample Time: 1610
Final Turbidity (NTUs) : 3.9
Casing Inner Diameter (inches): 4
Purge Rate (ml/min): 190
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174) NAP Parameters
2x Purge System Volume #: 5.21 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1535	0.19	6.35	14.75	565	4.1	9.40	152.2	62.28	
1540	0.95	6.21	14.61	579	4.1	7.99	156.8	62.28	
1545	1.9	6.18	14.51	582	4.1	7.54	161.8	62.28	
1550	2.85	6.18	14.42	584	4.1	7.43	165.6	62.28	
1555	3.8	6.18	14.49	586	4.1	7.35	168.9	62.28	
1600	4.75	6.18	14.41	589	4.3	7.32	171.4	62.28	
1605	5.7	6.18	14.42	590	3.9	7.30	173.5	62.28	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW13D
Sample Date:11/17/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):326
Screen Interval (feet TOIC):290-300
Initial Water Level (Feet TOIC):65.05
Final Water Level (feet TOIC):65.05
Casing Type: **PVC** Steel (circle one)
Personnel:D. Cuomo

Sample ID: MW-13-D-R2
Purge Start Time:0820
Sample Time: 0945
Final Turbidity (NTUs) : 1.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)350
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 19.8 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0830	1.75	5.60	13.93	111	0.6	4.94	208.6	65.05	
0835	3.50	5.62	13.88	108	0.7	4.95	205.2	65.05	
0840	5.25	5.59	13.88	107	0.5	5.36	208.2	65.05	
0845	7.00	5.56	13.85	107	44.3	5.71	212.1	65.05	
0850	8.75	5.51	13.91	116	69.3	7.21	221.9	65.05	
0855	10.50	5.52	13.89	117	68.8	7.31	222.7	65.05	
0900	12.25	5.52	13.71	120	27.9	7.53	224.7	65.05	
0905	14.00	5.52	13.76	120	3.8	7.73	230.4	65.05	
0910	15.75	5.52	13.80	130	5.5	7.74	230.2	65.05	
0915	17.50	5.52	13.65	133	4.1	7.77	232.4	65.05	
0920	19.25	5.51	13.68	138	1.5	7.81	234.9	65.05	
0925	21.00	5.52	13.72	140	1.5	7.84	236.0	65.05	
0930	22.75	5.53	13.86	147	1.7	7.86	238.0	65.05	
0935	24.50	5.52	13.78	148	1.8	7.89	239.0	65.05	
0940	26.25	5.51	13.78	150	1.8	7.92	242.4	65.05	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW13S
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):80.42
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.90
Final Water Level (feet TOIC):64.90
Casing Type: **PVC** Steel (circle one)
Personnel: D. Cuomo, J. Nelson

Sample ID: MW-13-S-R2
Purge Start Time:1500
Sample Time: 1610
Final Turbidity (NTUs) : 0.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)480
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.3 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1505	2.4	5.47	14.36	2546	8.6	12.93	189.8	64.90	
1510	4.8	5.37	14.33	2593	6.1	12.63	210.8	64.90	
1515	7.2	5.34	14.41	2601	4.6	12.54	222.0	64.90	
1520	9.6	5.29	14.39	2598	2.8	12.42	239.2	64.90	
1525	12.0	5.27	14.37	2577	1.6	12.36	250.2	64.90	
1530	14.4	5.27	14.38	2566	1.3	12.35	255.3	64.90	
1535	16.8	5.27	14.39	2564	1.3	12.34	259.7	64.90	
1540	19.2	5.27	14.36	2545	0.8	12.32	263.8	64.90	
1545	21.6	5.27	14.32	2532	0.7	12.29	271.0	64.90	
1550	24.0	5.27	14.38	2536	0.7	21.31	273.1	64.90	
1555	26.4	5.27	14.38	2532	0.4	12.31	271.0	64.90	
1600	28.8	5.27	14.37	2536	0.4	12.29	273.0	64.90	
1605	31.2	5.27	14.37	2512	0.4	12.30	273.1	64.90	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW14D
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 306
Screen Interval (feet TOIC):294-304
Initial Water Level (Feet TOIC):64.35
Final Water Level (feet TOIC):64.65
Casing Type: **PVC** Steel (circle one)
Personnel: S. Kromhout

Sample ID: _MW14D-R2
Purge Start Time: 1055
Sample Time: 1225
Final Turbidity (NTUs) : 1.5
Casing Inner Diameter (inches):2
Purge Rate (ml/min): 380
Purge Rate d/sampling (ml/min):230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 11.80L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1100	0.38	6.67	13.87	1396	8.0	1.39	197.9	64.35	
1105	1.9	6.76	13.65	1242	2.0	0.58	188.7	64.35	
1110	3.8	6.70	13.50	1124	51.7	0.65	185.5	64.35	
1115	5.7	6.72	13.53	1198	71.8	0.70	147.6	64.35	
1120	7.6	6.71	13.30	1455	150.9	0.74	142.5	64.35	
1125	9.5	6.65	13.45	1280	48.0	1.62	124.9	64.35	
1130	11.4	6.52	13.34	1105	24.2	2.30	123.0	64.35	
1135	13.3	6.34	13.35	921	11.4	3.01	126.4	64.35	
1140	15.2	6.26	13.30	841	7.4	3.40	129.2	64.35	
1145	17.1	6.17	13.31	801	5.4	3.89	131.7	64.35	
1150	19.0	6.03	13.26	663	3.4	4.21	142.6	64.35	
1155	20.9	5.95	13.23	604	2.0	4.45	150.5	64.35	
1200	22.8	5.92	13.27	584	2.6	4.59	153.8	64.65	
1205	24.7	5.89	13.24	562	3.9	4.71	159.5	64.65	
1210	26.6	5.86	13.23	556	1.5	4.83	165.6	64.65	
1215	28.5	5.86	13.22	556	1.4	4.82	167.5	64.65	
1220	30.4	5.84	13.18	549	1.5	4.89	170.8	64.65	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW14DD
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC): 365-375
Initial Water Level (Feet TOIC):63.73
Final Water Level (feet TOIC):63.73
Casing Type: **PVC** Steel (circle one)
Personnel: S.Kromhout

Sample ID: MW14DD-R2/MW513-GWR2
Purge Start Time: 0835
Sample Time: 0950
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):2
Purge Rate (ml/min): 330
Purge Rate d/sampling (ml/min):230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 14.43 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0850	0.330	5.52	13.39	254	0	6.11	199.6	63.73	
0855	1.65	5.49	13.19	252	0	6.34	203.6	63.73	
0900	3.3	5.48	13.14	251	0	6.38	205.9	63.73	
0905	4.95	5.45	13.14	250	0	6.44	208.1	63.73	
0910	6.6	5.46	13.16	252	5.9	6.54	212.4	63.73	
0915	8.25	5.59	13.11	270	5.6	6.57	215.8	63.73	
0920	9.9	5.64	13.14	276	1.1	6.57	218.2	63.73	
0925	11.55	5.62	13.07	276	0.3	6.59	220.6	63.73	
0930	13.2	5.60	13.06	274	0.1	6.62	223.1	63.73	
0935	14.85	5.58	13.09	271	0	6.70	224.9	63.73	
0940	16.50	5.54	13.04	268	0	6.73	227.1	63.73	
0945	18.15	5.51	13.00	268	0	6.84	230.2	63.73	Took Duplicate Sample

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW14S
Sample Date: 11/15/2012
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC):64.15
Final Water Level (feet TOIC):64.15
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: _MW-14S-R2
Purge Start Time: 0900
Sample Time: _____1000
Final Turbidity (NTUs) : 2.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 340
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and
Total Uranium (ASTM-D5174) NAP Parameters
2x Purge System Volume #: 3.25 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0905	1.7	5.61	13.40	852	25.9	8.85	219.3	64.15	
0910	3.4	5.52	13.38	884	14.1	9.16	243.7	64.15	
0915	5.1	5.52	13.42	882	9.0	9.20	258.8	64.15	
0920	6.8	5.52	13.40	883	6.1	9.20	265.6	64.15	
0925	8.5	5.52	13.47	884	4.1	9.15	272.4	64.15	
0930	10.2	5.51	13.55	885	3.6	9.24	276.2	64.15	
0935	11.9	5.52	13.59	887	0	9.19	279.1	64.15	
0940	13.6	5.52	13.74	893	0	9.18	282.5	64.15	
0945	15.3	5.52	13.55	890	2.6	9.15	285.1	64.15	
0950	17.0	5.52	13.65	887	2.4	9.11	287.7	64.15	
0955	18.7	5.52	13.50	886	2.4	9.02	290.2	64.15	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW15D
Sample Date: 11/17/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):63.65
Final Water Level (feet TOIC):63.65
Casing Type: **PVC** Steel (circle one)
Personnel: S. Kromhout

Sample ID: MW15D-R2
Purge Start Time: 1015
Sample Time: 1120
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 420
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 20.87 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1020	0.42	5.19	14.71	180	0	5.84	240.7	63.65	
1025	2.1	5.09	14.23	180	11.6	6.38	261.2	63.65	
1030	4.2	5.08	14.16	191	13.8	6.70	267.8	63.65	
1035	6.3	5.10	14.09	199	9.2	7.00	275.4	63.65	
1040	8.4	5.12	14.32	203	5.0	7.15	279.3	63.65	
1045	10.5	5.11	14.37	205	2.8	7.14	281.0	63.65	
1050	12.6	5.12	14.06	205	2.4	7.10	284.7	63.65	
1055	14.7	5.13	13.99	206	1.1	7.10	287.7	63.65	
1100	16.8	5.12	13.99	206	0.3	7.12	288.6	63.65	
1105	18.9	5.12	13.96	205	0	7.15	290.8	63.65	
1110	21.0	5.12	14.15	205	0	7.19	290.2	63.65	
1115	23.1	5.13	14.00	205	0	7.14	291.7	63.65	
									Freeze Line not functioning

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW15DD
Sample Date: 11/17/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC):64.10
Final Water Level (feet TOIC):64.10
Casing Type: **PVC** Steel (circle one)
Personnel: S. Kromhout

Sample ID: MW15DD-R2
Purge Start Time:0820
Sample Time: 0930
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)480
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 25.01 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0825	0.48	5.73	14.02	129	0	4.32	149.8	64.10	
0830	2.4	5.61	13.95	129	0	4.68	160.2	64.10	
0835	4.8	5.57	13.90	129	0	4.95	171.2	64.10	
0840	7.2	5.53	13.90	126	0.9	5.47	183.6	64.10	
0845	9.6	5.53	13.86	114	0.8	6.02	197.1	64.10	
0850	12	5.50	13.80	114	0	6.12	204.7	64.10	
0855	14.4	5.49	13.77	114	0	6.18	211.2	64.10	
0900	16.8	5.47	13.68	114	0	6.23	218.7	64.10	
0905	19.2	5.48	13.70	115	0	6.23	221.9	64.10	
0910	21.8	5.47	13.65	115	0	6.26	228.9	64.10	
0915	24.2	5.48	13.61	115	0	6.29	233.6	64.10	
0920	26.6	5.48	13.64	115	0	6.29	236.3	64.10	
0925	29.0	5.47	13.62	115	0	6.30	237.7	64.10	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW15S
Sample Date: 11/17/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.09
Final Water Level (feet TOIC):64.09
Casing Type: **PVC** Steel (circle one)
Personnel: D. Cuomo

Sample ID: _MW-15-S-R2
Purge Start Time:1120
Sample Time: 1210
Final Turbidity (NTUs) : 18.0
Casing Inner Diameter (inches):2
Purge Rate (ml/min)300
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 8.8 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1130	3.00	5.58	13.78	1139	182.0	10.40	223.9	64.09	
1135	4.5	5.59	13.96	1144	100.0	10.20	236.9	64.09	
1140	6.00	5.59	13.98	1142	90.5	10.19	238.2	64.09	
1145	7.50	5.59	14.01	1141	37.8	9.91	251.1	64.09	
1150	9.00	5.59	14.03	1141	34.1	9.87	252.7	64.09	
1155	10.50	5.58	14.01	1142	18.0	9.73	261.7	64.09	
1200	12.00	5.57	14.01	1141	18.2	9.73	266.9	64.09	
1205	13.50	5.57	14.03	1141	18.0	9.72	267.9	64.09	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW16D
Sample Date: 11/03/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):63.91
Final Water Level (feet TOIC):63.91
Casing Type: **PVC** Steel (circle one)
Personnel:R. Malaniak

Sample ID: MW-16D-R2
Purge Start Time:1250
Sample Time: 1435
Final Turbidity (NTUs) : 45.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1257	.35	8.18	15.18	251	7.4	6.81	211.3	63.91	
1302	1.75	7.17	15.16	247	5.1	7.23	209.6	63.91	
1307	3.5	6.80	15.13	247	10.5	7.44	209.0	63.91	
1312	4.55	6.47	15.17	251	83.3	7.70	210.0	63.91	
1317	5.6	6.69	15.17	258	82.9	7.84	210.6	63.91	
1322	6.65	6.29	15.09	255	428	7.92	210.6	63.91	
1327	7.7	6.20	14.79	253	363	7.90	210.4	63.91	
1332	8.75	6.20	14.85	253	267	8.00	209.4	63.91	
1337	9.8	6.21	14.82	253	183	7.96	209.3	63.91	
1342	10.85	6.23	14.36	244	161	7.95	210.7	63.91	
1347	11.9	6.13	15.07	253	109	8.11	208.0	63.91	
1352	12.95	6.18	14.79	253	116	7.98	208.7	63.91	
1357	14.0	6.17	15.02	253	91.3	8.00	207.9	63.91	
1402	15.05	6.21	14.92	253	85.3	7.92	207.7	63.91	
1407	16.1	6.20	14.68	253	70.4	7.88	207.6	63.91	
1412	17.15	6.18	14.84	253	64.3	7.93	206.9	63.91	
1417	18.2	6.24	15.04	254	49.2	8.07	206.1	63.91	
1422	19.25	6.23	15.04	254	48.6	8.05	206.1	63.91	
1427	20.65	6.29	15.18	254	45.9	8.17	205.6	63.91	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW16S
Sample Date: 11/03/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):165
Screen Interval (feet TOIC):155-165
Initial Water Level (Feet TOIC):64.48
Final Water Level (feet TOIC):64.48
Casing Type: **PVC** Steel (circle one)
Personnel:J. Lacanlale

Sample ID:MW-16S-R2
Purge Start Time:1305
Sample Time: 1400
Final Turbidity (NTUs) :0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.86 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16305	.3	5.46	15.38	130	5.0	8.95	224.9	64.48	
1310	1.5	5.16	15.27	128	4.9	8.66	270.1	64.48	
1315	3.0	4.82	15.30	126	0	8.58	300.0	64.48	
1320	4.5	4.82	15.31	124	0.7	8.52	331.0	64.48	
1325	6.0	4.75	15.14	124	1.0	8.52	342.0	64.48	
1330	7.5	4.58	14.90	124	0	8.54	348.0	64.48	
1335	9.0	4.66	14.83	122	0	8.52	348.2	64.48	
1340	10.5	4.73	14.75	123	0	8.51	340.5	64.48	
1345	12.0	4.89	15.17	123	0	8.45	325.5	64.48	
1350	13.5	4.91	15.00	122	0	8.47	316.9	64.48	
1355	15.0	4.84	14.96	122	0	8.53	316.2	64.48	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW17S
Sample Date: 11/16/2012
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):64.01
Final Water Level (feet TOIC):64.01
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW17S-R2
Purge Start Time:1442
Sample Time: 1524
Final Turbidity (NTUs) : 2.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)350
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.45L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1442	0	5.95	16.29	237	58.1	9.04	188.7	64.01	
1447	1.75	5.55	15.78	476	20.3	4.65	194.0	64.01	
1452	3.5	5.50	15.78	515	14.8	4.83	192.4	64.01	
1457	5.25	5.14	15.71	601	7.2	5.16	185.4	64.01	
1502	7	5.44	15.69	638	4.8	5.32	179.3	64.01	
1507	8.75	5.44	15.67	669	2.8	5.38	174.7	64.01	
1512	10.5	5.45	15.66	682	2.9	5.49	172.2	64.01	
1517	12.25	5.47	15.65	695	2.7	5.57	171.7	64.01	
1522	14	5.47	15.63	699	2.7	5.57	171.0	64.01	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW18I
Sample Date: 11/09/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):128
Screen Interval (feet TOIC):118-128
Initial Water Level (Feet TOIC):63.82
Final Water Level (feet TOIC):63.82
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID: MW18I-R2
Purge Start Time:0855
Sample Time: 0945
Final Turbidity (NTUs) : 2.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 1.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0855	0	6.10	13.89	409	9.9	11.14	205.9	63.82	
0900	2	5.81	13.86	310	4.2	11.72	202.6	63.82	
0905	4	5.76	13.90	307	3.3	11.25	203.1	6382	
0910	6	5.74	13.80	295	3.4	11.79	204.7	63.84	
0915	8	5.73	13.85	289	3.2	10.29	206.4	6385	
0920	10	5.72	13.83	286	2.8	12.81	209.9	63.82	
0925	12	5.72	13.81	286	2.6	10.92	210.8	63.87	
0930	14	5.72	13.78	284	2.6	10.91	212.5	63.83	
0935	16	5.72	13.83	284	2.4	10.46	214.6	63.82	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW18S
Sample Date: 11/09/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):72
Screen Interval (feet TOIC):62-72
Initial Water Level (Feet TOIC):63.66
Final Water Level (feet TOIC):63.66
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID: MW-18S-R2 and MW508-GWR2
Purge Start Time: 1020
Sample Time: 1110
Final Turbidity (NTUs) : 0.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.914

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1020	0	6.74	14.18	1006	31.2	8.69	161.0	63.66	
1025	2	6.76	14.15	999	20.5	9.13	155.6	63.68	
1030	4	6.79	13.97	999	10.3	7.98	151.3	63.68	
1035	6	6.79	13.95	1004	2.8	8.00	149.8	63.68	
1040	8	6.82	13.98	1008	1.9	8.01	147.6	63.66	
1045	10	6.82	13.96	1013	1.8	8.10	146.7	63.70	
1050	12	6.80	13.94	1015	1.0	8.11	148.1	63.66	
1055	14	6.81	13.93	1018	0.9	8.08	148.3	63.66	
1100	16	6.81	13.97	1021	0.9	8.11	148.5	63.66	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW19D
Sample Date: 11/12/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):306
Screen Interval (feet TOIC):296-306
Initial Water Level (Feet TOIC):62.74
Final Water Level (feet TOIC):62.75
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID:MW19D-R2
Purge Start Time:0845
Sample Time: 1010
Final Turbidity (NTUs) : 29.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.44

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0845	0	5.82	16.55	2581	20.1	1.87	219.7	62.74	
0850	1.25	5.68	16.30	2378	16.2	1.12	217.7	62.76	
0855	2.50	5.63	16.31	2215	20.1	1.30	211.4	62.75	
0900	3.75	5.62	16.29	2140	21.8	1.53	203.5	62.75	Purge Rate=320 ml/min
0905	5.4	5.58	15.91	1825	147.3	2.78	182.2	62.75	
0910	7.0	5.57	15.84	1016	570.5	5.33	186.5	62.77	
0915	8.6	5.55	15.94	869	216.9	5.92	196.6	62.77	
0920	10.2	5.54	15.98	795	144.3	6.35	201.7	62.75	
0925	11.8	5.52	16.00	756	80.3	6.53	208.7	62.75	
0930	13.4	5.51	16.03	718	70.6	6.64	212.7	62.75	
0935	15.0	5.48	16.07	708	67.7	6.70	217.3	62.75	
0940	16.6	5.49	16.04	698	69.3	6.70	219.0	62.75	
0945	18.2	5.48	16.01	692	62.7	6.75	221.4	62.75	
0950	19.8	5.46	15.84	689	43.1	6.70	224.8	62.75	
0955	21.4	5.47	15.93	689	33.1	6.67	225.1	62.75	
1000	22.5	5.47	16.09	693	30.8	6.68	226.2	62.75	Purge Rate=220 ml/min
1005	23.6	5.47	16.22	697	29.8	6.64	226.3	62.75	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW19S
Sample Date: 11/12/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):62.86
Final Water Level (feet TOIC):62.86
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID: MW19S-R2
Purge Start Time:1035
Sample Time: 1105
Final Turbidity (NTUs) : 1.4
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.922

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	0	5.89	16.48	73	9.6	9.87	209.8	62.86	
1040	2.0	5.70	16.39	71	3.4	8.36	214.5	62.87	
1045	4.0	5.69	16.35	71	2.0	8.29	215.5	62.86	
1050	6.0	5.68	16.34	70	1.5	8.23	215.9	62.89	
1055	8.0	5.68	16.32	70	1.4	8.14	217.2	62.86	
1100	10.0	5.68	16.35	70	1.4	8.10	216.9	62.86	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW20D
Sample Date: 11/07/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):63.58
Final Water Level (feet TOIC):63.58
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak and R. Sekerka

Sample ID: MW-20D-R2 and MS/MSD
Purge Start Time:0900
Sample Time: 1020
Final Turbidity (NTUs) : 1.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min):240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.52

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0900	0	7.19	14.20	997	3.5	8.86	215.7	63.58	
0905	2.5	6.43	13.77	967	0.8	7.91	202.3	63.58	
0910	5.0	6.35	13.73	964	1.2	7.82	195.3	63.58	
0915	7.5	6.48	13.74	989	5.7	8.06	186.9	63.58	
0920	10.0	6.15	13.75	1207	48.9	8.49	189.5	63.60	Flow rate dropped to 350 ml/min
0925	11.75	6.00	13.71	1298	28.9	8.67	194.2	63.60	
0930	13.50	5.94	13.64	1332	11.3	8.58	196.8	63.59	
0935	15.25	5.94	13.76	1393	4.0	8.72	198.7	63.59	
0940	17.75	5.94	13.73	1390	2.3	8.57	199.2	63.58	Flow rate=500 ml/min
0945	20.25	5.94	13.59	1378	1.8	8.93	199.4	63.58	
0950	22.0	5.94	13.60	1374	1.6	8.62	200.0	63.58	Flow rate=350 ml/min
0955	23.75	5.94	13.43	1368	1.3	8.56	200.1	63.58	
1000.	25.50	5.93	13.37	1373	1.2	8.60	200.9	63.58	
1005	27.25	5.93	13.13	1359	1.1	8.66	201.5	63.58	
1010	29.0	5.93	13.08	1353	1.1	8.76	201.8	63.58	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW20I
Sample Date: 11/09/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):63.81
Final Water Level (feet TOIC):63.86
Casing Type: **PVC** Steel (circle one)
Personnel:R. Sekerka

Sample ID: MW20I-R2
Purge Start Time:1030
Sample Time: 1135
Final Turbidity (NTUs) :2.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	2.0	5.94	14.18	1161	10.0	8.44	263.7	63.84	
1040	4.0	5.88	14.14	1108	11.1	8.74	310.8	63.84	
1045	6.0	5.88	14.14	1102	8.1	8.77	333.8	63.84	
1050	8.0	5.88	14.13	1101	8.0	8.82	335.6	63.84	
1055	10.0	5.86	14.15	1097	6.2	8.81	355.8	63.86	
100	12.0	5.87	14.15	1092	4.9	8.87	367.6	63.84	
1005	14.0	5.85	14.10	1092	4.3	8.90	356.9	63.86	
1110	16.0	5.83	14.07	1092	3.1	8.93	392.5	63.84	
1115	18.0	5.83	14.11	1092	3.0	8.92	402.3	63.84	
1120	20.0	5.83	14.11	1092	2.8	8.88	404.9	63.84	
1125	22.0	5.83	14.09	1090	2.7	8.86	405.3	63.86	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.:MW20S
Sample Date: 11/07/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.48
Final Water Level (feet TOIC):63.60
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak and R. Sekerka

Sample ID: MW20S-R2
Purge Start Time:1035
Sample Time: 1125
Final Turbidity (NTUs) : 1.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.915

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	0	6.73	13.59	1088	16.0	6.78	177.4	63.48	
1040	1.5	6.73	13.64	1086	12.1	7.01	176.9	63.48	
1045	3.0	6.79	13.64	1081	4.4	6.41	174.7	63.60	
1050	4.5	6.79	13.59	1082	2.7	6.31	174.5	63.60	
1055	6.0	6.79	13.41	1079	1.8	6.37	174.1	63.60	
1100	7.5	6.79	13.47	1081	1.6	6.24	174.1	63.62	
1105	9.0	6.79	13.47	1063	1.5	6.28	173.8	63.60	
1110	10.5	6.79	13.31	1038	1.5	6.32	172.9	63.60	
1115	12.0	6.79	13.43	1020	1.2	6.39	171.8	63.60	
1120	13.5	6.79	13.36	1010	1.4	6.49	170.7	63.60	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW21D
Sample Date: 11/12/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):62.76
Final Water Level (feet TOIC):62.78
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID:MW21D-R2
Purge Start Time:1215
Sample Time: 1335
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.52

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1215	0	6.23	17.02	439	0	5.22	158.5	62.76	
1220	1.75	6.14	16.60	432	0	1.45	133.0	62.76	
1225	3.50	6.09	16.68	431	0	0.83	129.7	62.76	
1230	5.25	6.07	16.80	431	0	0.67	127.2	62.76	
1235	7.0	6.05	16.67	429	7.0	0.66	131.8	62.76	
1240	8.75	5.82	16.06	427	14.5	0.93	154.7	62.78	
1245	10.5	5.51	16.00	457	1.5	1.93	184.4	62.78	
1250	12.25	5.49	15.91	458	1.5	2.49	190.9	62.80	
1255	14.0	5.47	15.91	463	1.0	3.05	195.2	62.78	
1300	15.75	5.48	15.87	465	1.0	3.30	201.2	62.78	
1305	17.5	5.47	15.98	468	1.0	3.68	204.7	62.78	
1310	19.25	5.47	15.95	469	1.0	4.03	205.7	62.78	
1315	21.0	5.50	15.80	467	0.9	4.26	207.6	62.78	
1320	22.75	5.45	15.81	468	0.9	4.57	206.4	62.78	
1325	24.5	5.47	15.79	468	1.0	4.76	206.8	62.78	
1330	26.25	5.47	15.74	469	1.0	4.93	207.1	62.78	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW21I
Sample Date: 11/12/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):180
Screen Interval (feet TOIC):170-180
Initial Water Level (Feet TOIC):62.85
Final Water Level (feet TOIC):62.85
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID: MW21I-R2
Purge Start Time:1420
Sample Time: 1505
Final Turbidity (NTUs) : 11.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.92

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1420	0	5.35	16.23	1047	5.8	4.51	240.9	62.85	
1425	2.0	5.09	16.06	1047	5.1	3.61	251.1	62.89	
1430	4.0	4.45	15.65	1005	7.3	3.06	284.2	62.87	
1435	6.0	4.46	15.50	786	37.4	7.60	297.5	62.87	
1440	8.0	4.45	15.44	787	16.9	7.89	306.6	62.89	
1445	10.0	4.43	15.39	800	13.0	7.97	311.5	62.85	
1450	12.0	4.44	15.36	809	11.9	8.04	316.7	62.85	
1455	14.0	4.43	15.31	814	12.1	8.10	321.1	62.87	
1500	16.0	4.43	15.29	817	11.4	8.10	324.3	62.85	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW21S
Sample Date: 11/12/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):62.75
Final Water Level (feet TOIC):62.85
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak

Sample ID: MW21S-R2
Purge Start Time:1525
Sample Time: 1555
Final Turbidity (NTUs) : 4.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.922

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1525	0	6.00	15.98	120	16.4	8.68	198.0	62.75	
1530	2.0	6.02	15.65	109	13.8	8.05	201.9	62.90	
1535	4.0	6.03	15.57	109	6.4	8.00	203.8	62.90	
1540	6.0	6.03	15.55	109	4.3	7.98	205.9	62.90	
1545	8.0	6.04	15.54	108	3.9	7.88	205.4	62.85	
1550	10.0	6.04	15.52	107	4.1	7.82	205.7	62.85	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.:MW22D
Sample Date: 11/06/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):315
Screen Interval (feet TOIC):305-315
Initial Water Level (Feet TOIC):64.80
Final Water Level (feet TOIC):64.91
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak and R. Sekerka

Sample ID: MW22D-R2
Purge Start Time:1340
Sample Time: 1540
Final Turbidity (NTUs) : 33.5
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1340	0	8.75	14.60	2818	0.4	3.39	-221.7	64.80	
1345	1.5	8.99	14.51	2809	0	2.46	-263.4	64.91	
1350	3.0	8.77	14.45	2798	1.0	1.98	-238.0	64.87	
1355	4.5	8.07	14.44	2811	208.6	1.85	-185.6	64.90	
1400	6.0	7.10	14.36	3057	>1000	2.45	-85.7	64.90	
1405	7.5	6.60	14.34	3282	>1000	2.90	13.5	64.90	
1410	9.0	6.52	14.34	3347	>1000	2.94	72.1	64.90	
1415	10.5	6.47	14.32	3384	>1000	2.97	102.9	64.90	
1420	12.0	6.46	14.23	3394	863.8	2.91	121.9	64.90	
1425	13.5	6.46	14.15	3398	323.8	2.85	137.8	64.91	
1430	15.0	6.45	14.15	3400	302.0	2.84	139.1	64.93	
1435	16.5	6.45	14.09	3396	205.3	2.83	148.0	64.91	
1440	18.0	6.45	14.10	3398	154.0	2.79	151.5	64.91	
1445	19.5	6.45	14.04	3393	124.0	2.75	156.6	64.91	
1450	21.0	6.45	14.02	3389	100.8	2.69	158.0	64.91	
1455	22.5	6.45	13.95	3384	82.2	2.69	162.0	64.91	
1500	24.0	6.46	13.95	3382	70.5	2.58	162.2	64.91	
1505	25.5	6.46	13.93	3376	65.1	2.55	163.0	64.91	
1510	27.0	6.48	13.96	3373	55.5	2.57	163.6	64.91	
1515	28.5	6.48	13.91	3369	49.1	2.47	164.8	64.88	
1520	30.0	6.49	13.92	3369	45.8	2.46	164.5	64.91	
1525	31.5	6.48	13.81	3355	36.9	2.44	165.4	64.91	
1530	33.0	6.49	13.87	3361	34.0	2.38	166.4	64.91	
1535	34.5	6.50	13.82	3355	33.5	2.34	166.0	64.91	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.:MW22I
Sample Date: 11/06/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):64.10
Final Water Level (feet TOIC):64.10
Casing Type: **PVC** Steel (circle one)
Personnel: M.Fronckowiak and R. Sekerka

Sample ID: MW22I-R2 and MW503-GWR2
Purge Start Time:0955
Sample Time: 1110
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.31

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0955	0	6.20	14.20	970	0	7.84	196.3	64.10	
1000	1.75	5.77	14.21	771	0	5.89	207.6	64.14	
1005	3.5	5.71	14.28	624	10.3	8.29	216.3	64.10	
1010	5.25	5.69	14.20	610	3.3	9.11	223.4	64.14	
1015	7.0	5.68	14.38	607	1.1	9.22	229.4	64.10	
1020	8.75	5.68	14.31	606	0	9.31	235.3	64.13	
1025	10.50	5.68	14.51	610	0	9.35	241.1	64.10	
1030	12.25	5.66	14.57	613	0	9.54	248.5	64.15	
1035	14.0	5.66	14.58	618	0	9.57	254.2	64.14	
1040	15.75	5.65	14.51	620	0	9.60	260.0	64.13	
1045	17.5	5.67	14.43	620	0	9.54	266.5	64.10	
1050	19.25	5.66	14.22	623	0	9.40	276.0	64.10	
1055	21.0	5.66	14.16	622	0	9.41	281.6	64.10	
1100	22.75	5.65	14.28	625	0	9.14	285.9	64.10	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW22S
Sample Date: 11/13/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.90
Final Water Level (feet TOIC):63.90
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak, T. Dillon

Sample ID: MW22D-R2
Purge Start Time: 1025
Sample Time: 1059
Final Turbidity (NTUs) : 0.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):200
Sample Analyses: NAP Only

2x Purge System Volume #: 0.912

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1025	0	6.26	14.45	474	2.6	8.32	203.0	63.90	
1030	1.75	6.22	14.43	456	1.7	7.82	198.0	63.90	
1035	3.5	6.21	14.39	453	1.1	7.70	195.7	63.95	
1040	5.25	6.19	14.34	457	0.9	7.60	193.9	63.91	
1045	7.00	6.18	14.31	460	0.8	7.52	193.9	93.90	
1050	8.75	6.18	14.30	461	0.9	7.39	193.7	63.90	
1055	10.25	6.17	14.31	463	0.9	7.50	196.7	63.90	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW23D
Sample Date: 11/08/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):386
Screen Interval (feet TOIC):376-386
Initial Water Level (Feet TOIC):61.79
Final Water Level (feet TOIC):61.80
Casing Type: **PVC** Steel (circle one)
Personnel:S. Kromhout

Sample ID: MW23D-R2
Purge Start Time:1525
Sample Time: 1640
Final Turbidity (NTUs) : 3.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 340
Purge Rate d/sampling (ml/min):170
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 14.92 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1525	.340	6.45	14.87	1387	4.2	1.08	72.7	61.79	
1530	1.7	6.53	14.77	1379	2.1	0.62	79.9	61.79	
1535	3.4	6.70	14.71	1368	3.1	0.49	86.4	61.80	
1540	5.1	6.84	14.60	1357	11.2	0.47	90.9	61.80	
1545	6.8	6.35	14.58	1195	250.1	0.90	85.7	61.80	
1550	8.5	6.13	14.30	874	186.0	1.27	76.6	61.80	
1555	10.7	6.27	14.27	804	43.2	1.19	63.0	61.80	
1600	12.4	6.23	14.21	796	13.0	1.23	60.5	61.80	
1605	14.1	6.14	14.22	842	8.1	1.37	65.0	61.80	
1610	15.8	6.10	14.25	894	6.3	1.54	73.2	61.80	
1615	17.5	6.14	14.18	942	4.8	1.73	79.9	61.80	
1620	19.2	6.12	14.21	973	3.8	1.89	85.9	61.80	
1625	20.9	6.02	14.20	1001	3.2	2.00	89.8	61.80	
1630	22.6	5.99	14.22	1020	3.3	2.11	91.7	61.80	
1635	24.3	5.99	14.26	1026	3.3	2.14	92.2	61.80	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW23I
Sample Date: 11/09/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):180
Screen Interval (feet TOIC):170-180
Initial Water Level (Feet TOIC):61.58
Final Water Level (feet TOIC):61.58
Casing Type: **PVC** Steel (circle one)
Personnel:R. Sekerra

Sample ID: MW-23I-R2
Purge Start Time:0825
Sample Time: 0940
Final Turbidity (NTUs) : 2.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.92

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0825	0	6.58	14.75	605	9.1	5.43	245.8	61.60	
0830	2	6.90	14.60	167	6.8	6.94	254.8	61.58	
0835	4	6.75	14.56	146	6.8	7.08	258.1	61.60	
0840	6	6.76	14.50	141	6.1	7.12	261.2	61.60	
0845	8	6.77	14.55	138	5.3	6.95	262.8	61.58	
0850	10	6.72	15.02	155	0.0	6.69	252.9	61.58	
0855	12	6.67	14.98	165	0.3	6.63	247.9	61.60	
0900	14	6.69	14.97	170	1.2	6.58	246.2	61.58	
0905	16	6.60	14.96	185	2.2	6.44	248.2	61.58	
0910	18	6.58	14.98	188	2.3	6.41	249.6	61.60	
0915	20	6.56	15.01	191	2.1	6.39	251.1	61.60	
0920	22	6.55	14.99	193	2.2	6.37	251.9	61.58	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW23S
Sample Date: 11/0/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):61.68
Final Water Level (feet TOIC):61.68
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak and R. Sekerka

Sample ID: MW23S-R2
Purge Start Time:1605
Sample Time: 1640
Final Turbidity (NTUs) : 0.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 1.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1605	0	6.13	14.42	82	1.2	10.45	172.6	61.68	
1610	2.0	6.10	14.60	81	1.1	10.34	173.5	61.70	
1615	4.0	5.99	14.78	81	0.6	10.04	175.0	61.68	Flow rate dropped to 300 ml/min
1620	5.5	5.99	14.86	81	0.6	9.96	174.5	61.68	
1625	7.0	5.99	14.87	80	0.6	9.83	174.6	61.70	
1630	8.5	5.99	14.85	80	0.6	9.88	176.1	61.68	
1635	10	5.99	14.83	80	0.6	9.76	175.8	61.68	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW24DD
Sample Date: 11/05/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC):65.74
Final Water Level (feet TOIC):65.74
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak and R. Sekerka

Sample ID: MW24DD-R2
Purge Start Time:1530
Sample Time: 1700
Final Turbidity (NTUs) : 2.5
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 6.69

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1530	0	5.49	15.45	340	9.4	1.89	199.3	65.74	
1535	2	5.45	15.24	337	22.3	0.99	212.5	65.78	
1540	4	5.41	14.92	335	12.4	0.92	226.4	65.79	
1545	6	5.39	14.90	336	13.8	0.72	237.0	65.75	
1550	8	5.38	14.78	339	27.0	0.81	243.8	65.77	
1555	10	5.33	14.70	377	35.7	3.04	253.9	65.77	
1600	12	5.28	14.57	426	12.1	4.86	265.2	65.78	
1605	14	5.28	14.55	445	4.7	5.72	272.7	65.74	
1610	16	5.29	14.47	449	2.8	6.23	278.8	65.74	
1615	18	5.29	14.42	450	2.1	6.46	282.2	65.76	
1620	20	5.28	14.37	450	2.6	9.69	285.4	65.78	
1625	22	5.30	14.32	452	2.7	7.64	288.5	65.76	
1630	24	5.29	14.30	450	3.0	6.96	289.6	65.76	
1635	26	5.29	14.30	451	2.4	8.86	290.9	65.74	
1640	28	5.29	14.33	452	2.5	8.52	292.3	65.74	
1645	30	5.30	14.31	451	2.5	8.43	293.6	65.74	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW24S
Sample Date: 11/05/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC):62.14
Final Water Level (feet TOIC):62.14
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak and R. Sekerka

Sample ID: MW24S-R2
Purge Start Time:1350
Sample Time: 1440
Final Turbidity (NTUs) : 0.6
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min): 120
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.928

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1350	0	6.04	15.88	105	5.9	9.47	196.9	62.14	
1355	1.5	6.02	15.92	104	-3.3	9.16	212.7	62.14	
1400	3.0	6.02	15.62	104	2.9	8.95	225.6	62.14	
1405	4.5	6.02	15.81	104	-4.3	9.12	231.2	62.14	
1410	6.0	6.03	15.73	103	-1.0	9.29	237.0	62.14	
1415	7.5	6.03	15.72	103	0.1	9.18	242.9	62.14	
1420	9.0	6.03	15.49	103	0.7	9.14	254.9	62.14	
1425	10.5	6.03	15.55	102	0.9	9.13	260.2	62.16	
1430	12	6.02	15.40	102	0.6	9.10	263.7	62.14	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW25D
Sample Date: 11/08/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):350
Screen Interval (feet TOIC):340-350
Initial Water Level (Feet TOIC):62.13
Final Water Level (feet TOIC):62.17
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak and R. Sekerka

Sample ID: MW25D-R2
Purge Start Time:1125
Sample Time: 1300
Final Turbidity (NTUs) : 2.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 450
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 6.33

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1125	0	6.82	14.91	1295	1.4	1.30	1.9	62.13	
1130	2.25	6.83	14.74	1276	1.7	0.77	-30.9	62.16	
1135	4.5	7.56	14.58	1253	1.4	0.62	-93.6	62.15	
1140	6.75	8.36	14.65	1236	7.9	1.10	-121.1	62.19	
1145	9.0	8.14	14.64	1180	61.9	1.13	-79.2	62.15	
1150	11.25	6.87	14.61	1056	241.9	2.04	0.2	62.18	
1155	13.75	6.25	14.59	973	73.8	1.81	42.8	62.15	Flow rate dropped to 300 ml/min
1200	15.25	6.01	14.58	935	23.0	2.53	69.3	62.17	
1205	16.75	5.88	14.49	918	12.4	2.66	86.6	62.18	
1210	18.25	5.84	14.59	934	8.9	2.76	94.8	62.19	
1215	19.75	5.77	14.59	915	6.6	5.52	105.8	62.16	
1220	21.25	5.75	14.52	906	5.9	5.77	110.0	62.16	
1225	22.75	5.73	14.52	903	5.0	5.96	114.8	62.19	
1230	24.0	5.70	14.45	895	5.0	6.14	124.4	62.20	
1235	25.25	5.67	14.34	887	3.7	5.77	129.9	62.15	
1240	26.50	5.66	14.36	889	3.8	5.82	136.3	62.20	
1245	28.25	5.64	14.28	882	2.3	6.31	142.3	62.18	
1250	30.0	5.63	14.32	884	2.1	6.28	143.5	62.20	
1255	32.25	5.62	14.35	899	2.1	6.83	146.2	62.17	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW25I
Sample Date: 11/08/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):61.82
Final Water Level (feet TOIC):61.82
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka and M. Fronckowiak

Sample ID: MW25I-R2
Purge Start Time:1235
Sample Time: 1335
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 4.13

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1235	0	6.06	15.26	803	0.1	4.32	214.9	61.82	
1240	2	6.41	15.01	853	0	0.93	225.2	61.82	
1245	4	5.52	14.92	830	0.9	2.85	253.2	61.82	
1250	6	5.39	14.87	743	1.7	7.54	266.7	61.84	
1255	8	5.39	15.00	736	0.9	7.78	276.1	61.82	
1300	10	5.39	14.98	736	0.7	7.88	281.7	61.84	
1305	12	5.38	14.96	736	0.3	7.96	285.6	61.82	
1310	14	5.37	14.92	736	0.1	7.97	289.4	61.82	
1315	16	5.38	15.04	740	0	8.04	289.2	61.82	
1320	18	5.38	15.10	741	0	8.27	288.7	61.82	
1325	20	5.38	15.08	743	0	8.24	288.2	61.82	
1330	22	5.39	15.06	742	0	8.27	291.9	61.82	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.:MW25S
Sample Date: 11/08/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):115
Screen Interval (feet TOIC):105-115
Initial Water Level (Feet TOIC):61.90
Final Water Level (feet TOIC):61.90
Casing Type: **PVC** Steel (circle one)
Personnel:R. Sekerra and M. Fronckowiak

Sample ID: MW25S-R2 and MW506-GWR2
Purge Start Time:1130
Sample Time: 1210
Final Turbidity (NTUs) : 0.8
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 1.63

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1130	0	5.47	14.99	461	6.0	7.49	247.0	61.90	
1135	1.8	5.21	14.79	458	3.2	8.68	287.6	61.88	
1140	3.6	5.29	14.86	467	0.8	8.72	302.0	61.90	
1145	5.4	5.20	14.79	456	0.9	8.68	312.9	61.88	
1150	7.2	5.19	14.74	455	0.8	8.67	321.9	61.88	
1155	9.0	5.20	14.80	455	0.8	8.71	326.6	61.88	
1200	10.8	5.20	14.79	456	0.8	8.76	328.8	61.90	
1205	12.6	5.21	14.71	455	0.8	8.79	333.7	61.90	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW26D
Sample Date: 11/08/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):276
Screen Interval (feet TOIC):266-276
Initial Water Level (Feet TOIC):61.85
Final Water Level (feet TOIC):61.85
Casing Type: **PVC** Steel (circle one)
Personnel:R. Sekerka and M. Fronckowiak

Sample ID:MW-26D-R2
Purge Start Time:1450
Sample Time: 1615
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 4.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1450	0	5.79	15.54	643	2.0	4.57	198.6	61.85	
1455	2	5.72	15.12	664	0.8	1.25	229.0	61.85	
1500	4	5.73	15.11	665	1.0	1.04	226.4	61.85	
1505	6	5.70	15.02	664	12.4	1.09	241.1	61.85	
1510	8	5.66	14.99	645	30.4	2.36	247.7	61.85	
1515	10	5.58	14.88	513	14.4	6.07	259.3	61.85	
1520	12	5.54	14.87	470	4.6	7.09	269.9	61.85	
1525	14	5.53	14.81	460	2.1	7.63	278.7	61.85	
1530	16	5.52	14.77	460	1.8	7.83	289.5	61.85	
1535	18	5.52	14.78	463	2.1	8.13	299.9	61.85	
1540	20	5.51	14.59	457	1.5	8.21	304.3	61.85	
1545	22	5.51	14.58	455	1.4	8.28	305.9	61.85	
1550	24	5.51	14.56	454	1.4	8.36	308.6	61.85	
1555	26	5.52	14.50	451	0.9	8.49	311.9	61.85	
1600	28	5.52	14.54	448	1.0	8.51	313.6	61.85	
1605	30	5.51	14.53	449	1.0	8.66	316.7	61.85	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW26S
Sample Date: 11/08/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):62.03
Final Water Level (feet TOIC):62.03
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak and R. Sekerka

Sample ID:MW26S-R2
Purge Start Time:1455
Sample Time: 1530
Final Turbidity (NTUs) : 0.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 1.73

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1455	0	6.49	15.40	423	1.6	8.82	129.3	62.03	
1500	2.5	5.46	15.03	396	3.3	6.27	178.4	62.03	
1505	5.0	5.36	15.00	394	2.2	6.07	186.4	62.03	
1510	7.5	5.34	15.01	395	1.5	5.58	193.1	62.03	
1515	10.0	5.34	14.95	396	0.9	5.66	199.3	62.03	
1520	12.5	5.34	14.95	396	0.9	5.88	202.8	62.05	
1525	15.0	5.34	14.90	397	0.8	5.93	205.1	62.03	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW27D
Sample Date: 11/14/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):61.37
Final Water Level (feet TOIC):61.47
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak/ T. Dillon

Sample ID: _MW27D-R2
Purge Start Time:1305
Sample Time: _____1450
Final Turbidity (NTUs) : 11.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.14 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1305	0	6.22	13.32	2408	8.6	3.99	217.0	61.37	
1310	1.3	6.31	13.27	2364	7.8	3.72	211.7	61.45	
1315	2.6	6.47	13.33	2255	9.8	3.54	204.0	61.45	
1320	3.9	6.71	13.28	2042	30.8	3.28	190.5	61.45	
1325	4.2	6.82	13.23	1861	89.2	3.01	180.5	61.45	
1330	5.5	7.01	13.27	1469	32.2	2.51	167.9	61.45	
1335	6.8	6.92	13.34	1646	19.6	2.98	169.8	61.45	
1340	7.1	5.69	13.17	2346	5.6	4.82	182.2	61.45	
1345	8.4	5.67	13.16	2345	5.5	4.68	183.1	61.45	
1350	9.7	5.26	13.19	2511	5.4	5.27	189.5	61.45	
1355	11.0	5.14	13.21	2576	3.7	5.45	192.8	61.45	
1400	12.3	5.07	13.39	2616	4.8	5.53	194.3	61.45	
1405	13.6	4.99	13.32	2628	5.1	5.56	195.8	61.45	
1410	14.9	4.97	13.36	2635	5.9	5.59	196.8	61.45	
1415	16.2	4.92	13.32	2636	7.2	5.68	198.7	61.45	
1420	17.5	4.88	13.41	2644	10.0	5.81	201.4	61.45	
1425	18.8	4.86	13.45	2647	9.5	5.88	203.1	61.45	
1430	20.1	4.87	13.49	2650	11.2	5.84	201.0	61.47	
1435	21.4	4.85	13.39	2643	12.1	6.03	201.1	61.47	
1440	22.7	4.83	13.49	2649	11.2	6.08	201.9	61.47	
1445	24.0	4.83	13.43	2644	11.5	6.07	202.0	61.47	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW27DD
Sample Date: 11/14/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):375
Screen Interval (feet TOIC):365-375
Initial Water Level (Feet TOIC):61.90
Final Water Level (feet TOIC):61.90
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID: MW-27DD-R2
Purge Start Time: 1150
Sample Time: _1335
Final Turbidity (NTUs) : 8.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 6.84

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1150	0	5.66	14.36	384	17.2	1.68	206.7	61.90	
1155	2	5.42	14.28	389	15.0	1.71	217.4	61.90	
1200	4	5.31	14.20	389	13.7	4.90	226.0	61.94	
1205	6	5.26	14.20	388	16.9	5.98	233.2	61.94	
1210	8	5.23	14.13	387	13.2	6.36	238.0	61.96	
1215	10	5.22	14.19	294	167.6	6.75	242.0	61.92	
1220	12	5.24	14.12	272	100.8	6.92	240.3	61.95	
1225	14	5.21	14.06	274	47.8	6.95	243.3	61.95	
1230	16	5.21	14.10	274	27.7	6.97	245.6	61.96	
1235	18	5.21	14.09	273	18.0	7.00	245.1	61.95	
1240	20	5.21	14.02	273	12.0	7.00	247.1	61.95	
1245	22	5.22	13.97	271	11.9	7.00	246.2	61.95	
1250	24	5.22	13.97	270	10.8	6.97	246.8	61.95	
1255	26	5.21	13.96	271	9.4	7.00	246.2	61.95	
1300	28	5.21	14.01	271	9.6	6.99	248.8	61.95	
1305	30	5.21	14.05	272	7.9	6.96	249.5	61.95	
1310	32	5.21	14.03	272	8.4	6.95	249.5	61.95	
1315	34	5.21	14.03	271	10.2	6.97	250.1	61.95	
1320	36	5.21	14.00	271	7.5	6.95	249.3	61.95	
1325	40	5.21	13.98	270	7.6	6.96	251.4	61.95	
1330	42	5.21	14.01	270	8.0	6.92	252.0	61.95	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW27S
Sample Date: 11/14/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 88
Screen Interval (feet TOIC):78-88
Initial Water Level (Feet TOIC):61.45
Final Water Level (feet TOIC):61.45
Casing Type: **PVC** Steel (circle one)
Personnel:T. Dillon

Sample ID: MW27S-R2/ MW511-GWR2
Purge Start Time:1152
Sample Time: 1228
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):2.5
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.5574 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1152	0	6.24	14.28	103	9.8	12.71	158.7	61.45	
1157	1.75	6.29	14.30	103	8.7	12.61	159.8	61.45	
1202	3.50	6.24	14.34	102	6.0	12.36	161.9	61.45	
1207	5.25	6.21	14.38	102	0.9	11.70	167.8	61.45	
1212	7.0	6.21	14.40	102	0	11.48	172.0	61.45	
1217	8.75	6.20	14.47	102	0	11.38	175.0	61.45	
1222	10.50	6.20	14.39	102	0	11.34	177.7	61.45	
1227	12.25	6.20	14.45	102	0	11.30	179.2	61.45	Duplicate Collected

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW28D
Sample Date: 11/13/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 287
Screen Interval (feet TOIC):277-287
Initial Water Level (Feet TOIC):67.05
Final Water Level (feet TOIC):67.09
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak, T. Dillon

Sample ID: MW28D-R2
Purge Start Time:1420
Sample Time: 1835
Final Turbidity (NTUs) : 48.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.02

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1420	0	7.90	14.25	2015	8.9	1.41	157.4	67.05	
1425	2.0	8.12	14.19	2014	9.4	1.02	155.8	67.08	
1430	4.0	8.95	14.11	2014	18.5	0.46	146.6	67.10	
1435	6.0	8.91	14.11	2006	120.6	0.56	22.5	67.08	
1440	8.0	7.58	14.07	2001	240.0	0.92	31.9	67.08	
1445	10.0	6.97	14.11	2008	194.1	1.30	71.7	67.08	
1450	12.0	6.65	14.05	2003	367.6	1.60	90.6	67.08	
1455	14.0	6.50	14.05	2003	360.7	2.24	107.0	67.08	
1500	16.0	6.42	14.07	2002	345.4	2.34	116.1	67.08	
1505	18.0	6.35	14.08	2002	340.5	2.39	125.6	67.08	
1510	20.0	6.32	14.02	2000	339.2	2.39	130.1	67.08	
1515	22.0	6.31	13.94	2000	329.4	2.39	132.7	67.08	Purge rate = 250 ml/min
1520	23.25	6.29	13.85	1991	325.8	2.40	135.6	67.08	
1525	24.50	6.28	13.91	1982	331.8	2.77	139.6	67.08	
1530	25.75	6.27	13.88	1982	325.8	2.62	143.1	67.08	
1535	27.00	6.27	13.86	1988	328.8	2.91	151.9	67.08	
1540	28.25	6.24	13.80	1948	323.6	3.28	155.8	67.08	
1545	29.50	6.26	13.86	1964	341.1	2.46	151.6	67.08	
1550	30.75	6.26	13.90	1974	361.5	2.48	151.2	67.08	
1555	32.00	6.25	13.85	1987	299.1	2.45	151.6	67.08	
1600	33.25	6.25	13.85	1984	301.8	2.46	151.9	67.08	
1605	34.50	6.25	13.89	1988	304.2	2.48	152.3	67.08	
1610	35.75	6.24	13.90	1991	288.9	2.49	153.2	67.08	
1615	37.0	6.25	13.90	1992	285.4	2.49	153.1	67.08	
1620	38.25	6.24	13.98	1995	240.6	2.50	153.7	67.08	
1625	39.50	6.25	13.90	1993	199.4	2.52	154.0	67.08	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW28D **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1630	40.75	6.25	14.00	1987	198.3	2.51	154.0	67.08	
1635	42.0	6.25	14.07	1993	187.4	2.52	154.2	67.08	
1640	43.25	6.25	14.02	1995	170.6	2.53	154.5	67.08	
1650	45.75	6.25	14.07	1997	121.5	2.53	155.1	67.08	Missed reading at 1645-helping at MW28I
1655	47.0	6.25	14.02	1996	121.0	2.54	155.4	67.08	
1700	48.2	6.25	14.04	1998	117.6	2.55	155.7	67.08	
1705	49.5	6.25	14.02	1997	122.3	2.55	155.7	67.08	
1710	50.75	6.25	14.01	1998	107.7	2.55	155.9	67.08	
1715	52.0	6.25	13.88	1988	90.7	2.55	156.2	67.08	
1720	53.25	6.25	13.89	1987	95.7	2.56	156.4	67.08	
1725	54.50	6.25	13.94	1994	89.9	2.57	156.7	67.08	
1730	55.75	6.24	13.90	1982	87.2	2.56	157.0	67.08	
1735	57.00	6.25	13.83	1971	88.6	2.57	156.6	67.08	
1740	58.25	6.24	13.89	1970	86.5	2.56	157.2	67.08	
1745	59.50	6.24	13.90	1979	85.0	2.55	156.8	67.08	
1750	60.75	6.25	13.81	1980	74.3	2.57	158.0	67.08	
1755	62.0	6.24	13.78	1981	62.6	2.58	157.6	67.08	
1800	63.25	6.24	13.81	1980	64.63	2.60	157.5	67.08	
1805	64.50	6.26	13.82	1984	61.2	2.61	157.0	67.09	
1810	65.75	6.24	13.76	1980	55.7	2.60	158.0	67.09	
1815	67.0	6.23	13.83	1980	48.9	2.57	158.7	67.09	
1820	68.25	6.24	13.82	1982	47.6	2.57	158.9	67.09	
1825	69.5	6.24	13.85	1981	48.6	2.56	159.0	67.09	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW28I
Sample Date: 11/14/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):159
Screen Interval (feet TOIC):149-159
Initial Water Level (Feet TOIC):67.08
Final Water Level (feet TOIC):67.11
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW28I-R2
Purge Start Time: 0957
Sample Time: 1050
Final Turbidity (NTUs) : 0.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.46 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0957	0	6.64	13.80	1301	14.7	11.33	155.3	67.11	
1002	1.75	6.42	14.12	1426	9.9	10.72	169.2	67.11	
1007	3.50	6.31	14.14	1490	14.6	10.80	162.6	67.11	
1012	5.25	6.30	14.17	1485	4.2	10.89	165.2	67.11	
1017	7.0	6.28	14.13	1489	2.5	10.96	168.1	67.11	
1022	8.75	6.27	14.08	1491	1.9	11.07	170.6	67.11	
1027	10.50	6.27	14.13	1500	2.9	11.15	173.9	67.11	
1032	12.25	6.27	14.05	1502	1.3	11.21	174.7	67.11	
1037	14.0	6.26	14.04	1502	0.6	11.26	176.4	67.11	
1042	15.75	6.26	14.08	1503	0.6	11.22	177.8	67.11	
1047	17.50	6.26	14.08	1505	0.5	11.23	179.3	67.11	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW29S
Sample Date: 11/14/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):76
Screen Interval (feet TOIC):66-76
Initial Water Level (Feet TOIC):62.26
Final Water Level (feet TOIC):62.28
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID: _MW29S-R2
Purge Start Time:1530
Sample Time: _____1630
Final Turbidity (NTUs) : 1.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 340
Purge Rate d/sampling (ml/min):160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.928

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1530	0	6.30	16.30	273	12.1	9.31	185.5	62.26	
1535	1.7	6.40	15.94	287	37.1	7.75	186.9	62.28	
1540	3.4	6.38	15.76	334	21.0	7.21	190.3	62.26	
1545	5.1	6.37	15.74	343	11.2	7.07	192.0	62.27	
1550	6.8	6.37	15.73	344	6.9	6.94	192.6	62.27	
1555	8.5	6.38	15.71	345	3.9	6.94	190.7	62.30	
1600	10.2	6.38	15.72	345	2.8	6.84	191.0	62.30	
1605	11.9	6.38	15.71	345	2.6	6.84	191.4	62.30	
1610	13.6	6.38	15.71	344	2.0	6.80	190.9	62.28	
1615	15.3	6.39	15.70	344	1.8	6.80	188.4	62.28	
1620	17.0	6.38	15.69	343	1.8	6.76	186.6	62.28	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW30D
Sample Date: 11/17/2012
Sampling Device: Dedicated Pump
Well Depth (feet TOIC):340
Screen Interval (feet TOIC):330-340
Initial Water Level (Feet TOIC):61.55
Final Water Level (feet TOIC):61.65
Casing Type: **PVC** Steel (circle one)
Personnel:M. Cameron

Sample ID: MW-30D-R2
Purge Start Time:0815
Sample Time: _0930
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 410
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 22.9 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0815	0.306	6.63	16.15	1075	7.0	6.23	211.6	61.65	
0820	1.8	6.43	15.65	1062	0	0.91	171.1	61.65	
0825	3.3	6.51	15.54	1063	0	0.57	144.9	61.65	
0830	5.2	6.56	15.48	1063	0	0.46	135.1	61.65	Increased rate from 300 to 350 ml/min
0835	7.1	6.17	15.34	1063	5.4	1.34	143.6	61.65	
0840	9.0	5.92	15.24	1062	0	2.33	155.1	61.65	
0845	11.05	5.77	15.17	1067	0	2.87	167.1	61.65	Increased rate from 350 to 410 ml.min
0850	13.1	5.71	15.18	1065	0	3.11	169.1	61.65	
0855	15.15	5.67	15.16	1061	0	3.29	167.6	61.65	
0900	17.2	5.63	15.11	1064	0	3.45	166.7	61.65	
0905	19.22	5.61	15.14	1061	0	3.59	167.1	61.65	
0910	21.27	5.59	15.08	1063	0	3.70	166.9	61.65	
0915	23.32	5.59	15.10	1059	0	3.73	168.1	61.65	
0920	25.37	5.58	15.07	1059	0	3.75	169.2	61.65	
0925	27.42	5.57	15.01	1060	0	3.80	171.1	61.65	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW30I
Sample Date: 11/17/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):59.98
Final Water Level (feet TOIC):59.98
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-30I-R2
Purge Start Time: 0813
Sample Time:0900
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 15.7 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0813	0	7.42	15.81	701	2.6	7.02	193.6	59.98	
0818	2	7.75	15.19	685	0	3.91	181.2	59.98	
0823	4	6.20	15.15	689	0.2	2.94	204.1	59.98	
0828	6	5.92	15.10	666	9.2	5.54	149.4	59.98	
0833	8	5.83	15.05	651	1.8	6.73	196.8	59.98	
0838	10	5.80	15.02	650	0.3	6.93	193.5	59.98	
0843	12	5.80	15.00	651	0	7.03	192.5	59.98	
0848	14	5.82	14.97	650	0	7.06	192.2	59.98	
0853	16	5.84	14.94	650	0	7.06	192.0	59.98	
0858	18	5.84	14.91	650	0	7.05	192.1	59.98	Collected DUP MW-517-GWR2

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW30S
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):60.80
Final Water Level (feet TOIC):60.80
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak

Sample ID: MW-30S-R2
Purge Start Time:1605
Sample Time: 1645
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 450
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 4.1 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1608	.450	5.50	15.24	133	0	8.86	201.6	60.91	
1613	2.25	5.44	15.12	135	0	9.36	222.6	60.91	
1618	4.5	5.42	15.23	136	0	9.20	237.4	60.91	
1623	6.75	5.43	15.13	136	0	9.00	248.4	60.91	
1628	9.0	5.43	15.14	139	0	8.99	255.1	60.91	
1633	11.25	5.43	15.11	141	0	8.92	260.3	60.91	
1638	13.5	5.43	15.15	143	0	8.86	263.5	60.91	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW31D
Sample Date: 11/17/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 330
Screen Interval (feet TOIC):320-330
Initial Water Level (Feet TOIC):61.45
Final Water Level (feet TOIC):61.45
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: _MW-31D-R2
Purge Start Time: 1002
Sample Time: 1140
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300/470/400/350
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 22.49 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1002	0	6.41	16.73	2006	17.9	9.31	188.3	61.45	
1007	1.5	6.63	15.45	2081	19.6	7.45	185.4	61.45	
1012	3	8.34	15.48	2101	2.5	7.05	151.7	61.45	Purge rate changed to 470 ml/min
1017	4	8.35	15.36	2100	3.7	6.64	158.9	61.45	
1022	6.35	8.02	15.22	2092	10.1	5.42	164.0	61.45	
1027	8.7	8.35	15.37	2096	11.1	3.88	157.1	61.45	Purge volume readjusted to match
1032	8	7.28	15.32	1948	326.2	2.25	183.4	61.45	actual volume
1037	10	6.53	15.42	1861	69.2	2.08	180.6	61.45	Purge rate at 400 ml/min
1042	12	6.38	15.74	1965	26.2	1.89	177.0	61.45	
1047	14	6.38	15.50	1812	19.3	3.22	174.2	61.45	Purge rate decreased; trying to fix problem
1052	16	6.31	15.73	1773	12.8	2.18	170.2	61.45	Changed battery, purge rate at 350 ml/min
1057	16.5	6.36	15.77	1703	7.0	1.84	166.7	61.45	
1102	17	6.40	15.86	1653	3.3	1.83	163.1	61.45	
1107	17.2	6.43	16.21	1641	4.4	1.95	159.1	61.45	
1112	17.5	6.44	15.95	1615	3.6	1.96	157.8	61.45	Purge volume readjusted to match actual volume
1117	19.25	6.46	16.06	1589	1.3	1.72	154.1	61.45	
1122	19	6.47	16.17	1594	0	1.72	151.8	61.45	Purge volume readjusted to actual volume purged
1127	20.5	6.46	16.07	16.01	0	1.66	149.0	61.45	Flow rate at 300 ml/min
1132	22	6.47	16.25	1612	0	1.70	147.1	61.45	
1137	23.5	6.47	16.39	1622	0	1.68	145.4	61.45	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW31I
Sample Date: 11/17/2012
Sampling Device: Dedicated Pump
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC):180-190
Initial Water Level (Feet TOIC):61.05
Final Water Level (feet TOIC):61.05
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID:MW-31I-R2
Purge Start Time:1005
Sample Time: 1050
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)380
Purge Rate d/sampling (ml/min):180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 11.63 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1005	3.80	6.54	15.73	536	0	4.21	126.1	61.05	
1010	2.28	7.41	15.56	530	0	1.35	89.8	61.05	
1015	4.18	6.07	15.68	513	4.9	3.47	152.8	61.05	
1020	6.08	5.77	15.54	502	0	4.87	173.9	61.05	
1025	7.98	5.73	15.49	501	0	5.07	181.9	61.05	
1030	9.88	5.72	15.35	502	0	5.10	189.1	61.05	
1035	11.78	5.77	15.31	502	0	5.13	193.5	61.05	
1040	13.68	5.73	15.27	503	0	5.17	197.2	61.05	
1045	15.55	5.72	15.25	504	0	5.17	200.2	61.05	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW32D
Sample Date: 11/17/2012
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):305
Screen Interval (feet TOIC):295-305
Initial Water Level (Feet TOIC):62.04
Final Water Level (feet TOIC):62.18
Casing Type: **PVC** Steel (circle one)
Personnel: J. Ganz

Sample ID: MW-32D-R2
Purge Start Time:0820
Sample Time: 1100
Final Turbidity (NTUs) : 27.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)500
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 20.3 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0825	0	5.98	14.92	1.418	8.3	7.84	189	62.18	Purge rate at 300 ml/min
0830	1.5	6.37	14.58	1402	2.7	3.22	61.5	62.21	Purge rate at 500 ml/min
0850	11.5	5.35	14.33	1387	142	6.72	89.2	62.21	>1 System Volume
0900	16.5	5.20	14.32	1388	205.5	6.32	146.0	62.21	
0905	19.0	5.18	14.44	1392	202.3	6.86	157.5	62.21	
0910	21.5	5.19	14.32	1387	169.9	6.39	168.3	62.21	>2 System Volume
0915	24.0	5.19	13.87	1373	268.0	7.02	178.4	62.21	Lowered purge rate to 200 ml/min
0920	25.0	5.19	14.15	1383	214.9	6.23	187.1	62.18	Purge rate at 150 ml/min
0925	25.75	5.20	13.99	1376	211.6	6.22	195.2	62.18	
0930	26.50	5.18	14.12	1381	147.7	6.17	203.7	62.18	
0935	27.25	5.20	14.19	1384	116.6	6.17	210.7	62.18	
0940	28.0	5.20	14.26	1385	126.4	5.72	216.9	62.18	
0945	28.75	5.20	14.20	1384	138.0	5.62	223.7	62.18	
0950	29.50	5.20	14.27	1386	188.0	5.69	229.5	62.18	
0955	30.25	5.20	14.25	1386	193.4	5.39	235.5	62.18	
1000	31.0	5.20	14.34	1388	191.6	5.48	241.0	62.18	
1005	31.78	5.19	14.32	1389	119.3	5.39	246.6	62.18	
1010	32.50	5.21	14.34	1390	135.0	5.46	251.2	62.18	
1015	33.25	5.20	14.63	1401	114.4	5.30	255.6	62.18	
1020	34.0	5.20	14.67	1404	114.3	5.58	259.6	62.18	Clean Flow Cell
1025	34.75	5.20	14.58	1404	125.5	5.60	264.5	62.18	
1030	35.5	5.22	14.54	1403	69.9	5.58	267.4	62.18	
1035	36.25	5.21	14.55	1407	64.9	5.61	273.7	62.18	
1040	37.0	5.21	14.51	1409	56.0	5.61	276.5	62.18	
1045	37.75	5.21	14.54	1411	39.3	5.60	277.6	62.18	
1050	38.5	5.21	14.55	1412	27.5	5.58	278.8	62.18	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1055	39.25	5.20	14.60	1414	28.0	5.60	280.0	62.18	
1100	40.0	5.21	14.56	1413	27.9	5.60	283.1	62.18	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW33D
Sample Date: 11/16/2012
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):300
Screen Interval (feet TOIC):290-300
Initial Water Level (Feet TOIC):55.83
Final Water Level (feet TOIC):56.12
Casing Type: **PVC** Steel (circle one)
Personnel:T. Dillon

Sample ID:MW-33D-R2
Purge Start Time:0940
Sample Time: 1130
Final Turbidity (NTUs) : 32.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)200/350
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 20.4L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0947	1.9	5.80	13.63	549	7.9	2.24	170.7	56.01	Some water purged while trying to
0952	2.9	5.80	13.73	548	4.9	0.86	166.8	56.01	Stabilize water level and purge rate.
0957	3.9	5.91	13.72	549	5.5	0.73	150.7	56.03	
1002	4.9	5.91	13.81	550	6.6	0.69	152.2	56.01	
1007	5.9	5.86	13.70	548	34.3	0.64	157.2	56.01	
1012	6.9	5.75	13.78	562	89.7	0.59	149.4	56.01	
1017	7.9	5.72	13.67	556	87.2	0.64	150.1	56.01	
1022	8.9	5.68	13.66	543	90.8	0.72	153.9	56.01	
1027	9.9	5.64	13.51	528	51.7	0.80	158.4	56.01	Purge rate changed to 350 ml/min
1032	11.65	5.60	13.60	525	28.6	0.88	166.8	56.11	
1037	13.4	5.59	13.60	525	21.8	0.96	170.9	56.03	
1042	15.15	5.58	13.62	527	15.6	1.14	175.7	56.12	
1047	16.9	5.57	13.64	527	15.6	1.24	177.6	56.12	
1052	18.65	5.56	13.76	530	11.8	1.32	179.4	56.12	
1057	20.4	5.55	13.76	535	16.2	1.42	180.7	56.12	
1102	22.15	5.55	13.74	532	26.8	1.51	181.8	56.12	
1107	23.9	5.54	13.76	535	22.3	1.55	181.8	56.12	
1112	25.65	5.55	13.86	539	43.3	1.63	182.6	56.12	
1117	27.4	5.53	13.84	539	35.6	1.68	183.2	56.12	
1122	29.15	5.53	13.84	543	34.7	1.73	183.7	56.12	
1127	30.9	5.53	13.84	542	32.6	1.76	184.5	56.12	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW33S
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):55.73
Final Water Level (feet TOIC):55.73
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron/T. Dillon

Sample ID: MW-33S-R2/MW-515-GW-R2
Purge Start Time:0942
Sample Time: 1020
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.75 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0942	.2	4.39	13.43	99	2.7	6.77	322.1	55.73	
0947	1.2	4.24	13.40	97	0.5	6.08	353.3	55.73	
0952	2.2	4.22	13.37	98	0	5.88	367.6	55.73	
0957	3.2	4.21	13.39	97	0	5.76	380.5	55.73	
1002	4.2	4.22	13.49	99	0	5.64	384.9	55.73	
1007	5.2	4.20	13.47	97	0	5.61	390.2	55.73	
1012	6.2	4.22	13.46	97	0	5.53	393.3	55.73	Duplicate Collected

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW34D
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC): 270-280
Initial Water Level (Feet TOIC):56.57
Final Water Level (feet TOIC):57.04
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID: MW-34D-R2
Purge Start Time: 1040
Sample Time: 1305
Final Turbidity (NTUs) : 46.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 4.98

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1040	0	6.48	13.20	247	19.6	3.24	240.5	57.01	Initial drawdown larger than 0.3 ft. but seems to stabilize around 57 ft.
1045	1.3	6.45	13.32	246	18.1	2.33	242.3	57.05	
1050	2.6	-	-	-	-	-	-	-	No reading-YSI not working properly. Shut down.
1055	3.9	6.30	13.41	248	17.3	1.27	264.5	57.08	
1100	5.2	6.18	13.35	251	19.8	0.98	252.4	57.04	
1105	6.5	6.09	13.42	249	72.1	1.48	241.5	57.06	
1110	7.8	6.04	13.60	243	129.9	3.38	227.3	57.08	
1115	9.1	5.98	13.63	243	322.6	4.97	214.2	57.07	
1120	10.4	5.94	13.63	243	484.1	5.13	211.9	57.07	
1125	11.7	5.92	13.68	244	180.5	5.50	204.2	57.07	
1130	13.0	5.92	13.67	242	133.4	5.60	201.2	57.08	
1135	14.3	5.90	13.58	243	114.3	5.77	199.1	57.07	
1140	15.6	5.89	13.58	243	87.7	5.94	198.3	57.08	
1145	16.9	5.86	13.67	244	214.5	5.88	198.6	57.08	
1150	18.2	5.87	13.55	243	124.9	5.87	199.0	57.08	
1155	19.5	5.87	13.53	243	142.2	5.86	198.2	57.08	
1200	20.8	5.85	13.61	244	61.3	5.85	198.1	57.08	
1205	22.1	5.85	13.79	245	37.7	6.40	196.8	57.08	
1210	23.4	5.84	13.68	245	87.8	6.45	196.0	57.08	
1215	24.7	5.84	13.63	244	39.4	6.50	196.0	57.08	
1220	26.0	5.84	13.61	244	77.2	6.54	195.8	57.08	
1225	27.3	5.84	13.61	244	73.3	6.57	195.1	57.08	
1230	28.6	5.83	13.53	244	68.5	6.61	195.8	57.08	
1235	29.9	5.83	13.60	244	57.8	6.64	196.0	57.08	
1240	31.2	5.82	13.51	243	58.4	6.64	196.1	57.08	

1245	32.5	5.83	13.52	243	55.7	6.62	195.0	57.08	Flow rate=200 ml/min

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1250	33.5	5.82	13.47	244	48.8	6.64	195.9	57.04	
1255	34.5	5.82	13.50	243	48.4	6.63	197.7	57.04	
1300	35.5	5.82	13.50	244	46.3	6.64	195.7	57.04	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW34S
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):56.71
Final Water Level (feet TOIC):56.71
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW34S-R2
Purge Start Time: 1045
Sample Time: 1120
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.98

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1045	0	5.93	13.51	64	5.8	11.57	139.7	56.71	
1050	2	5.50	13.50	68	1.7	10.64	152.5	56.71	
1055	4	5.45	13.53	71	0.8	10.38	157.0	56.71	
1100	6	5.44	13.54	73	0.1	9.46	163.5	56.71	
1105	8	5.45	13.55	74	0	9.33	169.5	56.71	
1110	10	5.45	13.66	76	0	9.63	174.5	56.71	
1115	12	5.46	13.60	76	0	9.60	176.6	56.71	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW39S
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):86
Screen Interval (feet TOIC):76-86
Initial Water Level (Feet TOIC):61.05
Final Water Level (feet TOIC):61.07
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: MW-39S-R2
Purge Start Time:1435
Sample Time: 1515
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):2
Purge Rate (ml/min)220
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.75 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1435	.220	5.85	16.29	170	32.0	5.50	244.3	61.05	
1440	1.32	5.75	16.04	187	27.0	5.36	254.2	61.07	
1445	2.42	5.68	15.83	187	7.3	5.05	254.7	61.07	
1450	3.52	5.67	15.80	189	1.5	4.95	257.3	61.07	
1455	4.62	5.67	15.72	190	0	4.88	259.2	61.07	
1500	5.72	5.67	15.69	190	0	4.81	263.9	61.07	
1505	6.82	5.67	15.62	189	0	4.79	268.0	61.07	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW41S
Sample Date: 11/06/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):76
Screen Interval (feet TOIC):66-76
Initial Water Level (Feet TOIC):63.28
Final Water Level (feet TOIC):63.28
Casing Type: **PVC** Steel (circle one)
Personnel:M. Fronckowiak and R. Sekerka

Sample ID: MW41S-R2
Purge Start Time:1600
Sample Time: 1640
Final Turbidity (NTUs) :0
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.918

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1600	0	6.25	14.36	373	27.5	8.12	239.5	63.28	
1605	1.5	6.16	14.48	375	11.2	7.62	265.6	63.32	
1610	3.0	6.17	14.44	380	5.4	7.64	277.3	63.32	
1615	4.5	6.17	14.41	382	3.0	7.61	284.1	63.32	
1620	6.0	6.17	14.40	382	1.2	7.63	290.0	63.32	
1625	7.5	6.17	14.42	383	0.2	7.61	295.9	63.32	
1630	9.0	6.17	14.42	382	0.0	7.60	299.8	63.28	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW42I
Sample Date: 11/13/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC): 140-150
Initial Water Level (Feet TOIC): 63.43
Final Water Level (feet TOIC): 63.43
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak, T. Dillon

Sample ID: MW42I-R2 and MW510-GWR2
Purge Start Time: 0840
Sample Time: 0935
Final Turbidity (NTUs) : 7.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.32

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0840	0	6.55	14.24	930	6.2	4.35	219.0	63.43	
0845	1.75	6.20	14.04	930	15.2	2.22	191.6	63.43	
0850	3.50	5.65	14.01	1130	48.7	8.03	225.8	63.43	
0855	5.25	5.56	14.00	1119	41.5	8.70	230.9	63.43	
0900	7.0	5.53	14.03	1107	24.2	8.83	237.0	63.43	
0905	8.75	5.52	14.01	1101	17.8	8.89	240.5	63.43	
0910	10.5	5.52	13.99	1095	13.4	8.89	243.0	63.43	
0915	12.25	5.52	13.99	1085	10.2	8.92	245.4	63.43	
0920	14.0	5.52	13.98	1080	7.7	8.91	247.8	63.43	
0925	15.75	5.52	14.01	1082	7.2	8.91	248.8	63.43	
0930	17.5	5.52	14.03	1080	7.0	8.93	250.6	63.43	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW43S
Sample Date: 11/07/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):73
Screen Interval (feet TOIC):63-73
Initial Water Level (Feet TOIC):63.65
Final Water Level (feet TOIC):63.64
Casing Type: **PVC** Steel (circle one)
Personnel:M Fronckowiak and R. Sekerka

Sample ID:MW43S-R2
Purge Start Time:1200
Sample Time: 1235
Final Turbidity (NTUs) : 2.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.914

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1200	0	7.19	13.16	480	11.3	9.43	141.6	63.65	
1205	1.75	6.85	13.49	698	9.4	8.21	148.5	63.65	
1210	3.50	6.60	13.64	792	3.6	7.77	158.6	63.65	
1215	5.0	6.51	13.67	793	2.8	7.54	165.0	63.68	Flow rate dropped to 300 ml/min
1220	6.5	6.48	13.71	792	2.0	7.52	168.3	63.65	
1225	8.0	6.47	13.64	789	1.9	7.34	171.5	63.65	
1230	9.5	6.45	13.69	790	2.1	7.28	173.4	63.65	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW44S
Sample Date: 11/06/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):62.60
Final Water Level (feet TOIC):62.63
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak and R. Sekerka

Sample ID:MW44S-R2
Purge Start Time:0840
Sample Time: 0920
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 0.924

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0840	0	6.47	15.12	413	3.2	8.47	222.0	62.60	
0845	1.5	6.53	14.80	423	4.2	10.20	239.9	62.60	
0850	3.0	6.54	15.03	437	1.7	10.32	241.0	62.63	
0855	4.5	6.56	15.24	436	0.3	10.23	239.6	62.67	
0900	6.0	6.56	15.17	436	0	10.04	237.5	62.61	
0905	7.5	6.58	15.19	436	0	9.74	236.3	62.60	
0910	9.0	6.57	15.08	436	0	9.66	235.9	62.63	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW49S
Sample Date: 11/14/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):63.72
Final Water Level (feet TOIC):63.72
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak

Sample ID: MW49S-R2
Purge Start Time:1015
Sample Time: 1055
Final Turbidity (NTUs) : 1.2
Casing Inner Diameter (inches):2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 1.51

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1015	0	6.04	15.13	169	11.8	9.40	215.9	63.72	
1020	2	5.65	15.02	122	7.1	9.75	211.3	63.72	
1025	4	5.47	14.98	130	2.6	9.49	211.7	63.72	
1030	6	5.42	14.99	140	1.3	9.04	211.2	63.72	
1035	8	5.40	14.92	142	1.2	8.89	212.9	63.72	
1040	10	5.37	14.91	145	1.3	8.65	215.4	63.72	
1045	12	5.37	14.83	148	1.2	8.56	217.3	63.72	
1050	14	5.37	14.83	148	1.2	8.44	217.6	63.72	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW50-I
Sample Date: 11/08/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):61.49
Final Water Level (feet TOIC):61.49
Casing Type: **PVC** Steel (circle one)
Personnel:S. Kromhout

Sample ID: MW50-I-R2 and MS/MSD
Purge Start Time:1311
Sample Time: 1416
Final Turbidity (NTUs) : 4.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 280
Purge Rate d/sampling (ml/min):220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.25L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1311	0.280	5.61	15.23	489	2.2	4.22	139.8	61.49	
1316	1.4	5.12	15.07	485	74.6	4.18	137.9	61.49	
1321	2.8	4.98	15.07	481	106.9	6.30	137.4	61.49	
1326	4.2	5.00	15.03	476	49.9	6.60	137.1	61.49	
1331	5.6	5.03	14.98	473	19.7	6.73	136.9	61.49	
1336	7.0	5.00	14.87	473	11.1	6.74	136.7	61.49	
1341	8.4	5.06	14.91	472	8.8	6.72	136.7	61.49	
1346	9.8	5.06	14.85	472	6.5	6.76	136.0	61.49	
1351	11.2	5.07	14.85	472	5.8	6.75	136.0	61.49	
1356	12.6	5.09	14.86	472	5.0	6.75	135.5	61.49	
1401	14.0	5.09	14.86	472	4.3	6.70	135.4	61.49	
1406	15.4	5.06	14.82	470	4.5	6.66	135.0	61.49	
1411	16.8	5.04	14.86	469	4.3	6.68	134.6	61.49	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW51I
Sample Date: 11/17/2012
Sampling Device: Dedicated Pump
Well Depth (feet TOIC):140
Screen Interval (feet TOIC):130-140
Initial Water Level (Feet TOIC):60.60
Final Water Level (feet TOIC):60.60
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: MW-51I-R2
Purge Start Time:1128
Sample Time: 1210
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)350
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 8.02 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1128	.350	5.96	16.28	546	0	6.54	176.1	60.60	
1133	2.1	5.69	15.77	515	0	5.25	201.0	60.60	
1138	3.85	5.64	15.61	498	0	5.06	211.7	60.60	
1143	5.6	5.53	15.57	503	0	4.96	219.0	60.60	
1148	7.35	5.63	15.51	507	0	4.92	222.2	60.60	
1153	9.1	5.62	15.47	515	0	4.84	227.2	60.60	
1158	10.85	5.62	15.41	521	0	4.77	231.6	60.60	
1203	12.75	5.59	15.41	526	0	4.73	235.5	60.60	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW52D
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):57.44
Final Water Level (feet TOIC):57.95
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak/ T. Dillon

Sample ID: MW52D_R2
Purge Start Time:1325
Sample Time: 1510
Final Turbidity (NTUs) : 43.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 300 (Initial Flow Rate=400)
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.10

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1325	0	6.00	12.83	177	25.1	7.71	191.1	57.44	Flow rate= 400 ml/min
1330	2.0	5.48	13.23	176	9.1	1.83	211.3	57.85	Initial draw down larger than 0.3 ft when pump turned on/ flow rate adjusted=300 ml/min
1335	4.0	5.49	13.24	176	9.3	1.78	211.7	57.85	
1340	5.5	5.47	13.27	176	8.1	1.69	212.3	57.95	
1345	7.0	5.46	13.19	176	7.8	1.30	215.4	57.90	
1350	8.5	5.41	13.29	178	35.8	1.28	220.3	57.95	
1355	10.0	5.28	13.34	190	129.7	1.16	226.1	57.95	
1400	11.5	5.25	13.31	190	122.1	1.21	229.4	57.95	
1405	13.0	5.24	13.35	186	150.8	1.28	231.8	57.95	
1410	14.5	5.26	13.44	183	171.7	1.24	232.3	57.95	
1415	16.0	5.28	13.34	181	194.5	1.23	232.8	57.95	
1420	17.5	5.30	13.30	176	143.1	2.04	231.2	57.95	
1425	19.0	5.32	13.27	176	140.4	1.92	231.1	57.95	
1430	20.5	5.33	13.36	179	141.2	1.31	231.5	57.95	
1435	22.0	5.33	13.32	178	87.6	1.23	232.3	57.95	
1440	23.5	5.33	13.34	178	70.0	1.23	233.4	57.95	
1445	25.0	5.34	13.35	178	68.8	1.20	233.7	57.95	
1450	26.5	5.34	13.30	178	55.2	1.17	233.5	57.95	
1455	28.0	5.34	13.41	179	47.1	1.14	233.8	57.95	
1500	29.5	5.35	13.40	179	46.8	1.17	233.6	57.95	
1505	31.0	5.36	13.46	180	43.4	1.14	233.5	57.95	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW53S
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):57.15
Final Water Level (feet TOIC):57.15
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak/ T. Dillon

Sample ID: MW53S-R2
Purge Start Time: 1530
Sample Time: 1630
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174) NAP Parameters
2x Purge System Volume #: 3.7 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1530	0	5.12	13.07	85	2.3	10.25	242.0	57.15	
1535	2	4.82	13.38	79	0.4	9.99	277.2	57.15	
1540	4	4.98	13.39	79	0	9.86	272.4	57.15	
1545	6	5.16	13.37	82	0	9.79	263.1	57.15	
1550	8	5.26	13.35	83	0	9.78	258.8	57.15	
1555	10	5.29	13.40	84	0	9.80	254.1	57.15	
1600	12	5.32	13.34	85	0	9.90	251.8	57.15	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW55S
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):95.5
Screen Interval (feet TOIC): 85.5-95.5
Initial Water Level (Feet TOIC):56.32
Final Water Level (feet TOIC):56.32
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron/ T. Dillon

Sample ID: MW-55S-R2
Purge Start Time:0823
Sample Time: 0900
Final Turbidity (NTUs) : 0.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min)420
Purge Rate d/sampling (ml/min):230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.83 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0823	.420	6.52	13.66	841	15.5	9.56	214.3	56.32	
0828	2.52	6.12	13.78	867	6.0	9.19	195.8	56.32	
0833	4.62	6.05	13.83	867	2.9	9.14	188.4	56.32	
0838	6.72	6.02	13.83	867	1.1	9.14	184.2	56.32	
0843	8.82	6.00	13.79	868	0.6	9.14	182.2	56.32	
0848	10.92	6.01	13.90	869	0.2	9.09	180.8	56.32	
0853	13.02	6.01	13.89	868	0.2	9.08	187.0	56.32	
0858	15.12	6.01	13.88	868	0.2	9.09	180.8	56.32	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW201-220
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):220
Screen Interval (feet TOIC):215-220
Initial Water Level (Feet TOIC):60.80
Final Water Level (feet TOIC):60.80
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: MW-201-220-R2
Purge Start Time:1415
Sample Time: 1525
Final Turbidity (NTUs) : 13.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 13.91L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1415	.190	6.75	16.26	373	22.3	2.02	164.1	60.80	
1420	1.14	6.73	15.97	369	20.4	1.95	185.8	60.80	
1425	2.09	6.44	15.75	345	16.2	2.22	208.7	60.80	
1430	3.04	6.22	15.80	336	18.4	2.22	233.8	60.80	
1435	3.99	-	-	-	-	-	-	-	No reading, increased rate to 300 ml/min
1440	5.49	6.12	16.05	371	21.7	2.66	244.2	60.80	
1445	6.99	6.05	15.85	365	15.5	2.66	253.8	60.80	
1450	8.49	5.95	15.75	355	14.8	2.63	262.5	60.80	
1455	9.99	5.90	15.77	353	14.4	2.60	270.1	60.80	
1500	11.49	5.87	15.73	351	14.0	2.58	274.5	60.80	
1505	12.99	5.81	15.68	348	13.9	2.56	279.6	60.80	
1510	14.94	5.76	15.70	346	14.1	2.53	284.7	60.80	
1515	16.59	5.74	15.72	345	13.8	2.50	291.8	60.80	
1520	18.39	5.73	15.72	344	13.8	2.45	294.2	60.80	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW202-220
Sample Date: 11/14/2012
Sampling Device:
Well Depth (feet TOIC):220
Screen Interval (feet TOIC):210-220
Initial Water Level (Feet TOIC):55.66
Final Water Level (feet TOIC):
Casing Type: PVC Steel (circle one)
Personnel: D. Cuomo

Sample ID: MW202-220-R2
Purge Start Time: 1545
Sample Time: 1635
Final Turbidity (NTUs) : 1.5
Casing Inner Diameter (inches):
Purge Rate (ml/min): 320
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 9.1 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1555	0.32	5.57	13.54	191	5.8	5.90	196	55.66	
1600	1.92	5.49	13.31	189	5.4	5.91	203	55.66	
1605	3.52	5.43	13.05	189	4.7	6.19	212	55.70	
1610	5.12	5.41	12.99	189	3.0	6.26	219	55.70	
1615	6.72	5.36	12.86	188	2.2	6.38	228	55.70	
1620	8.32	5.32	12.80	188	1.4	6.49	234	55.70	
1625	9.92	5.31	12.80	189	1.5	6.70	239	55.70	
1630	11.52	5.29	12.76	189	1.5	6.61	240	55.70	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW202-380
Sample Date: 11/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC):380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):56.06
Final Water Level (feet TOIC):56.20
Casing Type: PVC Steel (circle one)
Personnel:D. Cuomo

Sample ID: MW-202-380-R2/MW-512-GWR2
Purge Start Time:1240
Sample Time: 1345
Final Turbidity (NTUs) : 2.6
Casing Inner Diameter (inches):2
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min):240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 15.0 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1250	0.5	5.95	13.07	313	110	6.12	119		
1255	3.0	5.90	13.05	309	33.1	6.54	138		
1300	5.5	5.87	13.00	307	10.4	6.54	151		
1305	8.0	5.33	13.05	305	8.8	6.46	158		
1310	10.5	5.80	13.05	304	9.4	6.55	162		
1315	13.0	5.82	13.06	304	16.1	7.03	174		
1320	15.5	5.81	13.07	304	9.4	6.40	176		
1325	18.0	5.83	13.04	303	4.1	6.82	178		
1330	20.3	5.83	13.10	303	2.7	6.86	180		
1335	23.0	5.82	13.08	303	2.8	6.89	182		
1340	25.5	5.83	13.08	303	2.6	7.12	186		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW202-495
Sample Date: 11/14/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC):495
Screen Interval (feet TOIC):485-495
Initial Water Level (Feet TOIC):56.53
Final Water Level (feet TOIC):
Casing Type: PVC Steel (circle one)
Personnel:

Sample ID: MW202-495-R2
Purge Start Time:1130
Sample Time: 1455
Final Turbidity (NTUs) : 15.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 180
Purge Rate d/sampling (ml/min):180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 19.4 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1300	1.8	11.38	13.29	363	36.3	2.18	45.9	56.53	
1305	2.7	11.43	13.48	395	40.1	1.04	25.1	56.53	
1310	3.6	11.43	13.48	382	42.2	0.82	-2.0	56.53	
1315	4.5	11.44	13.48	382	46.4	0.82	-2.2	56.53	
1320	5.4	11.40	13.47	372	46.9	0.82	-9.6	56.53	
1325	6.3	11.36	13.35	365	45.6	0.22	-12.3	56.45	
1330	7.2	11.35	13.48	360	42.3	0.83	-16.2	56.45	
1335	8.1	11.34	13.48	354	33.1	0.85	-21.2	56.45	
1340	9.0	11.34	13.46	355	28.1	0.86	-22.2		WLI not working
1345	9.9	11.33	13.30	348	26.7	0.89	-28.9		
1350	10.8	11.30	13.43	344	26.6	0.90	-32.1		
1355	11.7	11.30	13.43	322	26.6	0.90	-32.1		
1400	12.6	11.23	1.45	321	20.6	0.97	-39.3		
1405	13.5	11.23	13.35	312	19.6	1.02	-42.0		
1410	14.4	11.17	13.43	308	19.1	1.04	-43.0		
1415	15.3	11.17	13.43	304	19.1	1.08	-43.0		
1420	16.2	11.17	13.43	304	19.1	1.08	-43.0		
1425	17.1	11.16	13.41	304	16.3	1.08	-46.2		
1430	18.0	11.15	13.44	302	18.0	1.09	-47.3		
1435	18.9	11.15	13.22	300	17.2	1.15	-50.0		
1440	19.8	11.13	13.42	300	16.3	1.16	-50.7		
1445	20.7	11.14	13.38	299	15.9	1.18	-52.2		
1450		11.14	13.44	299	15.9	1.20	-54.7		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW203-360
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):360
Screen Interval (feet TOIC):350-360
Initial Water Level (Feet TOIC):59.70
Final Water Level (feet TOIC):59.70
Casing Type: **PVC** Steel (circle one)
Personnel: D. Cuomo/J. Nelson

Sample ID: MW-203-360-R2
Purge Start Time: 0835
Sample Time: 1025
Final Turbidity (NTUs) : 28.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 24.59 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0845	1.5	9.57	13.93	326	113.6	2.19	142.0	59.70	
0850	3.0	10.49	13.88	356	109.1	2.67	132.4	59.70	
0855	4.5	10.55	13.93	366	95.3	2.90	124.0	59.70	
0900	6.0	10.40	13.99	364	160.0	3.09	119.2	59.70	
0905	7.5	10.28	14.10	362	144.8	3.17	118.0	59.70	
0910	9.0	10.16	14.14	360	131.9	3.25	117.7	59.70	
0915	10.5	9.60	14.21	352	106.8	3.60	122.1	59.70	
0920	12.0	9.14	14.09	347	104.7	3.89	132.3	59.70	
0925	13.5	8.88	14.06	345	84.4	3.99	138.6	59.70	
0930	15.0	8.43	14.21	347	83.9	4.16	148.6	59.70	
0935	16.5	8.13	14.08	344	85.9	4.30	116.2	59.70	Changed YSI batteries
0940	18.0	8.09	14.13	344	87.2	4.30	124.0	59.70	
0945	19.5	7.99	14.04	344	87.9	4.34	134.1	59.70	
0950	21.0	-	-	-	-	-	-	-	Cleaned flow through cell
0955	22.5	7.99	14.04	344	21.6	4.52	149.2	59.70	
1000	24.0	7.99	14.11	345	23.3	4.51	149.1	59.70	
1005	25.5	8.01	14.09	345	25.7	4.47	148.8	59.70	
1010	27.0	7.98	14.04	345	29.9	4.47	149.7	59.70	
1015	28.5	7.94	14.04	344	29.6	4.47	150.6	59.70	
1020	30.0	7.89	13.99	343	28.0	4.49	152.6	59.70	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW203-440
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):440
Screen Interval (feet TOIC):430-440
Initial Water Level (Feet TOIC):59.39
Final Water Level (feet TOIC):59.39
Casing Type: **PVC** Steel (circle one)
Personnel: J.Nelson/D.Cuomo

Sample ID: MW-203-440-R2
Purge Start Time:0850
Sample Time: 1040
Final Turbidity (NTUs) : 7.1
Casing Inner Diameter (inches):2
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 30.7 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0855	1.75	7.86	14.57	232	1.5	0.89	75.5	59.41	
0900	3.5	7.97	14.54	235	13.9	1.05	62.8	59.41	
0905	5.25	7.71	14.65	246	18.6	3.31	68.2	59.41	
0910	7.0	7.34	14.77	249	19.2	6.17	87.9	59.41	
0915	8.75	7.18	14.62	242	27.2	6.77	98.6	59.41	
0920	10.50	6.98	14.56	232	24.0	7.22	110.8	59.41	
0925	12.25	6.83	14.62	228	11.2	7.47	119.8	59.41	
0930	14.00	6.71	14.62	224	18.1	7.68	127.8	59.41	
0935	15.75	6.61	14.56	219	18.7	7.81	134.4	59.45	
0940	17.50	6.54	14.57	217	15.9	7.89	140.3	59.45	
0945	19.25	6.48	14.52	215	14.1	7.94	144.7	59.45	
0950	21.00	6.44	14.53	214	11.9	7.99	148.1	59.45	
0955	22.75	6.10	14.57	214	9.9	8.01	150.1	59.45	
1000	24.50	6.37	14.65	213	9.8	8.04	152.9	59.45	
1005	26.25	6.35	14.62	212	8.9	8.06	154.8	59.45	
1010	28.00	6.35	14.53	212	8.5	8.10	157.1	59.45	
1015	29.75	6.33	14.55	211	7.6	8.14	158.8	59.45	
1020	31.50	6.31	14.48	210	7.2	8.15	160.5	59.45	
1025	33.25	6.32	14.47	210	7.4	8.17	162.4	59.45	
1030	35.00	6.31	14.45	209	7.1	8.19	163.6	59.45	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW204-320
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):60.44
Final Water Level (feet TOIC):60.55
Casing Type: **PVC** Steel (circle one)
Personnel: J. Nelson, D. Cuomo

Sample ID: MW-204-320-R2
Purge Start Time:1440
Sample Time: _1630
Final Turbidity (NTUs) : 8.2
Casing Inner Diameter (inches):
Purge Rate (ml/min)300
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 21.55 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1445	1.5	10.87	14.86	893	13.4	1.37	-229	60.51	
1450	3.0	10.81	14.92	891	23.7	1.24	-220	60.48	
1455	4.5	11.65	14.83	1508	154.4	1.14	-209	60.48	
1500	6.0	11.92	14.82	1841	154.6	1.10	-198	60.48	
1505	7.5	11.96	14.73	1875	47.8	1.08	-189	60.48	
1510	9.0	11.94	14.69	1832	33.4	1.06	-182	60.48	
1515	10.5	11.89	14.65	1723	16.3	1.08	-173	60.48	
1520	12.0	11.75	14.65	1569	34.6	1.35	-163	60.48	
1525	13.5	11.67	14.64	1417	14.7	1.70	-148	60.55	
1530	15.0	11.56	14.63	1331	12.2	2.17	-137	60.55	
1535	16.5	11.50	14.61	1255	11.0	2.54	-126	60.55	
1540	18.0	11.45	14.59	1220	10.0	2.72	-121	60.55	
1545	19.5	11.39	14.59	1182	10.3	2.84	-116	60.55	
1550	21.0	11.30	14.60	1149	9.3	3.07	-112	60.55	
1600	22.5	11.23	14.58	1119	8.9	3.29	-105	60.55	
1605	24.0	11.17	14.55	1102	8.5	3.47	-100	60.55	
1610	25.5	11.03	14.52	1064	8.5	3.77	-91	60.55	
1615	27.0	10.97	14.51	1050	8.4	3.86	-88	60.55	
1620	28.5	10.93	14.50	1040	8.2	3.99	-85	60.55	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW204-470
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):60.55
Final Water Level (feet TOIC):60.55
Casing Type: **PVC** Steel (circle one)
Personnel: J. Nelson/D. Cuomo

Sample ID: MW-204-470-R2
Purge Start Time:1205
Sample Time: 1420
Final Turbidity (NTUs) : 1.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)350
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 32.9L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1210	1.75	12.00	14.80	1619	2.6	0.85	-272	60.55	
1215	3.50	12.00	14.69	1569	4.2	0.66	-254	60.55	
1220	5.25	11.99	14.70	1530	10.9	0.62	-249	60.55	
1225	7.0	12.09	14.71	2153	13.0	0.61	-236	60.63	
1230	8.75	12.16	14.67	2243	8.0	0.91	-214	60.63	
1235	10.50	12.14	14.63	2071	4.6	1.36	-195	60.63	
1240	12.25	12.10	14.63	1856	3.2	1.89	-177	60.63	
1245	14.0	12.07	14.55	1709	2.8	2.32	-166	60.63	
1250	15.75	12.02	14.58	1518	2.5	2.69	-157	60.63	
1255	17.50	11.99	14.54	1457	2.2	3.06	-150	60.63	
1300	19.25	11.96	14.59	1372	1.7	3.37	-144	60.63	
1305	21.00	11.92	14.56	1306	1.9	3.63	-140	60.71	
1310	22.75	11.90	14.62	1249	1.7	3.81	-137	60.71	
1315	24.50	11.88	14.61	1186	2.4	4.02	-133	60.71	
1320	26.25	11.86	14.62	1122	1.7	4.19	-130	60.71	
1325	28.00	11.84	14.63	1080	1.9	4.35	-127	60.71	
1330	29.75	11.81	14.66	1048	1.5	4.45	-125	60.66	
1335	31.50	11.79	14.62	1008	1.4	4.57	-122	60.66	
1340	33.25	11.78	14.61	979	1.5	4.62	-120	60.66	2 Volumes
1345	35.00	11.76	14.61	939	1.5	4.73	-119	60.66	
1350	36.75	11.75	14.61	911	1.2	4.80	-118	60.66	
1355	38.50	11.74	14.61	893	1.7	4.88	-116	60.66	
1400	40.25	11.72	14.64	860	1.6	4.93	-115	60.66	
1405	43.00	11.70	14.69	842	1.7	4.99	-114	60.66	
1410	44.75	11.69	14.65	835	1.7	5.06	-113	60.66	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW205-160
Sample Date: 11/16/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC):150-160
Initial Water Level (Feet TOIC):59.10
Final Water Level (feet TOIC):59.10
Casing Type: **PVC** Steel (circle one)
Personnel: D.Cuomo/J. Nelson

Sample ID: MW-205-160-R2
Purge Start Time:1115
Sample Time: 1255
Final Turbidity (NTUs) : 17.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min)220
Purge Rate d/sampling (ml/min):220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 12.0 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1120	1.1	6.01	13.96	243	105.1	3.52	187.2	59.10	
1125	2.2	5.98	13.99	244	109.7	3.31	193.0	59.10	
1130	3.3	5.87	14.02	247	154.0	3.00	198.7	59.10	
1135	4.4	5.82	14.11	248	200.8	2.96	200.8	59.10	
1140	5.5	-	-	-	-	-	-	-	Cleaned flow through cell
1145	6.6	5.74	13.27	229	258.5	5.22	198.2	59.10	
1150	7.7	5.71	13.88	242	249.9	3.48	197.3	59.10	
1155	8.8	5.68	13.93	245	174.5	3.16	180.6	59.10	
1200	9.9	5.68	13.87	244	179.7	3.16	175.5	59.10	
1205	11.0	5.67	13.92	243	143.2	3.24	177.4	59.10	
1210	12.1	5.66	13.95	243	118.0	3.34	181.0	59.10	
1215	13.2	5.64	13.91	242	96.1	3.41	183.9	59.10	
1220	14.3	5.63	13.98	241	77.7	3.38	189.3	59.10	
1225	15.4	-	-	-	-	-	-	-	Cleaned flow through cell
1230	16.5	5.63	13.75	232	36.7	5.17	198.8	59.10	
1235	17.6	5.63	13.88	238	24.5	4.40	202.4	59.10	
1240	18.7	5.62	13.93	240	18.3	4.20	204.3	59.10	
1245	19.8	5.62	13.95	240	17.9	4.18	204.9	59.10	
1250	20.9	5.62	13.94	240	17.7	4.18	205.2	59.10	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW205-285
Sample Date: 11/07/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):64.65
Final Water Level (feet TOIC):65.00
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak

Sample ID:MW205-285-R2
Purge Start Time:1316
Sample Time: 1420
Final Turbidity (NTUs) : 20.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 10.981 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1316	.35	12.22	13.10	2159	0	.49	-23.4	65.0	
1321	1.75	12.44	12.81	2476	0	.38	-225.6	65.0	
1326	3.50	12.55	12.71	2629	0	.48	-231.0	65.0	
1331	5.25	12.69	12.71	3077	0	.23	-221.6	65.0	
1336	7.0	12.70	12.61	3071	6.5	.19	-217.7	65.0	
1341	8.75	12.68	12.67	2992	5.0	.17	-212.5	65.0	
1346	10.5	12.65	12.68	2933	5.3	.24	-218.4	65.0	
1351	12.25	12.63	12.68	2857	15.9	.28	-210.6	65.0	
1356	14.0	12.59	12.72	2771	18.4	.26	-226.3	65.0	
1401	15.75	12.54	12.65	2666	20.1	.23	-212.9	65.0	
1406	17.5	12.49	12.62	2559	21.1	.29	-207.9	65.0	
1411	19.25	12.44	12.81	2465	20.9	.23	-213.6	65.0	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW205-470
Sample Date: 11/07/12
Sampling Device: Bladder Pump
Well Depth (feet TOIC):470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):63.18
Final Water Level (feet TOIC):63.18
Casing Type: **PVC** Steel (circle one)
Personnel:S. Kromhout

Sample ID: MW205-470-R2
Purge Start Time:1315
Sample Time: 1442
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 340
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 18.05L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1322	.34	10.20	13.71	164	0	7.91	105.1	63.18	
1327	1.7	10.28	13.00	162	0	7.84	109.7	63.18	
1332	3.4	10.18	12.54	160	1.2	7.95	112.5	63.18	
1337	5.1	10.21	12.52	160	6.0	7.94	114.3	63.18	
1342	6.8	10.23	13.30	164	0	7.65	113.3	63.18	
1347	8.5	10.79	12.83	159	0	7.49	113.2	63.18	
1352	10.2	10.17	13.16	167	0	5.07	113.0	63.18	
1357	11.9	10.81	12.45	176	1.4	6.88	114.2	63.18	
1402	13.6	11.18	12.82	359	3.0	6.90	114.5	63.18	
1407	15.3	11.23	13.27	376	0	7.84	114.0	63.18	
1412	17.0	11.17	12.81	334	0	7.15	115.9	63.18	
1417	18.7	11.07	12.70	289	0	7.46	116.3	63.18	
1422	20.4	10.84	13.59	250	0	6.69	116.9	63.18	
1427	22.1	10.79	13.63	232	0	7.64	116.2	63.18	
1432	23.8	10.70	13.33	230	0	7.54	113.0	63.18	
1437	25.5	10.70	13.33	230	0	7.77	110.7	63.18	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW206-320
Sample Date: 11/14/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):62.50
Final Water Level (feet TOIC):62.54
Casing Type: **PVC** Steel (circle one)
Personnel: S. Kromhout

Sample ID: __MW206-320R2
Purge Start Time:0923
Sample Time: _____1043
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 360
Purge Rate d/sampling (ml/min):230
Sample Analyses: DHC

2x Purge System Volume #: 12.396 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0928	.360	5.50	15.06	545	0	1.75	-55.1	62.50	
0933	1.8	5.38	14.61	544	0.7	0.73	-138.5	62.50	
0938	3.6	5.19	14.56	554	11.2	1.31	-51.9	62.50	
0943	5.4	5.11	14.51	555	16.1	1.74	-14.4	62.50	
0948	7.2	5.07	14.56	548	7.4	1.88	8.1	62.50	
0953	9.0	5.08	14.45	545	3.1	1.87	23.7	62.50	
0958	10.8	5.07	14.44	543	1.8	1.84	33.1	62.50	
1003	12.6	5.09	14.47	543	1.5	1.89	43.1	62.50	
1008	14.6	5.07	14.45	544	0.7	1.84	48.6	62.54	
1013	16.4	5.07	14.41	544	0.6	1.88	57.1	62.54	
1018	18.2	5.08	14.41	543	0.3	1.83	62.3	62.54	
1023	20.0	5.08	14.45	543	0.5	1.87	66.4	62.54	
1028	21.8	5.07	14.33	543	0	1.86	72.2	62.54	
1033	23.6	5.07	14.47	544	0	1.82	74.9	62.54	
1038	25.4	5.07	14.46	543	0	1.82	77.4	62.54	DHC only re-sample (missed hold time)

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW206-470
Sample Date: 11/07/12
Sampling Device:Bladder Pump
Well Depth (feet TOIC):470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):62.30
Final Water Level (feet TOIC):62.30
Casing Type: **PVC** Steel (circle one)
Personnel:S.Kromhout

Sample ID: MW206-470-R2
Purge Start Time:0940
Sample Time: 1105
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 420
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 18.08 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0955	.420	8.82	14.47	790	0	2.38	82.0	62.30	
1000	2.1	8.90	14.12	790	0	2.29	89.1	62.30	
1005	4.2	8.82	13.86	792	0	3.02	93.9	62.30	
1010	6.3	8.83	12.97	781	0	3.51	98.1	62.30	
1015	8.4	8.84	12.39	773	0	3.55	99.1	62.30	
1020	10.5	8.85	11.87	764	0	3.76	100.1	62.30	
1025	12.6	8.71	13.77	746	0	3.72	100.7	62.30	
1030	14.7	8.11	13.63	545	0	4.04	103.1	62.30	
1035	16.9	7.67	13.54	529	0	4.25	106.2	62.30	
1040	18.0	7.41	13.53	539	0	4.39	106.9	62.30	
1045	20.1	7.23	13.07	537	0	4.56	108.3	62.30	
1050	22.2	7.08	12.95	536	0	4.60	109.0	62.30	
1055	24.3	7.02	12.79	538	0	4.65	109.7	62.30	
1100	26.4	6.98	12.71	540	0	4.67	110.4	62.30	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW207-170
Sample Date: 11/14/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):170
Screen Interval (feet TOIC):160-170
Initial Water Level (Feet TOIC):56.54
Final Water Level (feet TOIC):56.54
Casing Type: PVC **Steel** (circle one)
Personnel: S.Kromhout

Sample ID: MW207-170-R2
Purge Start Time:1222
Sample Time: 1317
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 370
Purge Rate d/sampling (ml/min):220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174) NAP Parameters
2x Purge System Volume #: 6.94 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1227	.370	5.56	14.87	210	2.4	1.54	161.9	56.54	
1232	1.85	5.72	14.68	220	18.5	1.25	156.6	56.54	
1237	3.7	5.75	14.55	221	11.9	1.16	154.7	56.54	
1242	5.55	5.73	14.33	220	5.5	1.07	155.0	56.54	
1247	7.4	5.70	14.44	218	2.8	1.00	157.6	56.54	
1252	9.25	5.66	14.47	216	1.6	1.02	158.9	56.54	
1257	11.1	5.60	14.50	214	0	1.06	158.5	56.54	
1302	12.95	5.56	14.42	213	0	1.11	160.8	56.54	
1307	14.8	5.54	14.43	212	0	1.13	162.0	56.54	MS/MSD Taken

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW207-250
Sample Date: 11/8/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):250
Screen Interval (feet TOIC):240-250
Initial Water Level (Feet TOIC):56.02
Final Water Level (feet TOIC):56.02
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: MW-207-250-R2
Purge Start Time:1511
Sample Time: 1605
Final Turbidity (NTUs) : 1.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 16.32 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1511	.4	6.31	13.95	282	1.3	11.49	91.36	56.02	Well cap flooded upon opening
1516	2.4	5.64	14.05	288	34.7	8.07	142.3	56.02	Slight petrol sheen observed in water,
1521	4.4	5.42	14.01	291	17.9	8.95	179.1	56.02	Faint petrol odor noted
1526	6.4	5.39	14.04	290	6.0	7.88	198.4	56.02	
1531	8.4	5.39	14.01	289	3.9	7.31	208.2	56.02	
1536	10.4	5.39	14.12	289	3.3	6.96	216.2	56.02	
1541	12.4	5.39	13.91	288	2.0	6.81	222.0	56.02	
1546	14.4	5.37	13.94	288	1.3	6.69	228.6	56.02	
1551	16.4	5.37	13.92	283	1.2	6.52	232.6	56.02	
1556	18.4	5.36	13.87	287	1.1	6.42	236.1	56.02	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW270-320
Sample Date: 11/08/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):56.15
Final Water Level (feet TOIC):56.28
Casing Type: **PVC** Steel (circle one)
Personnel:M.Cameron

Sample ID: MW-270-320 and MW-507-GW-R2
Purge Start Time:1314
Sample Time: 1430
Final Turbidity (NTUs) : 2.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):210
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 21.65 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1314	.3	9.59	14.24	272	4.1	7.32	-83.6	56.20	
1319	1.8	8.83	14.25	320	10.4	3.01	-110.8	56.20	
1324	3.8	7.57	14.28	419	14.6	2.55	-105.1	56.25	Increased rate to 400ml/min
1329	5.8	6.94	14.07	480	27.7	2.41	-32.9	56.25	
1334	7.8	6.62	13.99	446	23.7	2.64	-6.1	56.25	
1339	8.8	6.42	13.89	430	16.7	3.01	13.9	56.25	
1344	9.8	6.23	13.90	415	10.4	3.57	34.0	56.25	
1349	11.8	6.14	13.82	402	5.5	3.68	45.4	56.30	
1354	13.8	6.09	13.82	395	9.1	3.73	52.5	56.30	
1359	15.8	6.05	13.77	392	3.2	3.76	57.5	56.25	
1404	17.8	6.02	13.86	386	2.4	3.76	61.3	56.30	
1409	19.8	5.97	13.86	381	2.5	4.23	66.7	56.30	
1414	21.8	5.95	13.82	376	2.3	3.95	70.0	56.28	
1419	23.8	5.91	13.77	368	2.3	3.91	73.0	56.28	
1424	25.8	5.89	13.78	364	2.4	3.89	74.0	56.28	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW208-350
Sample Date: 11/04/12
Sampling Device: Bladder Pump
Well Depth (feet TOIC):350
Screen Interval (feet TOIC):340-350
Initial Water Level (Feet TOIC):54.69
Final Water Level (feet TOIC):54.70
Casing Type: **PVC** Steel (circle one)
Personnel: S. Kromhout

Sample ID: MW208-350-R2 and MW501-GWR2
Purge Start Time:0937
Sample Time: 1042
Final Turbidity (NTUs) : 4.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 13.8 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0937	.3	10.71	15.73	1174	14.8	0.78	197.6	54.69	
0942	1.5	10.70	15.47	1184	13.5	0.56	198.7	54.69	
0947	3.0	10.42	15.40	1202	20.4	0.42	200.2	54.69	
0952	4.5	8.63	15.30	1310	59.0	0.42	201.6	54.69	
0957	6.0	6.92	15.24	1401	39.6	0.64	192.4	54.69	
1002	7.5	5.98	14.97	1420	15.9	0.66	199.1	54.69	
1007	9.0	5.90	15.11	1480	12.2	0.61	199.3	54.69	
1012	10.5	5.67	15.29	1433	9.3	0.64	199.6	54.69	
1017	12.0	6.09	15.22	1435	7.2	0.69	199.5	54.7	
1022	13.5	5.96	15.22	1435	6.4	0.66	199.9	54.7	
1027	15.0	6.08	15.21	1435	5.4	0.52	199.8	54.7	
1032	16.5	6.03	15.23	1435	5.0	0.48	200.7	54.7	
1037	18.0	6.04	15.23	1435	4.5	0.52	200.0	54.7	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW208-540
Sample Date: 11/04/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):570
Screen Interval (feet TOIC):560-570
Initial Water Level (Feet TOIC):55.39
Final Water Level (feet TOIC):55.40
Casing Type: **PVC** Steel (circle one)
Personnel:R. Malaniak

Sample ID: MW208-540-R2 and MW502-GWR2
Purge Start Time:0915
Sample Time: 1115
Final Turbidity (NTUs) : 1.2
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 325
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.4 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0920	.325	12.56	15.05	3629	3.2	0.8	-451.3	55.4	
0925	1.625	12.51	15.01	3862	3.9	0.67	-458.9	55.40	
0930	3.25	12.48	14.93	3684	4.2	0.71	-446.2	55.40	
0935	4.8	12.45	14.84	3520	32.1	0.42	-446.2	55.40	
0940	5.35	12.42	14.92	3315	10.9	1.07	-413.1	55.40	
0945	6.4	12.42	14.84	3750	10.5	1.15	-373.4	55.40	
0950	7.45	12.36	14.84	2803	12.1	1.40	-348.3	55.40	
0955	8.5	12.28	14.83	2313	19.9	1.77	-328.8	55.40	
1000	9.55	12.19	14.83	1948	21.8	2.59	-302.4	55.40	
1005	10.6	12.12	14.84	1679	21.6	2.43	-290.1	55.40	
1010	11.65	12.04	14.84	1485	21.0	3.26	-276.3	55.40	
1015	12.7	11.97	14.87	1326	19.4	3.71	-268.5	55.40	
1020	13.75	11.91	14.85	1206	19.8	3.99	-261.4	55.40	
1025	14.8	11.85	14.80	1096	20.7	4.26	-255.9	55.40	
1030	15.85	11.80	14.80	1022	17.4	4.61	-249.7	55.40	
1035	16.9	11.75	14.93	951	4.9	4.80	-239.7	55.40	
1040	17.95	11.70	15.02	894	1.4	5.01	-235.5	55.40	
1045	19.0	11.66	15.04	850	6.3	5.33	-229.1	55.40	
1050	20.05	11.63	15.10	825	1.2	5.43	-226.4	55.40	
1055	21.1	11.58	15.04	776	1.6	5.51	-226.6	55.40	
1100	22.15	11.53	15.18	745	1.2	5.58	-223.5	55.40	
1105	23.2	11.50	15.21	739	1.2	5.67	-217.2	55.40	
1110	24.25	11.45	15.29	733	1.2	5.94	-215.8	55.40	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW209-380
Sample Date: 11/03/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):38.31
Final Water Level (feet TOIC):38.31
Casing Type: **PVC** Steel (circle one)
Personnel: S.Kromhout and D. Cuomo

Sample ID: MW209-380-R2
Purge Start Time:1215
Sample Time: 1445
Final Turbidity (NTUs) : 31.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 13.211 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1220	0.2	10.72	15.49	600	27.2	0.66	11.5	38.31	
1225	1.2	-	-	-	-	-	-	-	Cleaned flow through cell
1230	2.2	11.64	15.71	1366	547	0.25	-44.8	38.31	Turbidity unstable
1235	3.2	12.09	15.69	2143	224	0.25	-111.5	38.31	
1240	4.2	12.13	15.46	2170	242	0.27	-137.9	38.31	
1245	5.2	12.11	15.41	2013	107.7	0.30	-147.5	38.31	
1250	6.2	12.08	15.42	1895	47.8	0.32	-150.1	38.33	
1255	7.2	12.052	15.35	1706	27.0	0.38	-148.8	38.33	
1300	8.2	11.95	15.30	1508	14.6	0.47	-144.5	38.33	
1305	9.2	11.85	15.29	1338	18.3	0.53	-138.2	38.33	
1310	10.2	11.75	15.21	1162	15.4	0.61	-130.9	38.33	
1315	11.2	11.67	15.26	1082	19.0	0.63	-126.2	38.33	
1320	12.2	11.58	15.33	994	17.3	0.69	-121.0	38.33	
1325	13.2	11.49	15.42	928	19.9	0.74	-115.1	38.33	
1330	14.2	11.43	15.31	888	16.6	0.77	-109.5	38.33	
1335	15.2	11.33	15.20	844	19.0	0.79	-107.2	38.33	
1340	16.2	11.26	15.19	804	26.3	0.82	-101	38.33	
1345	17.2	11.13	15.28	760	17.8	0.87	-94.8	38.33	
1350	18.2	11.04	15.39	733	27.2	0.90	-91.0	38.33	
1355	19.2	10.88	15.20	701	30.2	0.92	-82.0	38.33	
1400	20.2	10.78	15.12	688	24.9	0.92	-77.9	38.33	
1405	21.2	10.66	15.24	676	22.7	0.97	-71.3	38.33	
1410	22.2	10.55	15.15	668	24.0	0.98	-66.1	38.33	
1415	23.2	10.45	15.26	661	28.9	0.99	-60.8	38.33	
1420	24.2	10.37	15.25	656	26.4	1.04	-56.6	38.33	
1425	25.2	10.21	15.05	652	33.6	1.06	-50.2	38.33	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1430	26.2	10.10	14.97	649	39.7	1.07	-45.0	38.33	
1435	27.2	10.06	15.19	648	33.8	1.09	-41.2	38.33	
1440	28.2	10.06	15.37	649	31.1	1.09	-39.8	38.31	

Key:

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ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW209-530
Sample Date: 11/03/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):550
Screen Interval (feet TOIC):540-550
Initial Water Level (Feet TOIC):38.01
Final Water Level (feet TOIC):38.14
Casing Type: **PVC** Steel (circle one)
Personnel: S. Kromhout and D. Cuomo

Sample ID:MW209-530-R2
Purge Start Time:0816
Sample Time: 1103
Final Turbidity (NTUs) : 3.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 22.22 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0828	.2	10.59	15.23	233	3.4	4.49	69.4	38.01	
0833	1.2	10.77	15.41	233	2.6	5.52	36.8	38.01	
0838	2.2	10.75	15.38	226	2.6	6.0	27.0	38.01	
0843	3.2	10.75	15.38	225	3.5	6.69	16.6	38.01	
0848	4.2	10.76	15.48	226	3.7	7.00	12.2	38.01	
0853.	5.2	10.77	15.47	226	3.3	6.29	5.4	38.11	
0858	6.2	10.88	15.32	223	8.1	4.41	-0.7	38.11	
0903	7.2	11.29	15.49	259	11.4	3.02	-20.7	38.11	
0908	8.2	11.56	15.62	268	8.5	2.66	-41.8	38.11	
0913	9.2	11.65	15.54	769	7.8	2.59	-53.5	38.11	
0918	10.2	11.72	15.40	868	6.5	2.62	-65.0	38.11	
0923	11.2	11.72	15.39	718	6.5	2.77	-69.4	38.11	
0928	12.2	11.71	15.41	692	5.9	2.89	-71.1	38.11	
0933	13.2	11.66	15.08	766	4.8	3.29	-69.4	38.11	
0938	14.2	11.58	15.0	689	4.8	3.60	-65.6	38.11	
0943	15.2	11.52	14.98	615	4.7	3.89	-62.0	38.11	
0948	16.2	11.45	14.92	540	4.3	4.19	-56.0	38.11	
0953	17.2	11.40	14.90	507	4.0	4.32	-52.2	38.11	
0958	18.2	11.36	14.87	480	3.6	4.41	-47.8	38.13	
1003	19.2	11.38	15.79	466	3.4	4.45	-47.0	38.13	
1008	20.2	11.36	15.25	456	3.1	4.45	-44.4	38.13	
1013	21.2	11.35	15.39	447	3.2	4.43	-42.3	38.13	
1018	22.2	11.33	15.47	432	3.5	4.42	-39.6	38.13	
1023	23.2	11.29	15.34	412	3.2	4.50	-34.7	38.13	
1028	24.2	11.24	15.44	395	3.7	4.55	-29.7	38.13	
1033	25.2	11.18	15.44	370	33.1	4.60	-22.0	38.13	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1038	26.2	11.15	15.53	355	3.2	4.65	-16.0	38.11	
1043	27.2	11.14	15.57	347	3.6	4.66	-12.6	38.11	
1048	28.2	11.09	15.59	335	3.5	4.66	-5.5	38.11	
1053	29.2	11.07	15.41	330	3.4	4.46	2.7	38.14	
1058	30.2	11.04	15.19	328	3.3	4.8	5.5	38.14	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW210-280
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):280
Screen Interval (feet TOIC):270-280
Initial Water Level (Feet TOIC):46.04
Final Water Level (feet TOIC):46.04
Casing Type: **PVC** Steel (circle one)
Personnel: J. Nelson

Sample ID: MW-210-280-R2/MW-514-GW+R2
Purge Start Time:1435
Sample Time: 1620
Final Turbidity (NTUs) : 1.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 19.04 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1440	1.5	5.16	15.89	360	6.1	1.07	109	46.09	
1445	3.0	5.13	15.86	354	11.2	1.00	130	46.09	
1450	4.5	5.11	15.90	353	13.7	2.21	141	46.09	
1455	6.0	5.11	15.84	352	10.0	1.96	154	46.09	
1500	7.5	5.10	15.80	352	9.0	2.48	161	46.09	
1505	9.0	5.10	15.76	351	6.6	1.10	168	46.09	
1510	10.5	5.10	15.09	344	6.3	1.15	180	46.09	Battery died, DK dropped off backpack unit
1530	12.0	5.11	15.66	349	5.5	1.11	188	46.09	
1535	13.5	5.10	15.72	350	3.4	1.22	187	46.09	
1540	15.0	5.08	15.35	348	2.9	1.10	194	46.09	
1545	16.5	5.08	15.37	352	2.3	0.99	203	46.09	
1550	18.0	5.03	15.72	348	1.9	1.03	207	46.09	
1555	19.5	5.07	15.71	350	1.9	0.98	214	46.09	
1600	21.0	5.08	15.60	352	1.7	1.04	214	46.09	
1605	22.5	5.08	15.60	353	1.6	0.92	218	46.09	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-380
Sample Date: 11/15/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):45.90
Final Water Level (feet TOIC):45.90
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: MW-210-380-R2
Purge Start Time:1004
Sample Time: 1145
Final Turbidity (NTUs) : 24.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 390
Purge Rate d/sampling (ml/min):230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174) NAP Parameters
2x Purge System Volume #: 26.5 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1004	0.390	6.91	18.89	872	14.8	5.54	9.7	45.90	
1009	2.34	7.52	16.08	859	24.7	5.11	10.7	45.90	
1014	4.29	7.85	15.85	794	19.0	4.69	41.8	45.90	
1019	6.24	7.14	15.86	791	29.1	4.50	85.0	45.90	
1024	8.19	5.82	15.82	809	40.5	4.08	154.0	45.90	
1029	10.14	5.32	15.93	779	26.4	3.81	193.9	45.90	
1034	12.09	-	-	-	-	-	-	-	No Reading
1039	14.04	5.25	15.78	820	25.2	3.41	219.2	45.90	
1044	15.99	5.39	15.68	789	24.7	3.34	229.8	45.90	
1049	17.94	5.26	15.77	778	28.7	3.28	238.1	45.90	
1054	19.89	5.23	15.75	734	28.7	3.33	244.4	45.90	
1059	21.84	5.33	15.73	700	25.0	3.23	250.5	45.90	
1104	23.79	5.25	15.89	691	24.2	3.30	255.8	45.90	
1109	25.74	5.36	15.99	712	24.6	3.88	258.2	45.90	
1114	27.69	5.29	15.89	411	24.5	3.81	264.4	45.90	
1119	29.64	5.28	15.99	759	24.8	3.70	269.9	45.90	
1124	31.59	5.28	16.03	742	24.6	3.63	273.8	45.90	
1129	33.54	5.27	15.93	727	25.6	3.53	277.7	45.90	
1134	33.49	5.30	15.90	720	24.6	3.46	282.2	45.90	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW210-470
Sample Date: 11/15/2012
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):46.05
Final Water Level (feet TOIC):46.35
Casing Type: **PVC** Steel (circle one)
Personnel: J. Nelson/ D. Cuomo

Sample ID: MW-210-470-R2
Purge Start Time:1020
Sample Time: 1250
Final Turbidity (NTUs) : 13.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 33.46 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1025	1.5	11.87	15.99	1.412	6.8	1.83	-229	46.50	
1030	3.0	11.83	16.01	1.330	11.7	1.58	-230	46.50	
1035	4.5	11.80	15.90	1.335	13.3	1.65	-238	46.50	
1040	6.0	11.80	15.85	1.328	12.2	1.59	-239	46.50	
1045	7.5	11.81	15.05	1.471	12.2	2.57	-233	46.45	Inspected freeze line
1050	9.0	11.99	15.76	1.998	12.2	1.82	-240	46.45	
1055	10.5	12.03	15.72	2.144	12.2	1.71	-244	46.45	
1100	12.0	12.04	15.79	2.161	12.2	4.66	-246	46.41	
1105	13.5	12.06	15.94	2.149	12.2	5.80	-247	46.41	
1110	15.0	12.04	16.07	2.128	12.2	1.57	-248	46.41	
1115	16.5	12.02	15.99	2.056	13.7	1.50	-248	46.41	
1120	18.0	12.01	15.98	1.996	14.1	1.65	-245	46.41	
1125	19.5	12.05	16.05	1.932	15.0	1.83	-240	46.41	
1130	21.00	11.97	15.94	1.880	18.5	1.72	-235	46.41	
1135	22.5	11.54	15.94	1.841	15.8	2.09	-231	46.41	
1140	24.0	11.94	16.18	1.766	12.4	2.18	-229	46.41	
1145	25.5	11.94	16.12	1.724	18.8	2.34	-224	46.35	
1150	27.0	11.91	15.91	1.677	18.3	2.38	-222	46.35	
1155	28.5	11.91	15.83	1.633	18.0	2.54	-219	46.35	
1200	30.0	11.86	15.83	1.599	17.8	2.57	-215	46.35	
1205	31.5	11.91	15.78	1.564	17.7	2.64	-213	46.35	
1210	33.0	11.88	15.72	1.532	17.1	2.82	-209	46.35	
1215	34.5	11.93	15.73	1.506	16.3	2.79	-208	46.35	
1220	36.0	11.87	15.75	1.488	16.3	5.70	-208	46.35	
1225	37.5	11.83	15.72	1.458	16.1	4.74	-209	46.35	
1230	39.0	11.94	15.67	1.431	14.5	3.38	-201	46.35	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1235	40.5	11.96	15.62	1.413	14.4	3.46	-197	46.35	
1240	42.0	11.85	15.56	1.403	13.6	3.66	-195	46.35	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW211-455
Sample Date: 11/03/12
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC):455
Screen Interval (feet TOIC):445-455
Initial Water Level (Feet TOIC):52.12
Final Water Level (feet TOIC):52.85
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak and J. Lacanlale

Sample ID:MW211-488-R2
Purge Start Time:0820
Sample Time: 1140
Final Turbidity (NTUs) : 44.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 210
Purge Rate d/sampling (ml/min):210
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 4.73 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0825	.210	10.95	14.87	1784	130.5	1.55	193.2	53.71	
0830	1.05	10.98	15.20	1735	140.1	0.77	193.7	52.85	
0835	2.10	10.93	15.28	1694	120.3	0.53	195.9	52.85	
0840	3.15	10.99	15.38	1727	119.7	0.40	195.3	52.85	
0845	4.20	11.04	15.19	1694	110.7	0.24	194.1	52.85	
0850	5.25	11.18	15.42	1684	100.3	0.17	198.4	52.85	
0855	6.30	11.19	15.41	1683	46.1	0.17	184.2	52.85	
0900	7.35	11.18	15.55	1686	88.4	0.15	185.7	52.85	
0905	8.4	11.28	15.70	2095	62.2	0.14	184.3	52.85	
0910	9.45	11.29	15.49	2112	47.1	0.04	184.0	52.85	
0915	10.5	11.16	15.30	2076	32.3	0.14	187.1	52.85	
0920	11.55	11.18	15.31	2057	43.0	0.16	188.0	52.85	
0925	12.6	11.12	15.21	1990	169	0.20	189.0	52.85	
0930	13.65	11.05	15.07	1910	150	0.19	189.9	52.85	
0935	14.7	11.05	14.91	1896	109	0.19	190.3	52.85	
0940	15.75	10.99	14.89	1835	103	0.21	190.0	52.85	
0945	16.8	10.98	14.80	1796	97.1	0.19	192.5	52.85	
0950	17.85	11.03	14.70	1772	91.2	0.17	192.6	52.85	
0955	18.9	11.0	14.65	1726	93.0	0.17	190.5	52.85	
1000	19.95	10.94	14.65	1760	90.0	0.147	188.2	52.85	
1005	21.00	11.33	15.23	1685	92.9	0.18	188.6	52.85	
1010	22.05	11.28	15.04	1717	104.6	0.18	187.3	52.85	
1015	23.1	11.29	15.44	1774	93.4	0.13	188.3	52.85	
1020	24.15	11.31	15.50	1779	88.3	0.14	187.8	52.85	
1025	25.2	11.14	15.60	1755	66.3	0.14	186.8	52.85	
1030	26.25	11.20	15.67	1754	64.8	020	186.6	52.85	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	27.3	11.12	15.75	1698	72.9	0.20	186.6	52.85	
1040	28.35	11.21	15.75	1704	68.0	0.17	186.2	52.85	
1045	29.4	11.23	15.42	14612	69.9	0.16	186.6	52.85	
1050	30.45	11.21	15.74	1572	64.0	0.15	187.0	52.85	
1055	31.5	11.21	15.92	1556	66.3	0.14	186.9	52.85	
1100	32.55	11.17	15.88	1524	64.0	0.15	186.8	52.85	
1105	33.6	11.19	15.78	1512	63.5	0.14	186.8	52.85	
1110	34.65	11.15	1580	1492	59.9	0.15	187.0	52.85	
1115	35.7	11.11	15.87	1463	54.0	0.15	187.0	52.85	
1120	36.75	11.11	15.84	1436	52.0	0.12	186.7	52.85	
1125	37.8	11.13	15.93	1388	49.7	0.14	187.6	52.85	
1130	38.85	11.10	15.79	1323	49.8	0.15	187.8	52.85	
1135	39.90	11.13	15.81	1281	44.9	0.15	188.5	52.85	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW213-570
Sample Date: 11/04/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC): 46.59
Final Water Level (feet TOIC):46.65
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak

Sample ID: MW213-570-R2 and MS/MSD
Purge Start Time:1245
Sample Time: 1410
Final Turbidity (NTUs) : 20.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 23.0 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1250	.4	9.14	14.61	85	2.7	1.19	-243	46.65	
1255	2	8.89	14.42	68	3.9	0.47	-309.2	46.65	
1300	4	8.56	14.32	66	4.9	0.51	-267.2	46.65	
1305	6	8.04	14.27	63	8.9	1.19	-173.2	46.65	
1310	8	7.54	14.21	63	13.2	2.31	-103.1	46.65	
1315	10	7.03	14.16	63	8.9	3.65	-54.3	46.65	
1320	12	6.64	14.11	62	4.4	4.49	-26.9	46.65	
1325	14	6.44	14.10	61	1.9	4.92	-5.1	46.65	
1330	16	6.33	14.10	60	1.9	5.16	0.3	46.65	
1335	18	6.12	14.07	60	1.2	5.40	28.2	46.65	
1340	20	6.20	14.10	59	1.5	5.60	40.9	46.65	
1345	22	6.10	14.11	58	1.5	5.78	49.6	46.65	
1350	24	6.05	14.07	58	4.9	5.97	58.6	46.65	
1355	26	6.02	14.10	58	19.7	6.10	63.6	46.65	
1400	28	6.02	14.06	58	18.4	6.14	65.1	46.65	
1405	30	5.98	14.12	58	20.3	6.24	69.8	46.65	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW214-570
Sample Date: 11/04/12
Sampling Device: Bladder Pump
Well Depth (feet TOIC):570
Screen Interval (feet TOIC):560-570
Initial Water Level (Feet TOIC):47.89
Final Water Level (feet TOIC):47.89
Casing Type: **PVC** Steel (circle one)
Personnel:S. Kromhout

Sample ID: MW214-570-R2
Purge Start Time:1305
Sample Time: 1435
Final Turbidity (NTUs) : 1.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 22.4 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1305	.3	7.87	14.34	64	1.4	1.33	137.4	47.89	
1310	1.5	7.94	14.22	64	1.3	1.08	139.9	47.89	
1315	3.0	7.91	14.23	64	1.3	1.25	140.8	47.89	
1320	4.5	7.42	14.20	63	1.7	1.71	140.7	47.89	
1325	6.0	7.32	14.19	63	2.5	2.04	141.9	47.89	
1330	7.5	7.76	14.18	63	2.6	2.5	141.7	47.89	
1335	9.0	7.67	14.16	62	4.7	2.8	141.8	47.89	
1340	10.5	7.55	14.15	66	7.2	3.39	141.5	47.89	
1345	12.0	7.65	14.19	79	5.7	3.66	141.1	47.89	
1350	13.5	7.35	14.09	78	3.7	4.06	141.1	47.89	
1355	15.0	7.26	14.08	72	3.1	4.74	140.1	47.89	
1400	16.5	7.19	14.12	66	3.2	5.57	139.5	47.89	
1405	18.0	7.33	14.15	65	2.85	6.00	138.8	47.89	
1410	19.5	7.20	14.16	64	1.9	6.22	138.8	47.89	
1415	21.0	7.38	14.10	64	1.9	6.38	139.2	47.89	
1420	22.5	7.25	14.10	63	1.9	6.55	139.4	47.89	
1425	24.0	7.26	13.99	63	2.0	66.65	139.6	47.89	
1430	25.5	7.32	14.02	63	1.8	6.65	139.2	47.89	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW285
Sample Date: 11/13/2012
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):64.41
Final Water Level (feet TOIC):64.41
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon, M. Fronckowiak

Sample ID: _MW285-R2
Purge Start Time: 1715
Sample Time: 1755
Final Turbidity (NTUs) : 2.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 1.31 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1715	0	7.63	14.45	270	8.8	7.68	214.1	64.41	
1720	2.5	6.72	14.43	292	7.0	7.37	224.0	64.41	
1725	5	6.43	14.40	298	6.0	7.28	225.4	64.41	
1730	7.5	6.12	14.40	302	4.1	7.14	226.6	64.41	
1735	10	5.99	14.37	305	3.2	7.13	227.4	64.41	Purge rate=350ml/min
1740	11.8	5.92	14.34	307	2.5	7.04	228.1	64.41	
1745	13.6	5.89	14.35	307	2.5	6.91	228.8	64.41	
1750	15.4	5.87	14.28	308	2.5	6.90	229.6	64.41	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-110-355
Sample Date: 11/15/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC):355
Screen Interval (feet TOIC):345-355
Initial Water Level (Feet TOIC):47.23
Final Water Level (feet TOIC):49.35
Casing Type: **PVC** Steel (circle one)
Personnel: D.Cuomo/R. Malaniak

Sample ID: MWP-110-355-R2
Purge Start Time:0930
Sample Time: 1040
Final Turbidity (NTUs) : 18.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min): 325
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 14.5 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0940	1.625	6.13	13.46	288	11.7	3.37	218.7	47.23	
0945	3.25	6.08	13.48	284	11.8	2.96	217.3	48.98	
0950	4.875	5.98	13.56	280	33.0	2.42	199.6	48.97	
0955	6.5	5.96	13.54	279	31.9	1.93	177.2	48.97	
1000	8.125	5.96	13.50	278	29.5	1.76	173.6	49.25	Adjusted flow rate; new purge rate=250 ml/min
1005	9.4	5.98	13.70	279	23.3	1.73	170.9	49.35	
1010	10.6	5.98	13.67	279	24.5	1.72	170.2	49.35	
1015	11.9	5.96	13.43	277	22.1	1.68	172.2	49.35	
1020	13.1	5.98	13.75	278	19.6	1.66	171.8	49.35	
1025	14.4	5.98	13.75	279	19.9	1.67	171.6	49.35	
1030	15.6	5.96	13.69	278	18.2	1.67	173.0	49.35	
1035	16.9	5.95	13.40	276	18.0	1.65	174.1	49.35	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-110-440-R2
Sample Date: 11/15/2012
Sampling Device:
Well Depth (feet TOIC):440
Screen Interval (feet TOIC):430-440
Initial Water Level (Feet TOIC):47.48
Final Water Level (feet TOIC):47.20
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak

Sample ID: MWP-110-440-R2
Purge Start Time: 1255
Sample Time: 1400
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174) NAP Parameters
2x Purge System Volume #: 17 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1258	.500	5.59	13.84	395	0	6.21	189.7	47.20	
1303	4.75	5.49	13.99	401	0	5.58	211.5	47.20	
1308	7.0	5.51	13.96	400	2.1	5.38	229.3	47.20	
1313	9.25	5.45	13.97	400	11.4	4.89	240.6	47.20	
1318	11.5	5.42	14.02	401	6.6	5.01	254.4	47.20	
1323	13.75	5.42	14.00	400	4.9	4.97	257.9	42.70	
1328	16.0	5.41	14.00	400	1.7	4.94	264.5	42.70	
1333	18.25	5.42	14.00	400	0	4.91	271.0	42.70	
1338	20.5	5.41	13.99	400	0	4.88	273.8	42.70	
1343	22.75	5.41	13.96	400	0	4.89	277.5	42.70	
1348	25.0	5.40	14.00	400	0	4.94	280.3	42.70	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P114-170
Sample Date:11/15/2012
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC):160-170
Initial Water Level (Feet TOIC):47.33
Final Water Level (feet TOIC):47.33
Casing Type: **PVC** Steel (circle one)
Personnel: D. Cuomo

Sample ID: MW-P114-170-R2
Purge Start Time:1515
Sample Time: 1745
Final Turbidity (NTUs) : 49.2
Casing Inner Diameter (inches): 4
Purge Rate (ml/min): 160
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 7.5 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1525	0.8	6.09	12.94	522	36.9	5.60	117.8	47.33	
1530	1.6	6.01	13.32	520	67.8	3.27	126.7	47.33	
1535	2.4	5.96	13.37	516	69.3	2.70	135.1	47.33	
1540	3.2	5.94	13.36	515	79.9	2.56	139.2	47.33	
1545	4.0	5.93	13.48	515	95.2	2.15	150.8	47.33	
1550	4.8	5.92	13.44	514	97.8	1.95	157.5	47.33	
1555	5.6	5.92	13.47	513	83.2	1.92	159.6	47.33	
1600	6.4	5.91	13.46	513	84.4	1.81	163.5	47.33	
1605	7.2	5.92	13.42	511	82.1	1.70	167.6	47.33	
1610	8.0	-	-	-	-	-	-	-	Cleaned flow through cell
1615	8.8	5.88	13.30	500	61.0	2.09	169.2	47.33	
1620	9.6	5.87	13.24	508	67.2	1.58	172.2	47.33	
1625	10.4	5.87	13.26	507	64.9	1.53	173.6	47.33	
1630	11.2	5.86	13.24	507	62.3	1.49	176.4	47.33	
1635	12.0	5.86	13.20	506	62.0	1.46	177.7	47.33	
1640	12.8	5.86	13.32	507	64.1	1.41	179.0	47.33	
1645	13.6	5.85	13.36	506	68.1	1.36	181.0	47.33	
1650	14.4	5.85	13.33	506	64.8	1.34	181.7	47.33	
1655	15.2	5.84	13.27	504	59.8	1.29	183.8	47.33	
1700	16.0	5.84	13.25	503	59.7	1.24	185.4	47.33	
1705	16.8	5.83	13.14	501	57.3	1.23	186.4	47.33	
1710	17.6	5.82	13.21	501	57.7	1.17	188.4	47.33	
1715	18.4	5.82	13.20	499	61.4	1.15	189.6	47.33	
1720	19.2	5.81	13.15	499	59.5	1.14	190.2	47.33	
1725	20.0	5.81	13.17	498	58.5	1.12	191.0	47.33	Cleaned Flow Cell
1730	20.8	5.81	13.22	497	49.8	1.26	194.0	47.33	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1735	21.6	5.81	13.20	497	49.4	1.19	193.5	47.33	
1740	22.4	5.81	13.10	496	49.2	1.19	193.7	47.33	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-110-290
Sample Date: 11/15/2012
Sampling Device: Marchalk Bladder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):47.66
Final Water Level (feet TOIC):47.66
Casing Type: **PVC** Steel (circle one)
Personnel: D. Cuomo/ R. Malaniak

Sample ID: MW-P114-290-R2
Purge Start Time:1330
Sample Time: 1430
Final Turbidity (NTUs) : 40.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 14.27 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1340	1.75	5.89	13.95	385	4.3	3.73	126.0	47.66	
1345	3.5	5.75	14.02	371	5.4	2.53	146.6	47.66	
1350	5.25	5.63	14.14	355	69.7	1.76	142.0	47.66	
1355	7.00	5.61	14.19	354	60.2	1.62	131.2	47.66	
1400	8.75	5.59	14.17	352	52.5	1.46	118.9	47.66	
1405	10.5	5.56	14.13	350	46.4	1.35	111.7	47.66	
1410	12.25	5.55	14.17	350	46.3	1.32	110.7	47.66	
1415	14.00	5.54	14.18	349	41.0	1.28	108.3	47.66	
1420	15.75	5.54	14.04	348	41.0	1.24	106.5	47.66	
1425	17.5	5.53	14.14	348	40.0	1.19	102.7	47.66	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-1
Sample Date: 11/13/2012
Sampling Device: Wattera
Well Depth (feet TOIC):72
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.49
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: PW-2-1-R2
Purge Start Time: 1350
Sample Time: 1425
Final Turbidity (NTUs) : 3.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 160
Purge Rate d/sampling (ml/min):160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 1.87 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1350	.160	5.14	15.79	438	14.8	7.40	265.1		
1355	.96	5.42	16.19	437	7.9	7.93	264.7		1 well volume
1400	1.76	5.44	16.20	433	5.6	7.83	265.6		2 well volumes
1405	2.56	5.44	16.11	436	4.0	7.81	268.1		3 well volumes
1410	3.36	5.40	16.21	434	3.6	7.74	269.1		
1415	4.16	5.40	16.22	430	3.8	7.68	270.6		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-2
Sample Date: 11/13/2012
Sampling Device: Wattera
Well Depth (feet TOIC):87
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.47
Final Water Level (feet TOIC):55.49
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: PW-2-2-R2
Purge Start Time: 1035
Sample Time: 1125
Final Turbidity (NTUs) : 9.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 180
Purge Rate d/sampling (ml/min):180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 3.57 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	0.180	5.48	16.45	153	24.7	9.57	155.4		
1045	1.98	5.37	16.46	152	15.0	9.69	164.4		1 well volume
1055	3.96	5.39	16.35	153	11.8	9.69	173.4		2 well volumes
1100	4.86	5.77	16.32	153	8.5	9.56	176.3		3 well volumes
1105	5.76	5.44	16.26	153	13.4	9.69	180.2		
1110	6.66	5.45	16.16	153	9.0	9.65	182.2		
1115	7.56	5.43	16.17	153	8.7	9.76	185.5		
1120	8.46	5.36	16.09	153	9.5	9.67	188.2		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-3
Sample Date: 11/13/2012
Sampling Device: Wattera
Well Depth (feet TOIC):102
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.47
Final Water Level (feet TOIC):55.50
Casing Type: **PVC** Steel (circle one)
Personnel:M. Cameron

Sample ID: _PW-2-3-R2
Purge Start Time:1534
Sample Time: 1640
Final Turbidity (NTUs) : 18.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 180
Purge Rate d/sampling (ml/min):180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 5.25 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1534	.180	5.18	15.98	455	263.0	6.30	258.3		
1544	1.98	5.33	15.97	536	211.2	7.36	292.2		1 well volume
1554	3.78	5.37	15.89	536	106	7.51	299.2		2 well volumes
1559	4.68	5.44	15.94	535	95.9	7.51	302.3		
1604	5.58	5.39	15.93	534	54.8	7.53	300.9		3 well volumes
1609	6.48	5.29	15.90	533	44.3	7.52	300.9		
1614	7.38	5.28	15.88	532	41.1	7.53	302.8		
1619	8.28	5.30	15.72	537	28.4	7.52	303.8		
1624	9.18	5.25	15.72	536	19.8	7.53	305.1		
1629	10.08	5.30	15.75	535	19.0	7.55	306.6		
1634	10.98	5.29	15.72	536	18.4	7.59	309.1		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-4
Sample Date: 11/13/2012
Sampling Device: Wattera
Well Depth (feet TOIC): 117
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.49
Final Water Level (feet TOIC):55.47
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: _PW-2-4-R2
Purge Start Time:1340
Sample Time: 1450
Final Turbidity (NTUs) : 12.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 170
Purge Rate d/sampling (ml/min):170
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 6.96L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1340	.170	5.63	15.96	101	48.4	9.67	195.4		
1355	2.72	5.76	15.99	101	32.2	8.94	178.8		1 well volume
1410	5.27	5.68	15.81	102	17.5	8.93	202.4		2 well volumes
1415	6.12	5.54	15.87	102	16.6	8.98	203.6		
1420	6.97	5.49	15.87	102	16.7	8.95	204.1		3 well volumes
1425	7.82	-	-	-	-	-	-		No reading, collecting sample PW-2-1
1430	8.67	5.69	15.95	103	13.0	8.93	205.8		
1435	9.52	5.70	15.93	103	13.4	8.89	206.5		
1440	10.37	5.79	16.04	103	12.0	8.89	207.1		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW2-5
Sample Date: 11/13/2012
Sampling Device:Wattera
Well Depth (feet TOIC):132
Screen Interval (feet TOIC):122-132
Initial Water Level (Feet TOIC):55.49
Final Water Level (feet TOIC):55.55
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: PW-2-5-R2
Purge Start Time:1022
Sample Time: 1150
Final Turbidity (NTUs) : 5.8
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 160
Purge Rate d/sampling (ml/min):160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 8.6L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1022	0.160	5.47	16.58	272	217.5	5.89	218.2		
1042	3.36	5.55	16.34	218	115.2	8.04	221.3		1 well volume
1102	6.72	5.48	16.28	213	19.0	7.89	239.3		2 well volumes
1107	7.52	5.43	16.24	212	16.0	7.86	241.8		
1112	8.32	5.58	16.21	212	12.7	7.85	243.8		
1117	9.12	5.47	16.17	211	11.4	7.82	245.6		3 well volumes
1122	9.92	5.44	16.17	211	8.5	7.82	250.6		
1127	10.72	-	-	-	-	-	-		No reading, sampling PW2-2
1132	11.52	5.44	16.12	210	6.3	7.73	252.6		
1137	12.32	5.48	16.07	209	5.2	7.71	253.4		
1142	13.12	5.44	16.05	209	5.8	7.69	254.2		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-6
Sample Date: 11/12/2012
Sampling Device: Wattera
Well Depth (feet TOIC): 147.0
Screen Interval (feet TOIC): 146-147
Initial Water Level (Feet TOIC):55.55
Final Water Level (feet TOIC):55.52
Casing Type: **PVC** Steel (circle one)
Personnel:M. Cameron

Sample ID: PW-2-6-R2 and MS/MSD
Purge Start Time: 1245
Sample Time: 1430
Final Turbidity (NTUs) : 39.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 150
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 10.32 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1245	.150	5.37	18.09	312	59.5	9.85	235.2		
1307	3.45	5.22	17.94	309	27.9	8.64	279.7		1 well volume
1329	6.90	5.19	17.95	308	30.6	8.53	302.2		2 well volumes
1334	7.65	5.19	17.89	308	38.3	8.50	306.8		
1339	8.4	5.27	17.78	307	25.4	8.48	311.2		
1344	9.15	5.17	17.75	307	43.9	8.45	315.5		
1349	9.90	5.00	17.72	307	38.5	8.41	319.8		
1354	10.65	5.00	17.71	306	34.9	8.39	324.2		3 well volumes
1359	11.4	5.08	17.69	306	29.9	8.37	326.2		
1404	12.15	5.17	17.58	306	32.4	8.36	330.1		
1409	12.90	5.18	17.46	306	35.5	8.33	333.5		
1414	13.65	5.08	17.55	306	42.8	8.29	332.4		
1419	14.4	5.16	17.63	307	38.7	8.26	328.3		
1424	15.15	5.21	17.51	307	39.5	8.25	333.5		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-7
Sample Date: 11/12/2012
Sampling Device: Wattera
Well Depth (feet TOIC):161.0
Screen Interval (feet TOIC):160-161
Initial Water Level (Feet TOIC):55.55
Final Water Level (feet TOIC):55.58
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: PW-2-7-R2
Purge Start Time: 1247
Sample Time: 1845
Final Turbidity (NTUs) : 282.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 130
Purge Rate d/sampling (ml/min): 110
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 11.94 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1247	.70	5.48	19.79	314	1293.3	5.66	163.6		1252 Purge Rate=130 ml/min
1320	3.99	4.25	19.36	309	103.0	5.87	291.9		1 well volume
1350	8.21	4.98	18.95	306	95.2	6.01	327.4		2 well volumes
1355	8.86	4.36	19.13	306	98.1	5.95	333.4		
1400	9.51	5.57	19.13	306	115.2	5.95	335.5		
1405	10.16	5.04	19.08	306	265	5.98	338.9		
1410	10.81	5.60	18.85	304	284.1	6.01	342.5		
1415	11.46	5.22	18.86	305	497.4	5.96	346.6		
1420	12.11	-	-	-	-	-	-		3 well volumes, empty YSI
1430	13.41	5.12	18.46	301	949.6	7.03	354.1		
1620	29.01	6.02	17.84	295	1016.2	6.59	368.4		1524 Purge Rate=110 ml/min
1817	44.61	5.69	16.52	286	324.1	6.69	372.2		Purge Rate= 50ml/min 1715 pull tubing up 20 feet
1822	44.85	5.61	16.53	286	357.2	6.62	371.2		
1827	45.11	5.67	16.64	287	353	6.69	375.7		Purge Rate=75 ml/min
1832	45.48	5.76	16.78	288	355.0	6.68	373.7		Purge Rate=90 ml/min
1837	45.93	5.63	16.87	289	282.6	6.73	372.0		
									*Filtered and unfiltered samples taken

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-1
Sample Date: 11/13/2012
Sampling Device: Wattera
Well Depth (feet TOIC):146
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.35
Final Water Level (feet TOIC):55.34
Casing Type: **PVC** Steel (circle one)
Personnel: J. Nelson. M. Cameron

Sample ID: PW-3-1-R2
Purge Start Time: 1100
Sample Time: 1200
Final Turbidity (NTUs) : 1.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 280
Purge Rate d/sampling (ml/min):110
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 1.77 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1112	-	5.33	16.38	161	6.3	9.3	155.6		
1114	0.6	5.41	16.39	170	3.6	9.37	159.1		1 well volume
1116	1.2	5.42	16.30	172	3.8	9.42	163.1		2 well volumes
1118	1.8	5.40	16.25	174	2.1	9.46	167.0		3 well volumes
1123	3.2	5.37	16.20	177	2.2	9.53	178.2		
1128	4.6	5.42	16.22	177	1.4	9.54	185.7		
1133	6.0	5.38	16.16	177	1.4	9.56	193.4		
1138	7.4	5.36	16.21	177	1.4	9.57	197.3		
1143	8.8	5.37	16.15	177	1.4	9.53	201.4		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-2
Sample Date: 11/13/2012
Sampling Device:Wattera
Well Depth (feet TOIC):86
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.35
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: J. Nelson, M. Cameron

Sample ID: _PW-3-2-R2
Purge Start Time: 1340
Sample Time: 1435
Final Turbidity (NTUs) : 8.1
Casing Inner Diameter (inches):
Purge Rate (ml/min): 180
Purge Rate d/sampling (ml/min):180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 3.48 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1350	1.16	5.58	15.11	253	6.8	5.9	217.6		1 well volume
1357	2.32	5.57	15.11	257	7.1	5.86	221.1		2 well volumes
1404	3.48	5.45	15.17	259	7.9	5.79	228.1		3 well volumes
1410	4.54	5.50	15.03	259	8.3	5.78	236.4		
1415	5.80	5.56	15.13	261	8.1	5.76	239.7		
1420	6.96	5.56	15.31	263	8.1	5.74	241.1		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-3
Sample Date: 11/14/2012
Sampling Device: Dedicated Pump/Wattera
Well Depth (feet TOIC):101
Screen Interval (feet TOIC):91-101
Initial Water Level (Feet TOIC):55.45
Final Water Level (feet TOIC):55.41
Casing Type: **PVC** Steel (circle one)
Personnel:T. Dillon

Sample ID: _PW-3-3-R2
Purge Start Time:1415
Sample Time: _____1609
Final Turbidity (NTUs) : 12.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 210/150
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 1.73 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1423	1.73	5.59	16.55	111	450	8.51	219		1 volume
1431	3.46	5.52	16.62	111	102	8.52	235		2 volume
1439	5.14	5.55	16.77	112	70.2	8.51	247.0		3 volume
1447	6.92	5.58	16.79	112	62.5	8.50	251.5		4 volume
1455	8.65	5.54	16.84	112	45.2	8.51	254.4		5 volume
1503	10.38	5.52	16.88	112	22.0	8.48	258.9		6 volume flow rate at 150 ml/min
1514	12.11	5.55	16.46	112	120.0	8.60	265.1		7 volume
1525	13.84	5.57	16.38	112	108.7	9.31	275.4		8 volume
1536	15.57	5.56	15.56	106	54.1	9.62	279.6		9 volume
1547	17.3	5.52	15.99	110	42.3	9.00	284.2		10 volume every 5 minutes
1552	18.05	5.51	16.01	110	37.3	8.95	285.2		
1557	18.8	5.52	16.07	110	12.2	8.89	287.0		
1602	19.55	5.59	16.03	111	12.2	8.88	288.9		
1607	20.3	5.57	16.00	111	12.2	8.86	289.5		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-5
Sample Date: 11/14/2012
Sampling Device: Dedicated Pump/ Wattera
Well Depth (feet TOIC):131
Screen Interval (feet TOIC):121-131
Initial Water Level (Feet TOIC):55.45
Final Water Level (feet TOIC):55.42
Casing Type: PVC Steel (circle one)
Personnel:J. Nelson

Sample ID: _PW-3-5-R2
Purge Start Time:1310
Sample Time: _____1621
Final Turbidity (NTUs) : 19.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 70
Purge Rate d/sampling (ml/min):70
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.86 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1351	2.86	5.52	14.71	296	30.6	1.55	281.3		1 volume
1432	5.72	5.57	14.84	297	25.3	1.29	300		2 volume
1513	8.58	5.52	14.66	296	23.1	1.07	322		3 volume
1554	11.14	5.55	14.51	294	19.8	0.90	327.2		4 volume; every 5 minutes
1559	11.49	5.56	14.30	293	19.5	0.88	327.6		
1604		5.51	14.32	293	19.3	0.86	329.1		
1614		5.54	14.33	293	19.2	0.83	333.6		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-6
Sample Date: 11/14/2012
Sampling Device: Dedicated Pump/ Wattera
Well Depth (feet TOIC): 146
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 55.45
Final Water Level (feet TOIC):
Casing Type: PVC Steel (circle one)
Personnel: J. Nelson

Sample ID: _PW-3-6-R2
Purge Start Time:1010
Sample Time: 1215
Final Turbidity (NTUs) : 34.5
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 110
Purge Rate d/sampling (ml/min):110
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.43 L/31 min

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1041	3.43	5.25	15.55	214	135.5	7.77	260.4		1 volume
1112	6.86	5.51	15.61	214	77.1	6.83	286.1		2 volume
1130	8.84	5.53	15.80	215	12.0	6.20	294.7		
1135	9.39	5.62	15.90	215	22.2	5.98	296.5		
1140	9.94	5.59	16.00	215	19.9	5.84	278.5		
1145	10.49	5.56	16.08	216	20.4	5.69	302.1		3 volume
1150	11.04	5.53	16.06	216	20.6	5.49	306.9		
1155	11.59	5.55	15.78	215	35.8	5.37	309.2		
1200	12.14	5.54	16.00	215	35.2	5.26	312.3		
1205	12.59	5.51	15.86	215	34.5	5.10	316.6		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-7
Sample Date: 11/12/2012
Sampling Device: Wattera
Well Depth (feet TOIC): 161
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):55.58
Final Water Level (feet TOIC):55.41
Casing Type: **PVC** Steel (circle one)
Personnel: J. Nelson, M. Cameron

Sample ID: PW-3-7-R2
Purge Start Time: 1250
Sample Time: 1825
Final Turbidity (NTUs) : 27.5
Casing Inner Diameter (inches):
Purge Rate (ml/min): 70
Purge Rate d/sampling (ml/min):70
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1340	-	5.35	20.61	234	1221.8	4.90	232.7		
1400	4.00	5.31	20.59	235	1221.5	4.77	242.1		1 well volume
1500	6.00	5.28	19.32	228	490.1	4.54	268.7		
1600	7.00	5.26	18.32	224	389	4.53	281.1		
1640	8.00	3.28	18.13	221	225	4.58	298		2 well volumes
1730	10.00	5.17	17.73	218	45.9	5.18	310		
1740	10.70	5.26	17.68	218	38	5.25	312		
1750	11.40	5.26	17.65	218	33.1	5.29	313.8		
1800	12.10	5.27	17.65	218	28.7	5.35	316		3 well volumes
1805	12.45	5.27	17.62	217	27.9	5.37	316		
1810	12.80	5.28	17.61	217	27.5	5.39	317.1		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-3-9
Sample Date: 11/14/2012
Sampling Device: Dedicated Pump/ Wattera
Well Depth (feet TOIC):116
Screen Interval (feet TOIC):106-116
Initial Water Level (Feet TOIC):55.45
Final Water Level (feet TOIC):
Casing Type: PVC Steel (circle one)
Personnel:J. Nelson

Sample ID: _PW-3-4-R2
Purge Start Time: 1015
Sample Time: 1320
Final Turbidity (NTUs) : 27.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 210
Purge Rate d/sampling (ml/min):110
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.3 L/11 min

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1026	2.3	5.94	15.31	234	1276	6.11	190.6		1 volume
1036	4.6	5.89	15.19	235	1035	6.11	187.0		2 volume
1047	6.9	5.75	15.46	237	684	6.02	180.6		3 volume
1052	7.95	5.71	15.44	238	612	5.99	179.0		
1057	9.0	5.79	15.36	237	570	5.95	176.4		
1102	10.05	5.69	15.37	238	522	5.92	175.9		
1107	11.10	5.74	15.35	238	437	5.91	175.7		Clean YSI
1200	22.23	5.56	15.55	248	305.5	5.56	166.7		Clean YSI
1300		5.53	15.87	254	28.9	5.83	172.2		
1305		5.49	16.06	257	28.1	5.74	170.3		
1310		5.55	16.37	258	27.0	5.71	167.4		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW4-1
Sample Date: 11/04/12
Sampling Device: Wattera
Well Depth (feet TOIC):72.70
Screen Interval (feet TOIC):71-73
Initial Water Level (Feet TOIC):51.80
Final Water Level (feet TOIC):51.82
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and D. Cuomo

Sample ID: PW-4-1-R2
Purge Start Time:1110
Sample Time: 1150
Final Turbidity (NTUs) : 31.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min)250
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1117	1.60	5.51	15.40	317	68.8	6.88	215.0		2 Volumes
1122	2.85	5.52	15.57	312	36.6	7.87	216.0		3 Volumes
1127	4.10	5.63	15.65	312	26.1	8.04	216.2		
1132	5.35	5.60	15.68	312	29.1	8.07	217.3		
1137	6.60	5.63	15.70	311	29.2	8.10	217.8		
1142	7.85	5.64	15.66	311	31.4	8.10	218.6		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW4-2
Sample Date: 11/04/12
Sampling Device: Wattera
Well Depth (feet TOIC):87.65
Screen Interval (feet TOIC):86-88
Initial Water Level (Feet TOIC):51.81
Final Water Level (feet TOIC):51.82
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and D. Cuomo

Sample ID:PW-4-2-R2
Purge Start Time:1220
Sample Time: 1310
Final Turbidity (NTUs) : 22.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 225
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1232	2.70	5.55	15.80	244	44.6	8.43	197.3		2 Volumes
1237	3.825	5.51	15.86	245	37.0	8.60	199.5		
1242	4.95	5.48	15.96	246	26.2	8.65	201.3		3 Volumes
1247	6.075	5.47	15.94	247	27.3	8.68	204.3		
1252	7.20	5.47	15.85	247	23.6	8.65	205.4		
1257	8.325	5.47	15.88	248	23.2	8.63	206.7		
1302	9.45	5.47	15.87	247	22.2	8.64	208.1		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW4-3
Sample Date: 11/03/12
Sampling Device:Wattera
Well Depth (feet TOIC):102.65
Screen Interval (feet TOIC):101-103
Initial Water Level (Feet TOIC):50.95
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and J. Ganz

Sample ID:PW-4-3-R2
Purge Start Time:0930
Sample Time: 1010
Final Turbidity (NTUs) : 6.7
Casing Inner Diameter (inches):0.5
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0945	4.0	5.46	15.10	258	12.5	9.71	228.0		2 Volumes
0950	5.25	5.45	15.08	256	10.0	9.86	223.7		
0955	6.50	5.45	14.96	249	7.3	9.72	243.8		3 Volumes
1000	7.75	5.47	15.01	245	6.8	9.70	247.2		
1005	9.0	5.47	14.98	244	6.7	9.69	251.0		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW4-4
Sample Date: 11/04/12
Sampling Device:Wattera
Well Depth (feet TOIC):117.65
Screen Interval (feet TOIC):116-118
Initial Water Level (Feet TOIC):51.81
Final Water Level (feet TOIC):51.83
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and D. Cuomo

Sample ID: PW4-4-R2
Purge Start Time: 1505
Sample Time: 1555
Final Turbidity (NTUs) : 2.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 230
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1527	4.98	5.78	15.32	209	6.8	7.66	276.8		2 Volumes
1532	6.13	5.55	15.32	208	4.7	7.72	276.5		
1537	7.28	5.49	15.26	209	2.8	7.80	277.7		
1542	8.43	5.48	15.24	207	2.8	7.83	279.0		3 Volumes
1547	9.58	5.45	15.23	205	2.7	7.84	278.6		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: Pw4-5
Sample Date: 11/04/12
Sampling Device:Wattera
Well Depth (feet TOIC):132.55
Screen Interval (feet TOIC):131-133
Initial Water Level (Feet TOIC):51.85
Final Water Level (feet TOIC):51.85
Casing Type: **PVC** Steel (circle one)
Personnel:B. Hewitt and D. Cuomo

Sample ID: PW4-5-R2
Purge Start Time:0825
Sample Time: 1030
Final Turbidity (NTUs) : 9.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 75
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0945	6.1	5.64	14.28	268	15.3	7.59	179.1		2 Volumes
0952	6.625	5.68	14.45	267	15.0	7.56	181.8		
0959	7.15	5.58	14.60	268	12.5	7.25	183.7		
1006	7.675	5.61	14.77	267	10.4	7.47	185.3		
1013	8.2	5.61	14.87	267	9.4	7.35	187.4		
1020	8.735	5.60	14.85	266	9.6	7.30	189.1		
1027	9.25	5.60	14.89	266	9.9	7.28	190.9		3 Volumes

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW4-6
Sample Date: 11/03/12
Sampling Device:Wattera
Well Depth (feet TOIC):147.15
Screen Interval (feet TOIC):146-148
Initial Water Level (Feet TOIC):51.75
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and J. Ganz

Sample ID: PW-4-6R2
Purge Start Time:1421
Sample Time: 1530
Final Turbidity (NTUs) :11.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1456	7	5.79	15.40	277	24.6	0.02	282.7		
1501	8	5.79	16.08	276	0	0.06	277.2		2 Volumes
1506	9	5.78	15.53	275	12.9	0.09	293.7		
1511	10	5.78	15.32	275	12.1	0.12	300.4		
1516	11	5.81	15.31	274	11.7	0.15	303.8		3 Volumes
1521	12	5.81	15.17	273	11.4	0.15	307.8		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-1
Sample Date: 11/10/12
Sampling Device:Wattera
Well Depth (feet TOIC):71
Screen Interval (feet TOIC): 70-72
Initial Water Level (Feet TOIC): 53.79
Final Water Level (feet TOIC):53.79
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and D. Cuomo

Sample ID: PW-6-1-R2
Purge Start Time:1550
Sample Time: 1625
Final Turbidity (NTUs) : 8.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min):200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1600	2	5.72	15.33	91	8.8	7.12	168.1		3 Volumes
1605	3	5.72	15.27	94	10.0	7.74	177.0		
1610	4	5.71	15.28	93	9.1	7.86	183.3		
1615	5	5.74	15.32	92	9.3	8.03	185.0		
1620	6	5.71	15.19	92	8.9	8.11	186.9		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW6-2
Sample Date: 11/10/12
Sampling Device:Wattera
Well Depth (feet TOIC):91
Screen Interval (feet TOIC):90-92
Initial Water Level (Feet TOIC):53.82
Final Water Level (feet TOIC):53.83
Casing Type: **PVC** Steel (circle one)
Personnel:B. Hewitt and D. Cuomo

Sample ID: PW-6-2-R2
Purge Start Time:1440
Sample Time: 1530
Final Turbidity (NTUs) : 31.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1455	3	5.10	15.16	242	47.3	7.27	145.5		2 Volumes
1500	4	5.10	15.16	233	40.6	7.27	162.7		
1505	5	5.12	15.18	216	41.0	7.37	189.6		3 Volumes
1510	6	5.08	15.18	212	39.0	7.38	196.4		
1515	7	5.10	15.18	208	35.3	7.41	206.7		
1520	8	5.12	15.15	205	33.6	7.42	212.9		
1525	9	5.10	15.12	203	31.9	7.41	215.4		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW6-3
Sample Date:11/10/12
Sampling Device:Wattera
Well Depth (feet TOIC):119
Screen Interval (feet TOIC):118-120
Initial Water Level (Feet TOIC):53.80
Final Water Level (feet TOIC):53.82
Casing Type: **PVC** Steel (circle one)
Personnel:B.Hewitt and D. Cuomo

Sample ID: PW-6-3-R2
Purge Start Time:1155
Sample Time: 1420
Final Turbidity (NTUs) : 49.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1215	5	5.33	15.06	329	294.1	9.53	189.5		2 Volumes
1220	6.25	5.35	15.05	315	261.4	8.74	194.0		
1225	7.50	5.30	15.06	302	246.4	8.35	206.3		3 Volumes
1230	8.75	5.15	15.15	303	248.8	8.23	206.1		
1235	10	5.13	15.09	303	228.3	8.23	212.3		
1240	11.25	5.56	15.07	303	194.7	8.20	214.1		
1245	12.50	5.55	15.03	303	124.2	8.19	21.0		
1250	13.75	5.31	15.07	304	138.7	8.10	219.5		
1255	15.0	5.32	15.04	304	98.8	8.15	220.5		
1300	16.25	5.31	15.13	305	91.5	8.13	222.0		
1305	17.50	5.30	15.35	307	81.4	8.15	222.1		
1310	18.75	5.34	15.18	306	99.5	8.08	221.6		
1315	20	-	-	-	-	-	-		Change Flow Cell
1320	21.25	5.33	15.03	301	69.7	8.16	214.3		
1325	22.50	5.32	15.09	304	59.5	7.92	219.8		
1330	23.755	5.33	15.07	304	69.9	7.88	223.8		
1335	25	5.35	15.02	305	81.7	7.87	225.5		
1340	26.25	5.35	15.00	305	9.6	7.88	227.8		
1345	27.50	5.35	14.96	305	71.8	7.91	228.7		
1350	28.75	5.33	14.96	305	71.2	7.9	230.3		
1355	30	5.32	14.98	305	72.7	7.88	231.1		
1400	31.25	5.34	14.97	305	56.5	7.88	232.1		
1405	32.50	5.34	14.98	305	49.7	7.88	233.2		
1410	33.5	5.34	14.96	305	48.2	7.86	234.1		
1415	35	5.34	14.95	305	49.0	7.86	234.0		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW6-4
Sample Date: 11/10/12
Sampling Device:Wattera
Well Depth (feet TOIC):151
Screen Interval (feet TOIC):150-152
Initial Water Level (Feet TOIC):53.78
Final Water Level (feet TOIC):53.83
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and D. Cuomo

Sample ID: _PW-6-4-R2
Purge Start Time:1035
Sample Time:1520
Final Turbidity (NTUs) : 45.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min):200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 11.03 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1115	8	5.22	14.83	269	649.0	7.74	198.7		2 Volumes, DO membrane changed 1110
1120	9	5.46	14.85	271	589.0	7.46	202.1		
1125	10	5.57	15.04	260	229.4	7.15	215.4		
1130	11	5.43	15.13	255	336.0	7.01	225.0		
1135	12	5.48	15.07	251	370.6	6.86	233.7		3 Volumes
1140	13	5.53	15.02	250	345.2	6.84	238.1		
1145	14	5.54	15.01	249	299.7	6.83	242.0		
1150	15	5.69	14.99	249	292.2	6.84	247.4		
1155	16	5.84	14.94	248	315.1	6.82	249.2		
1200	17	5.42	15.04	248	245.0	6.83	252.2		
1205	18	5.90	15.03	248	194.5	6.83	253.9		
1210	19	-	-	-	-	-	-		Cleaned Flow Cell
1215	20	5.67	14.99	246	157.7	7.09	250.9		
1220	21	5.93	15.12	247	159.6	7.0	254.7		
1225	22	5.47	15.18	248	123.5	6.96	255.3		
1230	23	5.39	15.18	248	131.1	6.93	257.4		
1235	24	5.51	15.21	248	109.1	6.93	259.4		
1240	25	5.52	15.21	248	111.0	6.94	262.0		
1245	26	5.50	15.19	248	109.1	6.94	263.3		
1250	27	5.46	15.20	248	111.5	6.95	265.5		
1255	28	5.46	15.16	247	95.0	6.94	267.5		
1300	29	5.70	15.19	247	69.3	6.92	269.2		
1305	30	5.60	15.54	249	14.0	7.02	265.0		
1310	31	5.48	15.13	247	93.4	6.97	272.2		
1315	32	5.40	15.26	248	89.2	6.98	270.3		
1320	33	-	-	-	-	-	-		Cleaned Flow Cell

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1325	34	5.50	14.98	243	91.3	8.27	254.8		
1330	36	5.54	15.13	245	86.0	7.37	260.0		
1335	37	5.46	15.12	247	85.4	7.19	269.2		
1340	38	5.48	15.19	248	73.0	7.10	271.9		
1345	39	5.44	15.22	248	74.4	7.04	272.5		
1350	40	5.43	15.31	248	69.1	6.99	274.1		
1355	41	5.32	15.29	248	68.9	6.95	276.6		
1400	42	5.81	15.25	249	62.0	6.97	277.0		
1405	43	4.83	15.12	248	71.7	6.96	280.9		
1410	44	5.13	15.19	248	69.0	6.96	281.2		
1415	45	5.97	15.15	248	66.3	6.92	283.0		
1420	46	5.90	15.17	248	59.7	6.94	284.6		
1425	47	5.33	15.24	250	64.1	6.93	285.6		
1430	48	5.48	15.24	250	61.9	6.94	289.4		
1435	49	5.15	15.13	249	62.4	6.96	291.2		
1440	50	5.10	15.11	249	56.1	6.96	291.0		
1445	51	4.79	15.11	248	59.4	6.97	294.4		
1450	52	4.90	15.10	249	54.0	6.93	296.5		
1455	53	4.92	15.10	249	52.9	6.93	295.9		
1500	54	4.92	15.11	249	50.3	6.93	296.2		
1505	55	5.77	15.13	249	46.8	6.91	296.8		
1510	56	5.68	15.12	249	44.8	6.91	297.7		
1515	57	5.69	15.11	249	45.7	6.92	297.8		

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW6-5
Sample Date: 11/10/12
Sampling Device:Wattera
Well Depth (feet TOIC):167
Screen Interval (feet TOIC):166-168
Initial Water Level (Feet TOIC):53.87
Final Water Level (feet TOIC):53.81
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and D. Cuomo

Sample ID:PW-6-5-R2
Purge Start Time:1005
Sample Time: 1140
Final Turbidity (NTUs) : 47.3
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1050	9	5.24	15.11	248	91.4	0.10	200.7		2 Volumes
1055	10	5.16	15.09	249	84.8	0.10	211.0		
1100	11	5.25	15.11	252	77.0	0.13	217.7		
1105	12	5.30	15.16	252	71.5	0.16	219.5		
1110	13	5.26	15.21	253	68.5	0.27	229.0		3 Volumes
1115	14	5.31	15.23	253	53.2	0.34	232.5		
1120	15	5.31	15.29	254	59.3	0.37	231.7		
1125	16	5.30	15.52	255	48.7	0.44	231.3		
1130	17	5.31	15.49	255	49.4	0.45	231.0		
1135	18	5.31	15.51	255	47.3	0.47	231.2		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW6-6
Sample Date: 11/10/12
Sampling Device:Wattera
Well Depth (feet TOIC):181
Screen Interval (feet TOIC):180-182
Initial Water Level (Feet TOIC):53.85
Final Water Level (feet TOIC):53.87
Casing Type: **PVC** Steel (circle one)
Personnel:B. Hewitt and D. Cuomo

Sample ID: PW-6-6-R2
Purge Start Time:0812
Sample Time: 0940
Final Turbidity (NTUs) : 37.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0900	9.6	5.47	14.59	270	64.0	4.55	186.5		2 Volumes
0905	10.6	5.48	14.63	271	55.1	4.19	195.6		
0910	11.6	5.47	14.64	271	49.7	3.84	200.6		
0915	12.6	5.49	14.64	272	47.4	3.53	203.1		
0920	13.6	5.45	15.65	272	40.8	3.22	204.9		
0925	14.6	5.42	14.57	272	39.8	2.90	207.2		3 Volumes
0930	15.6	5.44	14.53	272	38.4	2.80	207.7		
0935	16.6	5.44	14.51	272	37.1	2.69	208.5		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW6-7
Sample Date: 11/10/2012
Sampling Device:Wattera
Well Depth (feet TOIC):221.5
Screen Interval (feet TOIC):221.5-222
Initial Water Level (Feet TOIC):54.35
Final Water Level (feet TOIC):54.35
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt and D. Cuomo

Sample ID:PW-6-7-R2
Purge Start Time:0800
Sample Time: 1015
Final Turbidity (NTUs) : 49.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 18.9 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0915	12.7	5.19	14.50	253	105.0	0.76	218.3	54.35	2 Volumes
0920	13.7	5.49	14.48	252	99.3	0.38	223.8		
0925	14.7	5.07	14.50	253	83.5	0.21	229.3		
0930	15.7	5.60	14.50	252	79.6	0.22	233.7		
0935	16.7	5.48	14.55	252	73.5	0.20	235.8		Changed batteries in YSI
0940	17.7	5.48	14.61	252	70.6	0.19	240.1		
0945	18.7	5.74	14.70	253	54.1	0.13	243.1		
0950	19.7	5.44	14.69	253	52.2	0.18	244.5		3 Volumes
0955	20.7	5.44	14.70	253	50.0	0.16	244.6		
1000	21.7	5.44	14.71	253	49.0	0.15	252.2		
1005	22.7	5.42	14.73	253	49.0	0.14	253.4		
1010	23.7	5.44	14.77	252	49.4	0.13	257.4		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW7-1
Sample Date: 11/06/12
Sampling Device:Wattera
Well Depth (feet TOIC):72
Screen Interval (feet TOIC):70-72
Initial Water Level (Feet TOIC):50.71
Final Water Level (feet TOIC):50.70
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale and J. Nelson

Sample ID: PW-7-1-R2
Purge Start Time:0910
Sample Time: 1030
Final Turbidity (NTUs) : 5.7
Casing Inner Diameter (inches):0.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0910	.4	4.99	15.30	512	125.7	9.75	187.3		
0915	2	4.90	15.25	526	683.3	9.02	195.5		
0920	4	5.00	15.27	526	31.7	8.95	197.6		
0925	6	5.03	15.25	524	15.3	8.84	200.0		
0930	8	5.04	15.24	523	14.2	8.88	201.9		
0935	10	5.06	15.21	519	8.3	8.78	204.0		
0940	12	5.02	15.23	518	11.4	8.78	205.2		
0945	14	5.01	15.25	517	8.5	8.80	206.9		
0950	16	5.02	15.28	515	14.3	8.85	209.8		
0955	18	5.00	15.24	514	11.5	8.88	210.8		
1000	20	4.98	15.23	513	11.5	8.79	211.8		
1005	22	5.06	15.26	511	8.2	8.80	213.4		
1010	24	5.07	15.26	510	8.1	8.87	215.2		
1015	26	5.03	15.25	510	6.0	8.87	216.0		
1020	28	5.03	15.24	510	5.9	8.89	216.7		
1025	30	5.07	15.27	509	5.7	8.91	217.9		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW7-2
Sample Date: 11/06/12
Sampling Device:Wattera
Well Depth (feet TOIC):96
Screen Interval (feet TOIC):95-97
Initial Water Level (Feet TOIC):50.71
Final Water Level (feet TOIC):50.71
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale and J. Nelson

Sample ID: PW-7-2-R2
Purge Start Time:1210
Sample Time: 1300
Final Turbidity (NTUs) : 3.7
Casing Inner Diameter (inches):0.5
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1210	.2	5.58	16.45	229	65.1	9.48	211.9		
1215	1	5.49	16.16	229	32.8	9.31	222.5		
1220	2	5.52	16.21	227	20.2	9.40	223.3		
1225	3	5.50	16.26	228	9.6	9.47	229.0		
1230	4	5.51	16.26	233	6.8	9.49	233.7		
1235	5	5.50	16.17	230	5.0	9.53	236.3		
1240	6	5.49	16.05	230	3.9	9.56	239.4		
1245	7	5.45	16.06	230	3.6	9.54	243.5		
1250	8	5.43	16.13	230	3.6	9.50	249.5		
1255	9	5.40	16.16	230	3.7	9.49	249.6		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW7-3
Sample Date: 11/06/12
Sampling Device:Wattera
Well Depth (feet TOIC):121
Screen Interval (feet TOIC):120-122
Initial Water Level (Feet TOIC):50.76
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel:J. Lacanlale and J. Nelson

Sample ID:PW-7-3-R2
Purge Start Time:1410
Sample Time: 1500
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):0.5
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1410	.2	5.43	16.41	219	0	9.76	171.9		
1415	1	5.31	16.20	217	0	9.47	185.7		
1420	2	5.32	16.36	215	0	9.61	192.6		
1425	3	5.33	16.13	214	0	9.68	200.0		
1430	4	5.31	16.21	214	0	9.73	205.6		
1435	5	5.35	16.41	213	0	9.80	216.5		
1440	6	5.33	16.26	214	0	9.83	220.8		
1445	7	5.32	16.13	214	0	9.88	223.2		
1450	8	5.35	16.03	214	0	9.90	226.5		
1455	9	5.34	16.01	214	0	9.86	228.6		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW7-4
Sample Date: 11/09/12
Sampling Device:Wattera
Well Depth (feet TOIC):146
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):50.84
Final Water Level (feet TOIC):50.82
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale and J. Nelson

Sample ID: _PW-7-4-R2
Purge Start Time:1010
Sample Time: 1205
Final Turbidity (NTUs) : 47.2
Casing Inner Diameter (inches):0.5
Purge Rate (ml/min): 150
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 10.96 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1010	0.150	5.83	14.56	228	109.1	7.33	164.2		
1034	3.63	5.81	14.90	238	25.9	7.67	187.0		
1058	7.26	5.80	15.24	241	21.5	7.81	196.0		
1122	10.89	5.70	15.36	243	13.4	7.83	201.1		
1127	11.64	5.73	15.12	240	15.0	7.90	202.5		
1132	12.39	5.69	15.22	240	12.6	7.86	204.6		
1137	13.14	5.65	15.29	240	12.2	7.89	204.8		
1142	13.89	5.62	15.15	240	22.2	7.93	207.7		
1147	14.64	5.60	15.12	239	46.3	7.88	207.7		
1152	15.39	5.65	15.24	239	45.0	7.88	209.0		
1157	16.14	5.62	15.28	239	47.2	7.88	208.5		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.:PW7-5
Sample Date: 11/9/2012
Sampling Device:Wattera
Well Depth (feet TOIC):171
Screen Interval (feet TOIC):169-171
Initial Water Level (Feet TOIC):50.84
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel:J. Nelson and J. Lacanlale

Sample ID: PW-7-5-R2
Purge Start Time:1145
Sample Time: 1355
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 120
Purge Rate d/sampling (ml/min):120
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 13.74L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1145	-	5.23	15.36	279	5.2	9.90	201.3		Initial
1220	4.54	5.24	15.32	300	2.0	10.46	318.6		1 Volumes
1300	9.08	5.23	15.57	303	2.0	10.62	359.5		2 Volumes
1320	11.35	5.19	15.55	303	0	10.63	380.1		
1325	11.95	5.15	15.60	303	0	10.47	376.8		
1330	12.55	5.20	15.61	304	0	10.48	355.2		
1335	13.15	5.19	15.65	304	0	10.58	353.1		
1340	13.75	5.21	15.60	303	0	10.57	355.8		3 Volumes

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW7-6
Sample Date: 11/07/12
Sampling Device:Wattera
Well Depth (feet TOIC):198
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):51.05
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel:

Sample ID:PW-7-6-R2
Purge Start Time:1040
Sample Time: 1325
Final Turbidity (NTUs) : 5.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 110
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1040	0.55	5.74	12.15	398	6.6	7.09	69.1		
1130	5.57	5.01	14.42	501	4.1	7.09	196		I Volume
1220	11.14	5.12	14.28	501	5.2	7.40	239		2 Volume
1245	13.89	5.18	14.07	497	5.2	7.44	251.9		
1250	14.44	5.1\9	14.11	499	5.4	7.44	253.0		
1255	15.00	5.11	14.22	500	5.4	7.46	252.0		
1300	15.55	5.13	14.26	500	5.4	7.46	254.0		
1305	16.10	5.15	14.19	500	5.6	7.47	256.0		
1310	16.65	5.12	14.18	500	5.7	7.47	254.0		
1315	17.2	5.04	14.08	500	5.6	7.47	259.0		3 Volumes

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW7-7
Sample Date: 11/07/12
Sampling Device:Wattera
Well Depth (feet TOIC):129.25
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):51.05
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel:J. Nelson and J. Lacanlale

Sample ID: PW-7-7-R2
Purge Start Time:1030
Sample Time: 1340
Final Turbidity (NTUs) : 41.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min): 140
Purge Rate d/sampling (ml/min):140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 19.34L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1030	.140	5.95	13.52	549	527	9.83	83.7		
1116	6.44	5.47	14.33	613	48.8	9.33	129.6		
1202	12.88	5.45	14.43	622	38.8	9.68	152.0		
1248	19.32	5.47	14.17	625	42.4	9.77	165.7		
1253	20.02	5.47	14.23	626	43.7	9.76	167.2		
1258	20.72	5.49	14.35	624	58.0	9.71	168.0		
1303	21.42	5.45	14.38	626	62.3	9.72	169.7		
1308	22.12	5.43	14.40	628	64.0	9.73	170.3		
1313	22.82	5.42	14.06	627	57.7	9.83	171.4		
1318	23.52	5.41	14.06	627	43.0	9.84	172.7		
1323	24.22	5.44	14.03	627	43.2	9.82	173.7		
1328	24.92	5.42	13.99	627	41.1	9.86	174.5		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-325
Sample Date: 11/12/2012
Sampling Device:
Well Depth (feet TOIC):325
Screen Interval (feet TOIC):315-325
Initial Water Level (Feet TOIC):47.47
Final Water Level (feet TOIC):47.47
Casing Type: PVC Steel (circle one)
Personnel: John Lacanlale, D. Cuomo

Sample ID: S-1-325-R2
Purge Start Time: 1405
Sample Time: 1705
Final Turbidity (NTUs) : 32.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400-500
Purge Rate d/sampling (ml/min):180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 22.102 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1405	2	5.17	15.13	342	1260	6.67	103	47.47	
1410	4	4.36	14.84	328	656	9.66	222	47.47	
1415	6	4.27	14.77	327	625.8	9.53	230	47.47	
1420	-	-	-	-	-	-	-	-	Cleaned flow through cell
1425	-	-	-	-	-	-	-	-	Change purge rate to 500 ml/min
1430	7.5	4.23	14.73	327	519.5	9.98	275.4	47.47	
1435	10	4.29	14.69	327	310.5	9.55	272.0	47.47	
1440	12.5	4.38	14.60	326	301.6	9.30	283.9	47.47	
1445	15.0	4.45	14.52	325	247.1	9.16	295.6	47.47	
1450	17.5	4.83	15.60	337	240.6	12.43	289.5	47.47	
1455	20.0	4.72	14.81	329	193.7	12.89	299.6	47.47	
1500	22.5	4.73	14.72	328	172.0	12.79	303.3	47.47	
1505	25.0	4.83	14.74	324	219.0	12.33	306.4	47.47	
1510	27.5	4.91	14.65	327	233.4	11.55	307.5	47.47	
1515	30.0	5.02	14.57	326	218.7	10.96	295.9	47.47	
1520	32.5	4.99	14.57	325	152.2	10.72	308.9	47.47	
1525	35.0	4.99	14.47	325	127.9	10.66	316.0	47.47	
1530	37.5	5.06	14.46	326	169.9	10.66	309.2	47.47	
1535	40.0	5.13	14.64	326	175.3	10.44	302.0	47.47	
1540	42.5	-	-	-	-	-	-	-	Cleaned flow through cell
1545	45.0	5.38	14.48	364	142.6	4.01	178.6	47.47	
1550	47.5	5.39	14.41	364	164.1	3.81	175.3	47.47	
1555	50.0	5.41	14.24	362	137.7	3.69	170.8	47.47	
1600	52.5	5.46	14.12	362	131.3	3.54	159.9	47.47	
1605	55.0	5.45	14.19	362	145.9	3.53	161.1	47.47	
1610	57.5	5.43	14.12	361	127.4	3.58	165.0	47.47	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: S-1-325 **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1615	60.0	5.44	14.16	361	98.0	3.52	166.5	47.47	
1620	62.5	5.44	14.21	361	88.4	3.52	162.7	47.47	
1625	65.0	5.39	14.03	360	76.8	3.57	177.0	47.47	
1630	67.5	5.39	13.93	358	62.0	3.55	173.9	47.47	
1635	70.0	5.39	13.91	357	54.2	3.54	177.7	47.47	
1640	72.5	5.32	13.88	357	43.7	3.59	195.3	47.47	
1645	75.0	5.31	13.85	356	38.1	3.61	201.9	47.47	
1650	77.5	5.28	13.85	355	33.0	3.62	202.8	47.47	
1655	80.0	5.31	13.87	356	33.8	3.57	204.2	47.47	
1700	82.5	5.27	13.84	355	32.8	3.59	211.2	47.47	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-450
Sample Date: 11/12/2012
Sampling Device:
Well Depth (feet TOIC):450
Screen Interval (feet TOIC):440-450
Initial Water Level (Feet TOIC):47.55
Final Water Level (feet TOIC):47.68
Casing Type: PVC Steel (circle one)
Personnel: J. Lacanlale, D. Cuomo

Sample ID: S-1-450-R2
Purge Start Time: 1115
Sample Time: 1515
Final Turbidity (NTUs) : 47.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 300-400
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #:31.5 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1125	.300	8.9	15.33	111	109.0	9.43	127.4	47.55	0938 Data logger pulled out
1130	1.5	7.79	15.22	126	480.6	8.35	-24.4	47.55	
1135	3.0	6.78	15.18	161	311.0	14.45	52.4	47.55	
1140	4.5	5.74	15.14	179	150.5	28.09	156.3	47.55	
1145	6.0	5.66	15.05	179	154.2	23.20	163.2	47.55	
1150	7.5	5.44	14.87	178	166.3	24.33	179.1	47.20	
1155	9.0	5.36	14.84	180	177.7	24.91	193.3	-	Purge rate=400 ml/min
1200	11.0	5.34	14.85	197.1	141.3	25.33	198.3	45.78	
1205	13.0	5.33	14.90	182	215.7	25.87	201.9	-	
1210	15.0	5.81	15.08	210	80.6	6.30	163.6	-	
1215	17.0	5.48	14.79	207	74.3	6.20	156.5	-	
1220	19.0	5.38	14.58	206	69.7	5.98	158.0	-	
1225	21.0	5.38	14.50	205	81.2	5.94	160.2	-	
1230	23.0	5.38	14.58	205	71.6	5.88	162.2	-	
1235	25.0	5.39	14.52	205	71.5	5.85	163.8	-	
1240	27.0	5.40	14.55	206	68.4	5.83	163.4	-	
1245	29.0	5.42	14.53	205	73.6	5.76	162.8	47.68	
1250	31.0	5.43	14.53	205	75.5	5.68	162.2	47.68	
1255	33.0	5.46	14.55	206	75.5	5.60	160.0	47.68	
1300	35.0	5.48	14.54	205	83.7	5.56	159.0	47.68	
1305	37.0	5.49	14.53	205	81.7	5.50	157.5	47.68	
1310	39.0	5.51	14.55	205	70.8	5.46	157.1	47.68	
1315	41.0	5.54	14.52	205	77.6	5.36	154.5	47.68	
1320	43.0	5.55	14.61	205	74.2	5.66	155.1	47.68	
1325	45.0	5.57	14.58	206	83.6	5.42	154.4	-	
1330	47.0	5.57	14.58	206	77.0	5.41	154.6	-	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: S-1-450 **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1335	49.0	5.57	14.59	206	80.9	5.39	154.6	-	
1340	51.0	5.59	14.55	205	66.9	5.31	155.1	-	
1345	53.0	5.60	14.61	206	67.4	5.26	155.4	-	
1350	55.0	5.60	14.80	206	-	-	-	-	
1355	57.0	5.60	14.86	208	68.0	-	-	-	
1425	59.0	5.70	15.16	209	107	5.94	132.8	-	Battery recharged for compressor
1430	61.0	5.65	14.40	206	72.5	5.43	140.6	-	
1435	63.0	5.65	14.30	205	57.9	5.23	144.7	-	
1440	65.0	5.64	14.36	205	59.5	5.20	147.0	-	
1445	67.0	5.63	14.35	205	53.9	5.20	151.3	-	
1450	69.0	5.61	14.35	205	50.5	5.23	157.2	-	
1455	71.0	5.58	14.31	205	50.4	5.29	164.0	-	
1500	73.0	5.56	14.80	205	48.3	5.23	167.6	-	
1505	75.0	5.56	14.80	205	48.2	5.23	167.6	47.68	
1510	77.0	5.58	14.76	208	47.8	5.28	166.6	47.68	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W05-78
Sample Date: 11/05/12
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):68-78
Initial Water Level (Feet TOIC):61.55
Final Water Level (feet TOIC):61.55
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: W-05-78-R2
Purge Start Time: 1222
Sample Time: 1315
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches):6.0
Purge Rate (ml/min): 140
Purge Rate d/sampling (ml/min):140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.45 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1222	.14	6.16	16.04	217	0	44.31	172.2	61.65	
1227	.7	6.13	15.87	223	0	38.21	184.2	61.65	
1232	1.4	6.13	16.00	226	0	34.41	184.4	61.65	
1237	2.1	6.13	15.97	227	0	2.81	181.0	61.65	
1242	2.8	6.13	15.98	228	0	2.49	178.7	61.65	
1247	3.5	6.13	16.22	228	0	2.17	175.6	61.65	
1252	4.2	6.12	16.12	228	0	2.11	178.2	61.65	
1257	4.9	6.11	15.78	225	0	1.96	185.4	61.65	
1302	5.6	6.13	15.83	225	0	1.79	188.0	61.65	
1307	6.3	6.14	16.08	226	0	1.68	188.6	61.65	
1312	7.0	6.14	16.11	226	0	1.63	191.4	61.65	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W6-79
Sample Date: 11/06/12
Sampling Device:Bladder Pump
Well Depth (feet TOIC):79
Screen Interval (feet TOIC):69-79
Initial Water Level (Feet TOIC):60.99
Final Water Level (feet TOIC):60.99
Casing Type: **PVC** Steel (circle one)
Personnel:S. Kromhout

Sample ID: W6-79-R2
Purge Start Time:1525
Sample Time: 1605
Final Turbidity (NTUs) : 43.6
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min):140
Purge Rate d/sampling (ml/min):140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.52 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1525	.14	8.92	15.14	71	49.6	11.37	124.1	60.99	
1530	.7	8.06	15.14	73	48.6	11.06	123.4	60.99	
1535	1.4	6.61	15.34	75	42.4	10.77	123.3	60.99	
1540	2.1	6.57	15.72	76	43.1	10.41	120.2	60.99	
1545	2.8	6.33	15.58	77	50.1	10.29	126.9	60.99	
1550	3.5	6.74	15.56	77	46.6	10.11	129.6	60.99	
1555	4.2	6.67	15.75	78	46.9	10.04	131.7	60.99	
1600	4.9	6.64	15.77	78	43.6	9.89	135.3	60.99	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W10-71
Sample Date: 11/06/12
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC):71.0
Screen Interval (feet TOIC):61-71
Initial Water Level (Feet TOIC):59.10
Final Water Level (feet TOIC):59.09
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron

Sample ID: W-10-71-R2
Purge Start Time: 1530
Sample Time: 1630
Final Turbidity (NTUs) : 26.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 190
Purge Rate d/sampling (ml/min):190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.28 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1530	.190	5.45	15.16	323	253	0.64	267.3	59.09	New tubing, old dedicated tubing had
1535	1.14	5.44	15.44	330	196.8	0.63	268.9	59.09	Holes in air line
1540	2.09	5.44	15.77	332	136.3	0.62	273.2	59.09	
1545	3.04	5.44	15.57	335	111.5	0.61	272.4	59.09	
1550	3.99	5.44	15.59	333	87.7	0.60	272.2	59.09	
1555	4.94	5.43	15.46	328	62.6	0.59	271.8	59.09	
1600	5.89	5.40	15.44	324	53.1	0.58	272.7	59.09	
1605	6.84	5.43	15.49	320	41.3	0.58	269.6	59.09	
1610	7.79	5.40	15.43	316	36.4	0.57	275.7	59.09	
1615	8.74	5.30	15.37	314	28.3	0.57	277.5	59.09	
1620	9.69	5.39	15.33	310	25.6	0.57	273.1	59.09	
1625	10.64	5.39	15.35	308	26.4	0.57	272.4	59.09	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-120
Sample Date: 11/14/2012
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC): 110-120
Initial Water Level (Feet TOIC):59.75
Final Water Level (feet TOIC): 59.90
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: _W-10-120-R2
Purge Start Time: 1003
Sample Time: _____1400
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches):2
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
3x Purge System Volume #: 111.5 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1003	2.5								
1008	5.0	6.19	15.83	291	0.5	4.81	222.6		
1013	7.5	6.16	15.71	286	1.7	5.06	228.2		
1018	10.0	6.15	15.77	286	1.2	5.02	230.7		
1023	12.5	6.15	15.80	288	0.7	5.06	237.9		
1117	37.17	5.68	15.67	338	0.8	5.68	277.9		1st well volume=9.82 gal
1231	74.34	5.56	15.80	330	0	14.02	256.1		2nd well volume=19.64 gal
1335	106.5	5.52	16.05	330	0	19.71	264.9		
1340	109.0	5.51	16.04	331	0	20.42	264.7		
1345	111.54	5.50	15.91	330	0	19.72	264.5		3rd well volume=29.46 gal
1350	114.04	5.54	15.89	330	0	20.71	226.9		

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W12-70
Sample Date: 11/05/12
Sampling Device: Bladder Pump
Well Depth (feet TOIC):70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):58.88
Final Water Level (feet TOIC):58.88
Casing Type: PVC **Steel** (circle one)
Personnel: S. Kromhout

Sample ID: W12-70-R2
Purge Start Time: 1250
Sample Time:1345
Final Turbidity (NTUs) : 2.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.07 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1250	.2	5.49	145.86	24	22.9	10.17	193.2	58.88	
1255	1	5.73	15.92	24	15.0	10.07	189.3	58.88	
1300	2	5.68	15.85	24	11.2	10.10	191.8	58.88	
1305	3	5.71	16.00	24	9.6	10.15	191.7	58.88	
1310	4	5.75	16.00	24	7.7	10.16	192.5	58.88	
1315	5	5.71	15.89	24	6.6	10.24	192.1	58.88	
1320	6	5.70	15.81	24	4.5	10.28	193.8	58.88	
1325	7	5.71	15.55	24	4.7	10.32	193.6	58.88	
1330	8	5.61	15.62	24	2.9	10.36	194.4	58.88	
1335	9	5.65	15.90	24	2.7	10.38	194.5	58.88	
1340	10	5.77	15.97	24	2.6	10.38	193.2	58.88	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W12-120
Sample Date: 11/05/12
Sampling Device:Well Wizard Bladder Pump
Well Depth (feet TOIC):120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):59.00
Final Water Level (feet TOIC):59.00
Casing Type: PVC **Steel** (circle one)
Personnel:R. Malaniak

Sample ID: W-12-120R2
Purge Start Time:1155
Sample Time: 1310
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.14 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1201	.250	5.26	15.45	82	14.7	10.43	194.4	59.0	
1206	1.25	5.25	15.70	82	0.9	10.12	220.0	59.0	
1211	3.5	5.32	15.92	81	0	10.03	229.0	59.0	
1216	4.75	5.32	16.03	82	0	9.94	243.2	59.0	
1221	6.0	5.31	16.16	82	0	9.82	253.7	59.0	
1226	7.25	5.31	15.92	82	0	9.87	262.6	59.0	
1231	8.5	5.31	16.02	82	0	9.77	269.9	59.0	
1236	9.75	5.28	15.89	81	0	9.77	278.5	59.0	
1241	10.00	5.26	15.95	81	0	9.79	285.7	59.0	
1246	11.25	5.28	15.97	81	0	9.71	291.4	59.0	
1251	11.50	5.26	15.96	81	0	9.70	297.9	59.0	
1256	11.75	5.27	15.83	81	0	9.79	301.5	59.0	
1301	12.0	5.28	15.97	81	0	9.70	305.3	59.0	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W16-148
Sample Date: 11/06/12
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC):148
Screen Interval (feet TOIC):138-148
Initial Water Level (Feet TOIC):60.20
Final Water Level (feet TOIC):60.27
Casing Type: PVC **Steel** (circle one)
Personnel: R. Malaniak

Sample ID: W-16-148-R2
Purge Start Time:1000
Sample Time: 1220
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.9 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1010	.2	5.66	13.93	171	48.0	10.90	181.3	60.27	
1015	1	5.63	14.05	180	24.0	9.52	203.7	60.27	
1020	2	5.61	14.39	183	11.8	9.21	221.6	60.27	
1025	3	5.58	14.49	186	4.8	9.14	237.6	60.27	
1030	4	5.53	14.52	187	2.8	9.05	259.4	60.27	
1035	5	5.50	14.52	189	1.2	9.04	280.0	60.27	
1040	6	5.44	14.62	191	0	9.03	306.9	60.27	
1045	7	5.37	14.69	196	2.7	9.03	344.1	60.27	
1050	8	5.31	14.62	200	2.1	8.99	364.5	60.27	
1055	9	5.31	14.76	201	0	8.93	380.7	60.27	
1100	10	5.31	14.99	203	0	8.85	392.7	60.27	
1105	11	530	14.97	207	0	8.84	405.4	60.27	
1110	12	5.26	15.03	208	0	8.83	420.7	60.27	
1115	13	5.21	14.99	210	0	8.78	432.8	60.27	
1120	14	5.18	15.03	211	0	8.79	448.3	60.27	
1125	15	5.15	15.17	212	0	8.72	463.8	60.27	
1130	16	5.09	15.20	211	0	8.75	470	60.27	
1135	17	5.06	15.06	216	0	8.74	479	60.27	
1140	18	5.03	15.08	215	0	8.83	490.4	60.27	
1145	19	5.02	15.09	228	0	8.84	347.5	60.27	
1150	20	5.01	14.56	222	0	8.87	416.0	60.27	
1155	21	5.05	14.54	219	0	8.79	458.0	60.27	
1200	22	5.11	14.45	222	0	8.78	478.0	60.27	
1205	23	5.15	14.53	223	0	8.79	486.0	60.27	
1210	24	5.17	14.44	222	0	8.71	490.0	60.27	
1215	25	5.19	14.53	222	0	8.74	492.0	60.27	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W17-130
Sample Date: 11/06/12
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC):130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):60.00
Final Water Level (feet TOIC):60.06
Casing Type: **PVC** Steel (circle one)
Personnel: R.Malaniak

Sample ID: W-17-130-R2
Purge Start Time:1410
Sample Time: 1545
Final Turbidity (NTUs) : 19.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.7 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1416	.2	6.22	14.15	111	46.2	7.89	188.6	60.04	
1421	1	6.15	14.26	111	34.6	7.81	217.5	60.04	
1426	2	6.11	14.24	110	26.5	7.79	242.7	60.04	
1431	3	6.01	14.27	107	20.5	7.98	263.4	60.04	
1436	4	5.91	14.24	104	12.4	8.01	290.1	60.06	
1441	5	5.83	14.19	102	7.5	8.18	312.1	60.06	
1446	6	5.78	14.18	101	4.7	8.16	332.0	60.06	
1451	7	5.68	14.22	98	1.8	8.57	384.8	60.06	
1456	8	5.68	14.32	91	1.9	8.41	389.0	60.06	
1501	9	5.66	14.35	98	1.9	8.36	391.7	60.06	
1506	10	5.65	14.23	97	21.8	8.61	404.1	60.06	
1511	11	5.62	14.09	97	20.8	8.45	414.2	60.06	
1516	12	5.61	14.02	96	20.8	8.63	420.3	60.06	
1521	13	5.60	13.98	96	19.47	8.72	425.7	60.06	
1526	14	5.60	13.88	95	20.5	8.56	430.9	60.06	
1531	15	5.54	13.71	95	19.5	8.64	436.7	60.06	
1536	16	5.59	13.69	95	19.5	8.64	439.1	60.06	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-18-150
Sample Date: 11/14/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC): 140-150
Initial Water Level (Feet TOIC): 54.95
Final Water Level (feet TOIC): 57.00
Casing Type: PVC **Steel** (circle one)
Personnel: M. Cameron

Sample ID: _W-18-150-R2
Purge Start Time:1118
Sample Time: 1310
Final Turbidity (NTUs) : 21.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 8.54 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1118	0.260	6.60	13.76	122	89.4	3.34	109.6	55.65	
1123	1.3	6.63	13.71	120	188.7	1.73	62.8	56.40	Lowered purge rate to 160 ml/min
1128	2.1	6.53	13.94	134	50.1	1.50	57.6	56.65	Lowered purge rate to 100 ml/min
1133	2.6	6.49	14.37	139	36.0	1.39	50.2	56.65	
1138	3.1	6.48	14.66	141	63.0	1.42	46.5	56.73	
1143	3.6	6.47	14.52	151	55.6	1.45	43.3	56.75	
1148	4.1	6.43	14.32	153	71.0	1.45	41.4	56.80	
1153	4.6	6.43	14.43	163	46.4	1.41	40.9	56.80	
1158	5.1	6.43	14.45	169	77.5	1.37	40.4	56.80	
1203	5.6	6.36	14.18	172	79.2	1.30	38.8	56.82	
1208	6.1	6.44	14.27	172	76.0	1.26	38.3	56.85	
1213	6.6	6.45	14.28	174	84.5	1.20	37.3	56.90	
1218	7.1	6.46	14.23	176	80.9	1.15	36.0	56.90	
1223	7.6	6.47	14.28	178	76.7	1.08	34.9	56.90	
1228	8.1	6.48	14.37	179	71.5	1.05	34.5	56.90	
1233	8.6	-	-	-	-	-	-	-	Emptied flow through cell
1243	9.1	6.54	13.82	184	68.5	3.18	32.7	57.00	
1248	9.6	6.52	13.92	190	57.8	1.48	30.4	57.00	
1253	10.1	6.50	13.79	206	75.6	1.18	26.8	57.00	
1258	10.6	6.50	13.72	221	40.4	1.00	21.2	57.00	
1303	11.1	6.54	14.05	213	37.3	0.96	18.4	57.00	
1308	11.6	6.52	14.23	226	43.1	0.91	17.0	57.00	
1313	12.1	6.53	14.42	243	65.9	0.89	14.5	57.00	
1318	12.6	6.52	14.39	252	19.7	0.86	13.4	57.00	
1323	13.1	6.51	14.41	255	21.3	0.84	12.8	57.00	
1328	13.6	6.52	14.39	259	32.7	0.82	12.7	57.00	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1333	14.1	6.49	14.06	262	116.2	0.79	12.8	57.00	
1338	14.6	6.51	13.92	265	73.5	0.78	13.2	57.00	
1343	15.1	6.47	14.11	267	52.2	0.76	12.6	57.00	
1348	15.6	6.54	14.33	269	22.4	0.74	12.4	57.00	
1353	16.1	6.51	14.46	270	22.2	0.73	12.3	57.00	
1358	16.6	6.50	14.55	272	21.9	0.71	12.2	57.00	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W19-110
Sample Date: 11/06/12
Sampling Device:QED Bladder Pump
Well Depth (feet TOIC):110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):55.02
Final Water Level (feet TOIC):55.04
Casing Type: **PVC** Steel (circle one)
Personnel: M.Cameron

Sample ID: W-19-110-R2
Purge Start Time:1440
Sample Time: 1620
Final Turbidity (NTUs) : 17.5
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 170
Purge Rate d/sampling (ml/min):170
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 4.9L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1440	.170	5.93	14.79	152	247.5	1.64	229.6	55.04	
1445	1.02	5.86	14.79	151	245.6	1.87	245.7	55.04	
1450	1.87	5.84	14.72	149	272.2	1.91	246.6	55.04	
1455	2.72	5.83	14.70	148	227.9	1.96	247.3	55.04	
1500	3.57	5.80	14.58	147	186.7	198	250.5	55.04	
1505	4.42	5.80	14.53	145	139.0	2.02	247.3	55.04	
1510	5.27	5.79	14.61	144	155.5	2.05	246.0	55.04	
1515	6.12	5.79	14.45	143	91.0	2.08	244.4	55.04	
1520	6.97	5.77	14.46	143	72.0	2.10	239.2	55.04	
1525	7.82	5.76	14.47	142	56.7	2.12	239.9	55.04	
1530	8.67	5.77	14.38	141	49.5	2.13	239.4	55.04	
1535	9.52	5.75	14.29	140	45.4	2.15	240.3	55.04	
1540	10.37	5.75	14.19	140	34.9	2.16	241.8	55.04	
1545	11.22	5.76	14.10	139	29.2	2.20	242.3	55.04	
1550	12.07	5.76	14.08	139	26.1	2.20	243.0	55.04	
1555	12.96	5.78	14.55	139	27.6	2.20	244.1	55.04	
1600	13.77	5.72	14.16	139	19.0	2.21	245.3	55.04	
1605	14.62	5.75	14.47	139	19.4	2.21	246.2	55.04	
1610	15.47	5.75	14.34	139	17.5	2.23	247.8	55.04	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W19-150
Sample Date: 11/06/12
Sampling Device:QED Bladder Pump
Well Depth (feet TOIC):150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):55.02
Final Water Level (feet TOIC):55.12
Casing Type: **PVC** Steel (circle one)
Personnel: D. Cuomo

Sample ID: W-19-150-R2
Purge Start Time:1430
Sample Time: 1700
Final Turbidity (NTUs) : 48.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 150
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 6.35 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1445	0.15	6.34	14.25	279	133.9	14.62	190.6	55.02	
1450	.9	6.33	14.21	280	139.6	14.18	198.3	55.15	
1455	1.65	6.30	14.29	282	216.0	13.55	211.7	55.15	
1500	2.4	6.28	14.40	287	223.3	12.99	217.1	55.20	New Flow Rate at 120 ml/min
1505	3.0	6.24	14.26	295	199.8	11.70	219.3	55.20	
1510	3.6	6.24	14.34	298	200.9	11.46	219.1	55.22	
1515	4.2	6.22	14.25	301	177.2	11.02	218.8	55.22	
1520	4.8	6.19	14.22	309	164.2	10.44	219.6	55.20	
1525	5.4	6.17	14.11	315	145.3	10.15	220.0	55.20	
1530	6.0	6.15	14.04	323	119.7	9.69	221.2	55.20	30 minute purging hiatus due to
1600	6.7	6.15	14.07	349	88.8	20.6	212.7	55.12	Scheduling conflict on site
1605	7.4	6.17	13.98	355	84.4	12.08	227.3	55.12	Purge Rate= 140 ml/min
1610	9.1	6.09	13.60	359	81.9	11.23	221.9	55.20	
1615	9.8	6.10	13.81	374	77.2	10.34	235.5	55.20	
1620	11.5	6.07	13.91	397	68.0	9.69	229.1	55.20	
1625	12.2	6.11	13.95	414	61.3	8.51	238.9	55.20	
1630	12.9	6.03	13.96	416	66.4	8.23	247.3	55.20	
1635	13.6	5.96	13.89	427	59.8	7.63	241.8	55.20	
1640	14.3	6.31	13.78	430	59.4	7.31	249.3	55.20	
1645	15.0	5.93	13.98	439	50.0	6.94	245.7	55.12	
1650	15.7	5.92	13.92	442	48.4	6.38	256.6	55.12	
1655	16.4	5.92	13.87	442	48.2	6.36	250.5	55.12	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W20-120
Sample Date: 11/06/12
Sampling Device:QED Bladder Pump
Well Depth (feet TOIC):120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):56.05
Final Water Level (feet TOIC):56.10
Casing Type: **PVC** Steel (circle one)
Personnel:M. Cameron

Sample ID: W-120-120-R2
Purge Start Time:0946
Sample Time: 1125
Final Turbidity (NTUs) : 18.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 150
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 5.24 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0946	.150	5.58	13.99	289	441.1	4.44	276.0	56.12	
0951	.90	5.56	14.23	315	280.3	3.72	278.7	56.12	
0956	1.65	5.56	14.10	323	165.6	3.22	274.8	56.12	
1001	2.4	5.52	14.00	328	148.9	2.84	275.0	56.12	
1006	3.15	5.53	13.95	332	124.3	2.55	275.8	56.12	
1011	3.90	5.53	14.07	337	95.7	2.26	275.8	56.12	
1016	4.65	5.50	13.92	340	59.1	1.97	276.9	56.12	
1021	5.40	5.50	13.93	344	23.4	1.73	276.5	56.12	
1026	6.15	5.51	13.96	347	26.6	1.54	276.0	56.12	
1031	6.9	5.50	14.83	360	10.8	1.29	275.3	56.12	
1036	7.65	5.51	15.18	368	11.3	1.03	275.1	56.12	
1041	8.4	5.51	14.84	365	35.6	0.89	273.0	56.10	
1046	9.15	5.51	14.83	366	14.5	0.83	273.4	56.10	
1051	9.9	5.52	14.66	365	25.4	0.75	274.3	56.10	
1056	10.65	5.51	14.63	372	15.4	0.64	274.8	56.10	
1101	11.40	5.51	14.77	375	16.4	0.59	273.7	56.10	
1106	12.05	5.51	14.93	379	18.5	0.53	273.1	56.10	Flow rate at 100 ml/min changed to 150
1111	12.7	5.51	14.82	379	18.3	0.50	272.5	56.10	ml/min
1116	13.35	5.51	15.05	382	18.8	0.47	273.2	56.10	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W20-160
Sample Date: 11/06/12
Sampling Device:Bladder Pump
Well Depth (feet TOIC):160
Screen Interval (feet TOIC):150-160
Initial Water Level (Feet TOIC):56.20
Final Water Level (feet TOIC):56.20
Casing Type: **PVC** Steel (circle one)
Personnel:D. Cuomo and M. Cameron

Sample ID: W-20-160-R2
Purge Start Time:1012
Sample Time: 1310
Final Turbidity (NTUs) : 19.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 100
Purge Rate d/sampling (ml/min):100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 6.7 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1155	0.1	5.93	14.94	328	124.9	23.15	262.1	56.20	
1200	0.6	5.91	14.93	336	102.0	20.22	261.9	56.51	
1205	1.1	5.91	15.02	338	80.0	18.42	261.3	56.46	
1210	1.6	5.90	15.06	339	56.0	16.36	259.7	56.46	
1215	2.1	5.91	15.10	339	53.0	15.16	258.4	56.20	
1220	2.6	5.90	14.85	339	46.0	14.36	257.1	56.20	
1225	3.1	5.89	14.79	338	39.3	13.63	256.6	56.20	
1230	3.6	5.89	14.82	338	38.5	13.28	256.2	56.20	
1235	4.1	5.90	14.72	338	30.2	12.65	255.8	56.20	
1240	4.6	5.90	14.85	337	25.4	12.22	255.2	56.20	
1245	5.1	5.90	14.87	337	26.3	11.85	254.9	56.20	
1250	5.6	5.90	14.80	337	25.5	11.59	255.2	56.51	
1255	6.1	5.90	14.79	336	20.4	11.15	255.4	56.51	
1300	6.6	5.90	14.77	337	21.1	10.94	255.4	56.15	
1305	7.1	5.89	14.69	336	19.9	10.80	255.2	56.20	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W22-95
Sample Date: 11/06/12
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC):95
Screen Interval (feet TOIC):85-95
Initial Water Level (Feet TOIC):59.98
Final Water Level (feet TOIC):59.45
Casing Type: PVC **Steel** (circle one)
Personnel: D. Cuomo

Sample ID: W-22-95-R2
Purge Start Time:1255
Sample Time: 1407
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 150
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 4.163 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1317	.15	5.44	14.32	484	114.4	7.68	265.8	59.51	First system volume was rusty in color
1322	.9	5.50	15.66	472	35.6	8.10	261.5	59.45	
1327	1.65	5.42	15.42	472	48.2	7.35	262.7	59.45	
1332	2.40	5.40	15.55	474	29.2	6.90	263.1	59.44	
1337	3.15	5.38	15.24	472	47.3	6.60	266.2	59.47	
1342	3.90	5.38	15.24	473	28.9	6.50	266.7	59.42	
1347	4.65	5.35	15.08	470	2.5	6.33	271.2	59.45	Cleaned optics
1352	5.40	5.37	15.20	469	0	6.24	269.6	59.45	
1357	6.15	5.35	15.12	467	0	6.11	273.4	59.45	
1402	6.90	5.34	15.16	466	0	6.11	275.7	59.45	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.:W23-110
Sample Date: 11/07/12
Sampling Device: Bladder Pump
Well Depth (feet TOIC):110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):55.45
Final Water Level (feet TOIC):55.41
Casing Type: **PVC** Steel (circle one)
Personnel:D. Cuomo

Sample ID: W-23-110-R2
Purge Start Time:1040
Sample Time: 1245
Final Turbidity (NTUs) : 2.02
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 210
Purge Rate d/sampling (ml/min):210
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 4.8 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1050	.21	6.35	13.19	278	929.7	0.11	-13.0	55.45	
1055	1.26	6.47	13.75	306	723.0	-0.1	-32.8	55.41	
1100	2.31	6.51	13.73	316	518.9	-1.2	-41.2	55.41	
1105	3.36	6.52	13.76	319	445.6	-1.1	-44.3	55.41	
1110	4.41	6.59	13.70	327	323.5	-2.1	-53.2	55.41	
1115	5.46	6.59	13.74	337	246.4	-0.26	-65.4	55.41	
1120	6.51	6.61	13.70	339	183.5	-0.25	-70.9	55.41	
1125	7.56	6.63	13.57	347	166.6	-0.26	-77.1	55.41	
1130	8.61	6.66	13.58	355	118.2	-0.26	-85.9	55.41	
1135	9.66	6.69	13.39	352	91.6	-0.27	-89.2	55.41	
1140	10.71	6.69	13.41	352	81.3	-0.27	-91.9	55.41	
1145	11.76	6.70	13.50	353	68.9	-0.29	-92.4	55.41	
1150	12.81	6.71	13.40	354	60.2	-0.27	-88.9	55.41	
1155	13.86	-	-	-	-	-	-	-	Replacing YSI D.O. membrane
1200	14.91	-	-	-	-	-	-	-	
1205	15.96	-	-	-	-	-	-	-	
1210	17.01	-	-	-	-	-	-	-	
1215	18.06	6.60	13.34	357	30.4	4.71	-82.7	55.41	
1220	19.11	6.68	12.94	358	27.3	1.93	-97.7	55.41	
1225	20.16	6.72	13.45	357	21.9	1.57	-103.7	55.41	
1230	21.21	6.73	13.41	357	21.3	1.44	-104.8	55.41	
1235	22.26	6.74	13.39	356	20.3	1.32	-104.6	55.41	
1240	23.31	6.74	13.38	356	20.2	1.30	-104.4	55.41	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W24-260
Sample Date: 11/12/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC):260
Screen Interval (feet TOIC):250-260
Initial Water Level (Feet TOIC):55.24
Final Water Level (feet TOIC):55.24
Casing Type: **PVC** Steel (circle one)
Personnel:T. Dillon, S. Kromhout

Sample ID: W-24-260-R2
Purge Start Time: 1600
Sample Time: 1740
Final Turbidity (NTUs) : 15.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 280
Purge Rate d/sampling (ml/min):250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 17.2 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1600	0	6.78	17.24	5260	2.2	3.55	182.1	55.24	
1605	1.4	5.77	16.90	566	0	2.71	202.6	55.24	
1610	2.8	5.62	16.86	569	0	2.15	213.9	55.24	
1615	4.2	5.54	16.82	569	0	1.79	228.8	55.24	
1620	5.6	5.51	16.77	569	2.0	1.59	244.1	55.24	
1625	7.0	5.50	16.78	570	6.2	1.51	253.7	55.24	
1630	8.4	5.49	16.72	576	12.4	1.37	264.3	55.24	
1635	9.8	5.48	16.71	582	17.4	1.25	270.5	55.24	
1640	10.2	5.48	16.71	588	20.6	1.15	275.3	55.24	
1645	11.6	5.47	16.68	597	23.4	1.03	278.8	55.24	
1650	13.0	5.47	16.66	604	35.6	0.95	279.5	55.24	
1655	14.4	5.47	16.64	608	34.6	0.87	280.2	55.24	
1700	15.8	5.47	16.62	610	35.6	0.81	280.6	55.24	
1705	17.2	5.46	16.60	611	39.3	0.77	279.8	55.24	
1710	18.6	5.47	16.58	611	32.7	0.74	280.7	55.24	
1715	20.0	5.47	16.56	610	22.7	0.69	281.4	55.24	
1720	21.4	5.47	16.53	610	20.3	0.67	282.6	55.24	
1725	22.8	5.47	16.54	610	15.3	0.65	281.9	55.24	
1730	24.2	5.47	16.52	610	15.2	0.64	283.3	55.24	
1735	25.6	5.48	16.51	609	15.1	0.62	283.2	55.24	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W25-150
Sample Date: 11/12/2012
Sampling Device: Bladder Pump
Well Depth (feet TOIC):150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):53.30
Final Water Level (feet TOIC):53.30
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon, S. Kromhout

Sample ID: W25-150-R2 and MW-509-GW-R2
Purge Start Time:1020
Sample Time: 1155
Final Turbidity (NTUs) : 3.1
Casing Inner Diameter (inches):2.0
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 6.3 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1040	0.2	8.56	16.52	475	9.3	5.03	90.9	53.30	
1045	1.0	9.40	16.42	470	8.3	3.90	85.6	53.30	
1050	2.0	9.84	16.43	464	7.2	3.19	83.0	53.30	
1055	3.0	9.88	16.43	464	6.4	3.11	82.4	53.30	
1100	4.0	10.04	16.50	463	5.6	2.83	83.7	53.30	
1105	5.0	10.16	16.46	462	4.2	2.59	86.7	53.30	
1110	6.0	10.27	16.51	459	3.8	2.21	97.0	53.30	
1115	7.0	10.27	1654	460	3.7	2.20	98.4	53.30	
1120	8.0	10.27	16.53	459	4.1	2.20	99.0	53.30	
1125	9.0	10.32	16.62	459	3.3	2.02	106.2	53.30	
1130	10.0	10.34	16.701	458	3.1	1.92	112.4	53.30	
1135	11.0	10.32	16.79	455	3.2	1.92	118.5	53.30	
1140	12.0	10.37	16.75	458	3.1	1.73	125.1	53.30	
1145	13.0	10.38	16.89	461	3.1	1.65	128.0	53.30	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W25-188
Sample Date: 11/14/2012
Sampling Device: QED Bladder Pump
Well Depth (feet TOIC):188
Screen Interval (feet TOIC):178-188
Initial Water Level (Feet TOIC):54.65
Final Water Level (feet TOIC):53.65
Casing Type: **PVC** Steel (circle one)
Personnel: R. Malaniak

Sample ID: _W-25-188-R2
Purge Start Time:0825
Sample Time: _____1155
Final Turbidity (NTUs) : 16.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 125
Purge Rate d/sampling (ml/min):125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 2.74 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0850	.125	5.66	11.10	290	358	5.64	160.3	53.65	
0855	.625	5.78	13.01	299	1637.5	3.97	150.6	53.65	
0900	1.25	5.80	12.91	299	1635.6	3.46	153.7	53.65	
0905	1.875	5.80	12.92	299	1636.2	3.12	157.5	53.65	
0910	2.5	5.80	13.12	301	1617.9	2.51	161.3	53.65	Clean flow through cell
0915	3.125	5.80	13.17	307	1607.3	2.43	163.4	53.65	
0930	3.75	5.80	12.96	301	590	2.19	167.1	53.65	
0935	4.375	5.82	12.96	302	491	2.12	167.4	53.65	
0940	5.0	5.83	13.33	304	401	1.15	170.0	53.65	
0945	5.625	5.83	13.58	307	314	1.75	172.0	53.65	
0950	6.25	5.83	13.54	307	300	1.73	173.0	53.65	
1000	6.87	5.87	13.29	234	249	1.74	186.5	53.65	Clean flow through cell
1005	7.5	5.82	13.52	301	212	2.11	179.6	53.65	
1010	8.12	5.83	13.85	306	167	1.79	179.8	53.65	
1015	8.75	5.83	13.95	308	169	1.69	181.4	53.65	
1020	9.37	5.83	13.89	310	138	1.62	183.6	53.65	
1025	10.0	5.82	13.90	310	113.1	1.58	185.9	53.65	
1030	10.62	5.82	14.02	311	117.2	1.51	187.9	53.65	
1035	11.25	5.81	13.99	311	123.6	1.50	188.9	53.65	
1040	11.27	5.80	13.65	299	84.8	1.92	196.2	53.65	
1045	12.5	5.80	13.84	306	89.6	1.80	195.6	53.65	
1050	13.125	5.80	13.77	308	84.4	1.82	198.0	53.65	
1055	13.75	5.80	13.78	302	85.1	1.83	203.6	53.65	
1100	14.37	5.81	13.93	305	72.9	1.82	203.1	53.65	
1105	15.0	5.79	13.50	307	68.1	1.74	207.0	53.65	
1110	15.62	5.78	13.28	308	53.5	1.71	208.9	53.65	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1115	16.25	5.77	13.20	306	51.3	1.71	210.9	53.65	
1120	16.87	5.77	13.30	306	31.0	1.69	212.6	53.65	
1125	17.5	5.78	13.59	308	24.1	1.70	213.3	53.65	
1130	18.125	5.78	13.66	309	14.7	1.67	214.0	53.65	
1135	18.75	5.78	13.74	310	17.3	1.68	214.3	53.65	
1140	19.375	5.78	13.88	311	17.5	1.69	215.2	53.65	
1145	19.75	5.78	13.92	311	16.6	1.69	216.0	53.65	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W26-270
Sample Date: 11/09/12
Sampling Device:Well Wizard Bladder Pump
Well Depth (feet TOIC):270
Screen Interval (feet TOIC):260-270
Initial Water Level (Feet TOIC):43.0
Final Water Level (feet TOIC):43.01
Casing Type: **PVC** Steel (circle one)
Personnel: M. Cameron and D. Cuomo

Sample ID: W-26-270-R2
Purge Start Time:1120
Sample Time: 1220
Final Turbidity (NTUs) : 21.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 420
Purge Rate d/sampling (ml/min):180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 18.11 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1120	0.420	5.73	14.53	287	29.8	7.23	151.0	43.02	
1125	2.52	5.76	14.67	230	41.3	6.88	189.4	43.02	
1130	4.62	5.76	14.72	231	36.3	6.89	200.3	43.02	
1135	6.72	5.75	14.60	230	32.2	6.78	207.8	43.02	
1140	8.82	5.75	14.59	230	29.4	6.71	216.6	43.02	
1145	10.92	5.75	14.60	229	23.3	6.66	221.8	43.02	
1150	13.02	5.74	14.58	229	21.0	6.62	229.6	43.02	
1155	15.12	5.74	14.55	229	20.2	6.62	232.4	43.01	
1200	17.22	5.74	14.56	229	22.7	6.61	236.8	43.01	
1205	19.32	5.74	14.53	229	22.8	6.58	241.1	43.01	
1210	21.42	5.73	14.49	229	21.0	6.54	247.2	43.01	
1215	23.52	5.73	14.51	229	21.0	6.50	248.7	43.01	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W27-240
Sample Date: 11/13/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):47.58
Final Water Level (feet TOIC):47.22
Casing Type: PVC **Steel** (circle one)
Personnel: D. Cuomo, R. Malaniak

Sample ID: W-27-240-R2
Purge Start Time:0940
Sample Time: 1055
Final Turbidity (NTUs) : 25.6
Casing Inner Diameter (inches):
Purge Rate (ml/min) 180/300
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 11.73

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0950	0.18	9.10	15.27	204	48.2	3.45	10.2	47.58	
0955	1.08	6.51	15.30	328	82.2	2.50	-39.2	47.65	
1000	1.98	6.51	15.30	329	100.0	1.90	-38.0	47.65	
1005	2.88	6.51	15.31	328	144.4	1.85	-38.0	47.65	
1010	3.78	6.52	15.38	328	119.6	1.31	-34.9	47.65	Purge rate=300 ml/min
1015	5.28	6.52	15.50	329	118.2	1.11	-33.5	47.65	
1020	6.78	6.52	15.43	328	152.0	0.96	-34.7	47.65	
1025	8.28	6.52	15.38	327	74.5	0.81	-35.7	47.65	
1030	9.78	6.52	15.43	327	51.1	0.69	-36.8	47.72	
1035	11.28	6.52	15.36	326	43.9	0.67	-37.3	47.72	
1040	12.78	6.52	15.16	324	28.4	0.67	-37.0	47.72	
1045	14.28	6.51	15.00	323	26.0	0.68	-35.3	47.72	
1050	15.78	6.51	14.88	322	25.6	0.70	-34.7	47.72	
1055	17.28	6.51	14.88	322	25.6	0.72	-34.7	47.72	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-285
Sample Date: 11/13/2012
Sampling Device:Well Wizard Bladder Pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):47.00
Final Water Level (feet TOIC):47.10
Casing Type: PVC **Steel** (circle one)
Personnel: R. Malaniak

Sample ID: W-27-285-R2
Purge Start Time: 1015
Sample Time: 1205
Final Turbidity (NTUs) : 9.0
Casing Inner Diameter (inches):2
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174) and NAP Parameters
2x Purge System Volume #: 12.4 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1020	.2	5.67	15.27	102	16.8	7.27	162.9	47.10	
1025	1	5.67	15.45	128	3.7	8.18	184.9	47.10	
1030	2	5.80	15.63	146	16.4	8.09	198.0	47.10	
1035	3	6.07	15.92	183	16.2	7.67	203.2	47.10	
1040	4	6.40	15.56	224	7.7	7.08	205.1	47.10	
1045	5	6.42	15.62	258	7.6	6.26	216.4	47.10	
1050	6	6.39	15.66	265	8.8	6.13	219.8	47.10	
1055	7	6.36	15.63	273	6.0	5.36	222.7	47.10	
1100	8	6.26	15.62	291	5.1	5.60	228.8	47.10	
1105	9	6.14	15.54	325	2.1	4.46	237.7	47.10	
1110	10	6.05	15.47	349	2.3	4.47	243.5	47.10	
1115	11	5.99	15.62	366	9.2	4.00	247.8	47.10	
1120	12	5.95	15.48	378	9.8	3.66	252.4	47.10	
1125	13	5.93	15.51	385	12.0	3.33	255.3	47.10	
1130	14	5.91	15.36	391	12.4	3.11	258.2	47.10	
1135	15	5.90	15.44	395	12.1	2.94	260.2	47.10	
1140	16	5.87	15.36	401	9.3	2.79	262.5	47.10	
1145	17	5.85	15.39	403	10.1	2.64	264.1	47.10	
1150	18	5.84	15.40	408	9.1	2.50	265.6	47.10	
1155	19	5.83	15.34	410	9.0	2.41	266.7	47.10	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-30-285
Sample Date: 11/13/2012
Sampling Device: Well wizard Bladder pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC): 275-285
Initial Water Level (Feet TOIC): 46.19
Final Water Level (feet TOIC): 46.12
Casing Type: PVC **Steel** (circle one)
Personnel:D. Cuomo, R. Malaniak

Sample ID: W-30-285-R2
Purge Start Time: 1350
Sample Time: 1500
Final Turbidity (NTUs) : 14.0
Casing Inner Diameter (inches):
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min):190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 13.43 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1400	0.3	5.92	13.96	144	16.5	6.75	73.3	46.19	Pulled data logger out (1300)
1405	1.8	5.89	13.14	141	9.0	6.47	94.7	46.09	
1410	3.3	5.80	12.75	601	6.8	6.52	127.3	46.09	
1415	4.8	5.83	14.49	142	90.4	5.82	120.7	46.38	
1420	6.3	5.83	14.56	142	33.4	5.31	127.8	46.38	
1425	7.8	5.83	14.57	142	24.0	5.07	131.7	46.12	
1430	9.3	5.80	14.55	141	23.0	4.81	151.5	46.12	
1435	10.8	5.80	14.58	141	24.9	4.79	155.7	46.12	
1440	12.3	5.79	14.65	141	23.0	4.77	161.0	46.12	
1445	13.8	5.80	14.68	141	16.2	4.80	159.9	46.12	
1450	15.3	5.79	16.60	141	14.2	4.78	156.9	46.12	
1455	16.8	5.78	14.67	141	14.0	4.78	165.7	46.12	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W31-95
Sample Date: 11/06/12
Sampling Device:Bladder Pump
Well Depth (feet TOIC):95
Screen Interval (feet TOIC):85-95
Initial Water Level (Feet TOIC):59.71
Final Water Level (feet TOIC):59.71
Casing Type: **PVC** Steel (circle one)
Personnel: S.Kromhout

Sample ID: W31-95-R2
Purge Start Time:1015
Sample Time: 1135
Final Turbidity (NTUs) : 5.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 210
Purge Rate d/sampling (ml/min):210
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 3.99 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1015	.21	6.21	14.43	91	270.1	10.91	190.4	59.71	
1020	1.05	5.62	14.55	88	160.1	10.63	189.9	59.71	
1025	2.10	5.72	14.55	86	102.4	10.39	197.8	59.71	
1030	3.15	5.74	14.37	85	63.9	10.30	186.3	59.71	
1035	4.20	5.55	14.54	83	39.0	10.10	184.8	59.71	
1040	5.25	5.70	14.60	85	33.7	10.05	184.4	59.71	
1045	6.30	5.69	14.60	85	27.8	10.05	184.0	59.71	
1050	7.35	5.58	14.58	84	21.5	10.04	183.0	59.71	
1055	8.40	5.48	14.44	85	16.5	10.05	183.2	59.71	
1100	9.45	5.48	14.50	84	14.1	10.03	182.2	59.71	
1105	10.50	5.38	14.60	85	12.3	9.95	182.1	59.71	
1110	11.55	5.32	14.64	84	10.1	9.91	181.7	59.71	
1115	12.60	5.50	14.57	84	7.1	9.94	181.0	59.71	
1120	13.65	5.57	14.62	84	5.7	9.90	181.4	59.71	
1125	14.70	5.60	14.74	84	5.0	9.94	181.1	59.71	
1130	15.75	5.62	14.65	84	5.0	9.89	180.4	59.71	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W36-390
Sample Date: 11/13/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC):390
Screen Interval (feet TOIC): 380-390
Initial Water Level (Feet TOIC):45.20
Final Water Level (feet TOIC):45.35
Casing Type: PVC **Steel** (circle one)
Personnel: S. Kromhout, J. Lacanlale

Sample ID: W36-390-R2
Purge Start Time: 1000
Sample Time: 1225
Final Turbidity (NTUs) : 10.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 27.1 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1005	1.25	6.21	14.24	698	14.6	9.27	242.6	45.35	
1010	2.50	6.28	14.21	700	23.3	6.08	248.1	45.35	
1015	3.75	6.32	14.17	752	21.2	5.01	249.7	45.35	
1020	5.0	6.39	14.19	755	17.6	4.40	250.1	45.35	
1025	6.25	6.46	14.24	751	12.0	3.83	244.0	45.35	
1030	7.50	6.46	14.15	745	10.3	3.57	232.3	45.35	
1035	8.75	6.46	14.15	744	10.4	3.53	231.3	45.35	
1040	10.0	6.45	14.12	742	10.9	3.52	230.1	45.35	
1045	11.25	6.44	14.09	738	11.9	3.36	228.8	45.35	
1050	12.50	6.42	14.12	735	13.5	3.17	231.6	45.35	
1055	13.75	6.40	14.10	731	12.7	3.00	235.1	45.35	
1100	15.0	6.38	14.06	728	11.5	2.88	239.14	45.35	
1105	16.25	6.38	14.04	726	11.7	2.74	242.1	45.35	
1110	17.5	6.38	13.99	724	10.3	2.58	247.2	45.35	
1115	18.75	6.36	13.94	722	8.5	2.47	251.5	45.35	
1120	20.0	6.35	13.99	720	7.8	2.36	256.1	45.35	
1125	21.25	6.34	13.93	718	8.0	2.29	259.6	45.35	
1130	22.5	6.35	13.92	718	9.1	2.24	263.3	45.35	
1135	23.75	6.34	13.92	716	7.5	2.19	266.4	45.35	
1140	25.0	6.35	13.91	715	8.6	2.06	267.4	45.35	
1145	26.25	6.35	13.90	715	9.4	1.99	267.5	45.35	
1150	27.50	6.37	13.92	715	9.1	1.90	265.9	45.35	
1155	28.75	6.36	13.92	713	13.2	1.84	266.1	45.35	
1200	30.0	6.35	13.89	712	13.1	1.78	266.9	45.35	
1205	31.25	6.36	13.88	712	11.8	1.68	266.8	45.35	
1210	32.50	6.36	13.85	711	9.5	1.58	266.5	45.35	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1215	33.75	6.35	13.89	710	10.4	1.54	267.5	45.35	
1220	35.0	6.34	13.84	709	10.2	1.50	267.8	45.35	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W36-448
Sample Date: 11/13/2012
Sampling Device: Well Wizard Bladder Pump
Well Depth (feet TOIC):448
Screen Interval (feet TOIC):438-448
Initial Water Level (Feet TOIC):45.6
Final Water Level (feet TOIC):45.6
Casing Type: PVC **Steel** (circle one)
Personnel:S. Kromhout, J. Lacanlale

Sample ID: W36-448-R2
Purge Start Time:1240
Sample Time: 1630
Final Turbidity (NTUs) : 35.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 140-200
Purge Rate d/sampling (ml/min):200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 31.47 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1245	.140	7.68	12.92	725	30.8	6.85	195.4	45.60	
1250	0.7	7.72	13.23	726	52.7	6.48	192.3	45.60	
1255	1.4	7.69	13.35	727	75.5	6.14	190.5	45.60	
1300	2.1	7.60	13.32	728	97.3	5.91	190.4	45.60	
1305	2.8	7.51	13.06	728	87.8	5.78	191.5	45.60	
1310	3.5	7.43	13.32	719	48.2	5.41	191.7	45.60	
1315	4.2	7.42	13.26	720	36.5	5.21	191.8	45.60	
1320	4.9	7.39	13.07	701	23.8	4.92	192.3	45.60	
1325	5.6	7.34	12.88	676	15.4	4.45	192.0	45.60	
1330	6.3	7.31	12.85	666	14.6	4.38	191.8	45.60	
1335	7.0	7.21	12.66	634	12.6	4.37	192.0	45.60	
1340	7.7	7.15	12.64	621	12.2	4.38	192.1	45.60	
1345	8.4	7.00	12.70	590	9.4	4.47	192.1	45.60	
1350	9.1	6.92	12.77	574	9.8	4.53	191.9	45.60	
1355	9.8	6.83	13.41	558	10.2	4.66	191.8	45.60	
1400	10.5	6.79	13.36	553	11.8	4.71	192.4	45.60	
1405	11.2	6.74	13.40	545	12.6	4.76	193.0	45.60	
1410	11.9	6.71	13.51	542	12.9	4.83	192.9	45.60	
1415	12.6	6.69	13.69	539	13.1	4.77	192.9	45.60	
1420	13.3	6.67	13.83	536	14.0	4.91	193.0	45.60	
1425	14.0	6.64	13.97	531	15.7	4.98	192.6	45.60	
1430	14.7	6.62	14.07	528	15.9	5.01	192.7	45.60	
1435	15.4	6.60	14.27	527	17.0	5.04	192.9	45.60	
1440	16.1	6.59	14.22	526	16.3	5.05	193.4	45.60	
1445	16.8	6.58	13.99	525	18.8	5.04	193.4	45.60	
1450	17.5	6.56	14.29	414	15.0	5.15	192.9	45.60	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1455	18.2	6.56	14.29	412	13.0	5.15	193.0	45.60	
1500	18.9	6.54	14.31	407	12.3	5.26	193.3	45.60	
1505	19.6	6.53	14.33	405	12.3	5.34	19..7	45.60	
1510	20.3	6.51	14.26	401	15.5	5.24	194.2	45.60	
1515	21.0	6.49	14.42	400	18.0	5.38	194.9	45.60	
1520	21.7	6.46	14.46	398	18.4	5.45	196.0	45.60	
1525	22.4	6.45	14.45	396	19.1	5.46	196.7	45.60	
1530	23.1	6.43	14.43	393	20.8	5.48	197.6	45.60	
1535	23.8	6.41	14.39	391	22.7	5.49	199.1	45.60	
1540	24.5	6.40	14.40	389	25.8	5.51	200.0	45.60	
1545	25.2	6.39	14.41	388	25.6	5.52	201.0	45.60	
1550	25.9	6.37	14.39	387	31.4	5.45	202.9	45.60	
1555	26.9	6.37	14.37	387	36.2	5.39	204.0	45.60	Purge rate= 200 ml/min
1600	27.9	6.36	14.27	385	35.9	5.30	205.2	45.60	
1605	28.9	6.36	14.36	386	33.3	5.11	206.2	45.60	
1610	29.9	6.36	14.35	385	35.6	4.95	206.9	45.60	
1615	30.9	6.36	14.33	385	35.7	4.73	207.6	45.60	
1620	31.9	6.35	14.31	385	35.2	4.61	208.6	45.60	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W37-325
Sample Date: 11/09/12
Sampling Device:Well Wizard Bladder Pump
Well Depth (feet TOIC):325
Screen Interval (feet TOIC):315-325
Initial Water Level (Feet TOIC):48.75
Final Water Level (feet TOIC):48.80
Casing Type: PVC **Steel** (circle one)
Personnel:S. Kromhout

Sample ID:W37-325-R2
Purge Start Time:1055
Sample Time: 1220
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min):170
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 22.18 L

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1100	0.4	5.29	15.08	308	0	4.15	117.1	48.75	
1105	2.0	5.27	15.02	306	44.4	2.85	128.7	48.75	
1110	4.0	5.24	14.97	309	176.2	1.70	128.6	48.75	
1115	6.0	5.20	14.96	309	129.1	1.29	130.5	48.75	
1120	8.0	5.23	15.03	309	89.8	1.14	125.6	48.80	
1125	10.0	5.24	14.89	308	60.1	1.06	124.5	48.80	
1130	12.0	5.38	14.90	308	47.1	1.00	123.4	48.80	
1135	14.0	5.35	14.88	307	30.1	0.96	122.9	48.80	
1140	16.0	5.35	14.96	307	23.9	0.94	128.1	48.80	
1145	18.0	5.48	14.87	307	14.5	0.89	128.9	48.80	
1150	20.0	5.48	14.81	306	10.5	0.88	128.3	48.80	
1155	22.0	5.49	14.86	307	7.8	0.87	128.4	48.80	
1200	24.0	5.59	14.86	307	2.3	0.85	128.2	48.80	Metal intake at end of tubing lost in well
1205	26.0	5.82	14.89	308	1.0	0.83	128.1	48.80	
1210	28.0	5.79	14.89	308	1.6	0.82	127.8	48.80	
1215	30.0	5.72	14.99	309	1.0	0.80	127.8	48.80	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W37-385
Sample Date: 11/09/12
Sampling Device:Wattera
Well Depth (feet TOIC):385
Screen Interval (feet TOIC):375-385
Initial Water Level (Feet TOIC):48.86
Final Water Level (feet TOIC):48.86
Casing Type: PVC **Steel** (circle one)
Personnel: S. Kromhout

Sample ID: W37-385-R2
Purge Start Time: 1050-1105 (YSI broken)/ 1158
Sample Time: _1333
Final Turbidity (NTUs) : 5.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 360
Purge Rate d/sampling (ml/min):150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Purge System Volume #: 26.727

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1148	-	-	-	-	-	-	-	-	YSI not working
1153	-	-	-	-	-	-	-	-	
1158	0.36	5.48	15.84	277	3.1	4.71	176.7	48.86	Brian replaced YSI cable
1203	1.8	5.49	15.40	216	118.2	3.41	182.5	48.86	
1208	3.6	5.48	15.40	262	122.4	3.07	186.0	48.86	
1213	5.4	5.45	15.39	257	72.3	2.86	191.3	48.86	
1218	7.2	5.43	15.36	250	29.7	2.36	195.7	48.86	
1223	9.0	5.40	15.40	248	19.1	2.32	200.7	48.86	
1228	10.8	5.41	15.44	243	13.9	2.36	203.3	48.86	
1233	12.6	5.40	15.46	222	10.5	2.57	211.3	48.86	
1238	14.4	5.38	15.44	209	8.1	3.07	215.7	48.86	
1243	16.2	5.38	15.44	201	7.9	3.44	217.6	48.86	
1248	18.0	5.37	15.43	198	7.1	3.42	222.1	48.86	
1253	19.8	5.37	15.48	193	7.1	3.52	225.1	48.86	
1258	21.6	5.37	15.47	186	7.0	3.75	225.8	48.86	
1303	23.4	5.36	15.45	182	6.3	3.88	226.6	48.86	
1308	25.2	5.36	15.38	180	5.7	3.96	230.4	48.86	
1313	27.0	5.35	15.35	178	5.7	4.04	231.8	48.86	
1318	28.8	5.36	15.34	177	5.6	4.04	234.5	48.86	
1323	30.6	5.36	15.38	175	5.6	4.08	235.8	48.86	
1328	32.4	5.35	15.38	174	5.6	4.08	238.1	48.86	

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-3
Sample Date: 4/24/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):58-78
Initial Water Level (Feet TOIC):61.62
Final Water Level (feet TOIC):61.62
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MW-3-SP13
Purge Start Time: 900
Sample Time: 935
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
905	0.75	4.91	16.55	158	3.6	8.83	335	61.62	
910	1.5	5.59	16.70	136	0.0	8.64	280	61.62	
915	2.25	5.64	16.68	135	0.0	8.75	243	61.62	
920	3.0	5.67	16.75	135	0.0	8.92	227	61.62	
925	3.75	5.67	16.76	135	0.0	9.14	223	61.62	> 2 system volumes
930	4.5	5.68	16.80	135	0.0	9.29	223	61.62	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-4
Sample Date: 4/24/2013
Sampling Device: Bladder Pump (QED)
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):58-78
Initial Water Level (Feet TOIC):61.22
Final Water Level (feet TOIC):61.22
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MW-4-SP13
Purge Start Time: 1045
Sample Time: 1135
Final Turbidity (NTUs) : 3.2
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1050	0.5	6.15	17.91	309	2.2	9.52	230	61.22	
1055	1.0	6.16	17.56	311	1.7	9.47	227	61.22	
1100	1.5	6.16	17.41	311	1.7	9.39	224	61.22	
1105	2.0	6.17	17.27	310	1.7	9.41	223	61.22	
1110	2.5	6.17	17.30	310	1.7	9.39	223	61.22	
1115	3.0	6.17	17.37	309	2.1	9.42	223	61.22	
1120	3.5	6.18	17.44	309	3.0	9.42	223	61.22	> 2 system volumes
1125	4.0	6.18	17.39	309	3.2	9.48	223	61.22	
1130	4.5	6.18	17.34	309	3.2	9.49	223	61.22	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-8
Sample Date: 4/24/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):61.42
Final Water Level (feet TOIC):61.42
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-8-SP13
Purge Start Time: 905
Sample Time: 940
Final Turbidity (NTUs) : 2.9
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.43

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
910	1.4	5.97	13.89	341	2.5	5.44	207	61.42	
915	2.8	5.61	13.94	451	2.8	4.89	211	61.42	
920	4.2	5.56	14.01	488	2.9	3.84	213	61.42	
925	5.6	5.55	14.06	498	3.1	3.52	214	61.42	> 2 system volumes
930	7.0	5.55	14.01	501	2.9	3.30	215	61.42	
935	8.4	5.55	14.02	501	2.9	3.23	218	61.42	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-9
Sample Date: 4/24/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 82
Screen Interval (feet TOIC):72-82
Initial Water Level (Feet TOIC):62.03
Final Water Level (feet TOIC):62.03
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-9-SP13
Purge Start Time: 1040
Sample Time: 1130
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.59

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1045	1.0	5.53	16.97	92	0.0	12.10	192	62.03	
1050	2.0	5.69	16.55	75	0.0	7.63	197	62.03	
1055	3.0	5.71	16.47	70	0.0	7.05	206	62.03	
1100	4.0	5.70	16.55	69	0.0	6.71	213	62.03	> 2 system volumes
1105	5.0	5.70	16.58	68	0.0	6.45	222	62.03	
1110	6.0	5.69	16.60	68	0.0	6.18	226	62.03	
1115	7.0	5.67	16.72	67	0.0	6.13	233	62.03	
1120	8.0	5.67	16.75	67	0.0	5.95	236	62.03	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-10
Sample Date: 4/24/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):61.93
Final Water Level (feet TOIC):61.90
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-10-SP13
Purge Start Time: 1225
Sample Time: 1320
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.42

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1230	1.4	5.83	17.29	201	19.1	5.47	142	61.81	
1235	2.8	5.81	16.94	248	1.1	5.00	161	61.81	
1240	4.2	5.81	16.66	258	0.0	5.00	178	61.87	
1245	5.6	5.82	16.67	258	0.0	4.81	184	61.90	> 2 system volumes
1250	7.0	5.79	16.65	253	0.0	4.74	186	61.90	
1255	8.4	5.81	16.65	239	0.0	4.63	185	61.90	
1300	9.8	5.82	16.52	225	0.0	4.77	187	61.90	
1305	11.2	5.81	16.50	217	0.0	5.38	189	61.90	
1310	12.6	5.83	16.44	215	0.0	5.44	187	61.90	
1315	14.0	5.80	16.39	212	0.0	5.65	184	61.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-11
Sample Date: 4/24/2013
Sampling Device: Bladder Pump (QED)
Well Depth (feet TOIC): 82
Screen Interval (feet TOIC):72-82
Initial Water Level (Feet TOIC):62.18
Final Water Level (feet TOIC):62.20
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MW-11-SP13
Purge Start Time: 1230
Sample Time: 1300
Final Turbidity (NTUs) : 3.9
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 320
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1235	1.6	5.88	16.22	189	4.2	10.66	220	62.20	
1240	3.2	5.81	16.06	181	4.0	10.66	226	62.20	
1245	4.8	5.80	16.00	178	3.8	10.80	231	62.20	> 2 system volumes
1250	6.4	5.79	16.02	175	4.1	10.85	234	62.20	
1255	8.0	5.80	15.94	177	3.9	10.91	241	62.20	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-12
Sample Date: 4/24/2013
Sampling Device: Bladder Pump (QED)
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):62.74
Final Water Level (feet TOIC):62.74
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-12-SP13
Purge Start Time: 1515
Sample Time: 1600
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.38

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1520	1.4	6.34	16.25	595	0.0	7.67	213	62.74	
1525	2.8	6.18	16.20	634	0.0	6.49	216	62.74	
1530	4.2	6.19	15.74	646	0.0	5.81	215	62.74	
1535	5.6	6.18	15.78	649	0.0	5.58	216	62.74	> 2 system volumes
1540	7.0	6.19	15.73	650	0.0	5.30	218	62.74	
1545	8.4	6.17	15.71	651	0.0	5.25	218	62.74	
1550	9.8	6.17	15.64	653	0.0	5.19	218	62.74	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-13D
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 300
Screen Interval (feet TOIC):290-300
Initial Water Level (Feet TOIC):65.34
Final Water Level (feet TOIC):65.34
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-13D-SP13 & DUP
Purge Start Time: 914
Sample Time:1005
Final Turbidity (NTUs) : 14.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.85

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
916	1.0	5.78	14.09	153	0.0	3.84	205	65.34	
921	3.5	5.74	13.98	153	0.0	3.76	212	65.34	
926	6.0	5.69	13.92	155	83.2	4.38	171	65.34	
940	13.0	5.75	13.92	125	52.0	6.69	109	65.34	
945	15.5	5.68	13.85	124	20.4	6.79	122	65.34	
950	18.0	5.67	13.83	126	15.5	6.91	127	65.34	
955	20.5	5.64	13.83	123	15.1	6.89	129	65.34	> 2 system volumes
1000	23.0	5.63	13.80	123	14.8	6.83	130	65.34	
									Duplicate Sample Collected
									MW-813-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-13S
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):65.23
Final Water Level (feet TOIC):65.23
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-13S-SP13
Purge Start Time: 1640
Sample Time:1705
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 475
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1641	0.5	5.37	15.02	3190	0.0	8.05	239	65.23	
1646	2.85	5.35	15.04	3180	0.0	7.76	254	65.23	
1651	5.22	5.32	14.96	3170	0.0	7.72	269	65.23	> 2 system volumes
1656	7.59	5.32	14.94	3140	0.0	7.66	276	65.23	
1701	9.97	5.32	14.93	3120	0.0	7.63	277	65.23	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14D
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 304
Screen Interval (feet TOIC):294-304
Initial Water Level (Feet TOIC):64.20
Final Water Level (feet TOIC):64.85
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-14D-SP13
Purge Start Time: 1049
Sample Time:1200
Final Turbidity (NTUs) : 2.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.19

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1051	1.0	5.93	13.06	490	0.0	1.69	141	64.85	
1056	3.5	6.19	1.94	478	0.0	0.95	136	64.88	
1101	6.0	6.23	12.89	556	427	0.84	139	64.91	
1118	14.5	6.42	12.76	568	44.3	3.09	129	64.85	
1123	17.0	6.29	12.73	495	19.9	3.60	139	64.85	
1128	19.5	6.12	12.72	423	8.5	4.16	154	64.85	
1133	22.0	6.03	12.68	401	6.0	4.33	160	64.85	> 2 system volumes
1138	24.5	5.94	12.70	382	4.3	4.38	169	64.85	
1143	27.0	5.85	12.71	362	2.5	4.59	179	64.85	
1148	29.5	5.79	12.66	357	2.4	4.66	184	64.85	
1153	32.0	5.77	12.65	357	2.4	4.79	187	64.85	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14DD
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC):365-375
Initial Water Level (Feet TOIC):64.10
Final Water Level (feet TOIC):64.10
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-14DD-SP13
Purge Start Time: 1438
Sample Time:1540
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 25.58

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1440	0.9	5.58	13.19	244	0.0	5.71	239	64.10	
1445	3.15	5.54	13.17	243	0.0	5.76	248	64.12	
1450	5.4	5.52	13.12	242	0.0	5.88	253	64.13	
1455	7.65	5.54	13.11	253	5.7	5.93	257	64.10	
1510	14.4	5.63	13.05	254	0.0	6.09	258	64.10	
1525	21.15	5.52	13.00	245	0.0	6.23	269	64.10	
1530	23.4	5.50	13.03	244	0.0	6.19	272	64.10	
1535	25.65	5.49	12.90	243	0.0	6.34	274	64.10	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14S
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.33
Final Water Level (feet TOIC):64.33
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-14S-SP13
Purge Start Time: 1339
Sample Time:1405
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.44

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1342	1.5	5.41	13.71	1140	16.1	7.71	232	64.33	
1347	4.0	5.36	13.75	1110	0.9	7.78	253	64.33	> 2 system volumes
1352	6.5	5.35	13.74	1100	0.0	7.83	257	64.33	
1357	9.0	5.34	13.74	1100	0.0	7.77	258	64.33	
1402	11.5	5.34	13.75	1100	0.0	7.64	266	64.33	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15D
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):64.10
Final Water Level (feet TOIC):64.20
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-15D-SP13
Purge Start Time: 1635
Sample Time:1735
Final Turbidity (NTUs) : 4.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.65

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1640	2.5	5.99	13.79	2200	33.6	5.02	250	64.19	
1645	5.0	6.07	13.85	2430	50.7	5.49	243	64.10	
1655	10.0	5.91	13.68	887	21.6	5.74	209	64.10	
1710	17.5	5.76	13.71	713	8.3	5.81	195	64.10	
1715	20.0	5.73	13.57	695	6.3	5.81	196	64.12	
1720	22.5	5.72	13.55	680	4.8	5.94	196	64.15	> 2 system volumes
1725	25.0	5.68	13.52	677	4.7	5.85	196	64.19	
1730	27.5	5.68	13.52	679	4.5	5.84	196	64.20	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15DD
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC):64.34
Final Water Level (feet TOIC):64.44
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-15DD-SP13
Purge Start Time: 809
Sample Time: 910
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 25.19

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
811	1.0	6.70	13.91	115	0.1	5.62	181	64.44	
818	4.5	6.05	13.92	115	0.0	5.74	200	64.44	
825	8.0	5.69	13.95	119	19.0	6.00	214	64.44	
838	14.5	5.54	13.97	120	1.5	6.12	223	64.44	
849	20.0	5.49	14.01	121	0.0	5.97	225	64.44	
854	22.5	5.49	13.95	121	0.0	6.07	228	64.44	
859	25.0	5.47	13.97	121	0.0	5.91	229	64.44	
904	27.5	5.45	13.97	121	0.0	6.02	232	64.44	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15S
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.13
Final Water Level (feet TOIC):64.13
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-15S-SP13 & MS/MSD
Purge Start Time: 944
Sample Time: 1025
Final Turbidity (NTUs) : 2.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.44

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
950	2.7	5.40	14.36	1480	24.1	8.67	253	64.13	
958	6.3	5.42	14.37	1480	8.2	8.70	260	64.13	> 2 system volumes
1003	8.55	5.42	14.37	1480	3.6	8.73	264	64.13	
1008	10.8	5.45	14.38	1480	2.4	8.68	267	64.13	
1015	13.95	5.46	14.39	1480	2.2	8.60	270	64.13	
1020	16.2	5.46	14.40	1490	2.3	8.64	272	64.13	
									MS/MSD collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-16D
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):64.26
Final Water Level (feet TOIC):64.30
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-16D-SP13
Purge Start Time: 1430
Sample Time:1620
Final Turbidity (NTUs) : 17.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 690/495/450
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1430	0	6.09	15.14	233	11.1	6.87	245	64.26	
1440	6.9	5.99	15.06	234	6.8	5.83	248	64.37	
1450	13.8	5.87	14.98	210	128	5.76	253	64.45	
1500	20.7	5.87	14.80	210	162	6.00	261	64.35	> 2 system volumes, Flow reduced
1510	25.65	5.80	14.83	211	112	6.15	264	64.30	to 495 ml/min
1520	30.6	5.79	14.83	211	85.9	6.21	270	64.30	
1530	35.55	5.82	14.81	211	47.5	6.27	270	64.28	
1535	39.0	5.83	14.89	212	41.0	6.39	272	64.27	
1540	42.45	5.83	14.98	211	36.5	6.34	269	64.30	
1545	45.9	5.81	14.99	212	30.0	6.21	271	64.28	
1550	49.35	5.86	14.90	212	27.6	6.10	269	64.28	Flow reduced to 450 ml/min
1555	51.6	5.81	14.94	212	25.2	6.01	269	64.30	
1600	53.85	5.86	14.81	212	24.0	5.99	272	64.27	
1605	56.1	5.87	14.78	212	19.5	5.97	271	64.27	
1610	58.35	5.87	14.95	212	17.6	5.96	271	64.30	
1615	60.6	5.87	14.93	212	17.8	5.86	261	64.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-16S
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 79.7
Screen Interval (feet TOIC):69.7-79.7
Initial Water Level (Feet TOIC):64.91
Final Water Level (feet TOIC):64.91
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-16S-SP13
Purge Start Time: 1520
Sample Time:1545
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1520	0	5.75	14.62	226	0.0	8.99	208	64.91	
1525	2.0	5.34	14.24	227	0.0	7.98	225	64.91	
1530	4.0	5.29	14.23	216	0.0	7.56	224	65.01	> 2 system volumes
1535	6.0	5.30	14.14	216	0.0	7.32	217	64.91	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-17S
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):64.48
Final Water Level (feet TOIC):64.50
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-17S-SP13
Purge Start Time: 828
Sample Time: 848
Final Turbidity (NTUs) : 22.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.24

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
828	0	6.65	15.46	155	30.5	5.52	130	64.50	
833	2.5	6.59	15.46	155	24.4	5.61	129	64.50	
838	5.0	6.56	15.44	157	23.5	5.60	133	64.50	> 2 system volumes
843	7.5	6.51	15.43	159	22.5	5.46	137	64.50	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-18I
Sample Date: 4/17/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 128
Screen Interval (feet TOIC):118-128
Initial Water Level (Feet TOIC):64.49
Final Water Level (feet TOIC):64.48
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth

Sample ID: MW-18I-SP13 & DUP
Purge Start Time: 1023
Sample Time:1110
Final Turbidity (NTUs) : 3.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.09

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1023	0	9.07	14.29	300	1.1	7.38	163	64.49	
1028	2.5	7.04	14.10	622	26.6	7.87	209	64.48	
1033	5.0	5.84	14.12	621	6.7	7.86	221	64.48	
1038	7.5	5.33	14.17	616	7.6	7.85	233	64.48	
1048	12.5	5.16	14.21	614	5.6	7.67	242	64.48	> 2 system volumes
1053	15.0	5.14	14.24	616	4.0	7.85	247	64.48	
1058	17.5	5.14	14.29	617	3.9	7.81	250	64.48	
1103	20.0	5.11	14.27	618	3.7	7.78	255	64.48	
									Duplicate Sample Collected
									MW-806-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-18S
Sample Date: 4/17/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC):62-72
Initial Water Level (Feet TOIC):64.20
Final Water Level (feet TOIC):64.24
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-18S-SP13
Purge Start Time: 1229
Sample Time:1320
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.14

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1229	0	6.45	15.71	1000	60.7	6.94	157	64.23	
1234	2.5	6.54	15.29	1000	33.9	6.38	157	64.24	
1239	5.0	6.58	15.00	1010	13.2	6.23	158	64.24	> 2 system volumes
1244	7.5	6.60	14.92	1010	3.3	6.17	161	64.24	
1249	10.0	6.61	14.87	1010	2.2	6.12	161	64.24	
1254	12.5	6.62	14.84	1010	1.3	6.14	161	64.24	
1259	15.0	6.63	14.86	1010	0.4	6.11	161	64.24	
1304	17.5	6.65	14.82	1010	0.0	6.14	161	64.24	
1309	20.0	6.65	14.80	1010	0.0	6.06	161	64.24	
1314	22.5	6.65	14.81	1010	0.0	6.04	161	64.24	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-19D
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 306
Screen Interval (feet TOIC):296-306
Initial Water Level (Feet TOIC):63.25
Final Water Level (feet TOIC):63.29
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-19D-SP13
Purge Start Time: 1040
Sample Time:1205
Final Turbidity (NTUs) : 15.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 475
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.38

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1040	0	5.60	15.20	682	13.0	3.95	227	63.25	
1045	2.38	5.59	15.18	664	8.8	4.34	232	63.28	
1050	4.75	5.58	15.16	520	6.7	4.80	237	63.28	
1055	7.12	5.55	15.21	238	822	5.35	238	63.28	
1100	9.5	5.38	15.17	245	952	6.06	249	63.28	
1115	16.62	5.32	15.16	239	74.8	6.27	267	63.28	
1120	19.0	5.29	15.17	237	60.6	6.08	269	63.29	
1125	21.375	5.27	15.21	231	48.2	6.02	271	63.29	> 2 system volumes
1130	23.75	5.26	15.29	225	35.9	5.97	273	63.29	
1135	26.12	5.24	15.25	222	25.7	6.05	276	63.29	
1140	28.5	5.22	15.09	221	32.2	6.17	281	63.29	
1145	30.88	5.21	15.11	217	22.5	6.13	282	63.29	
1150	33.25	5.21	15.11	220	16.8	6.27	281	63.29	
1155	35.62	5.21	15.11	217	16.4	6.34	283	63.29	
1200	38.0	5.21	15.11	217	15.8	6.27	283	63.29	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-19S
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.40
Final Water Level (feet TOIC):63.40
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-19S-SP13
Purge Start Time: 945
Sample Time:1008
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 425
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.47

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
948	1.28	5.71	15.45	64	4.1	7.92	218	63.40	
953	3.4	5.71	15.52	64	0.0	7.90	225	63.40	
958	5.525	5.67	15.50	64	0.0	7.73	229	63.40	> 2 system volumes
1003	7.65	5.65	15.56	64	0.0	7.62	233	63.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20D
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):64.04
Final Water Level (feet TOIC):64.04
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-20D-SP13
Purge Start Time: 1440
Sample Time:1525
Final Turbidity (NTUs) : 45.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 270
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1410	0	7.86	13.82	1620	0.0	6.49	207	64.04	
1440	5.4	7.32	14.07	1410	0.0	7.04	211	64.04	
1450	8.1	7.29	14.00	1280	13.1	7.19	216	64.04	
1500	10.8	6.83	13.96	1130	4.5	7.47	232	64.04	
1510	13.5	6.65	13.93	1160	0.0	7.59	238	64.04	> 2 system volumes
1520	16.2	6.54	13.87	1150	0.0	7.61	244	64.04	
1525	18.9	6.53	13.81	1150	0.0	7.61	247	64.04	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20I
Sample Date: 4/18/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):64.39
Final Water Level (feet TOIC):64.39
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne & M. Werth

Sample ID: MW-20I-SP13
Purge Start Time: 1456
Sample Time:1525
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.51

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1457	0.4	5.62	14.15	602	16.1	6.99	237	64.39	
1502	2.4	5.54	14.11	579	4.8	6.83	237	64.39	
1507	4.4	5.55	14.06	554	1.9	6.60	240	64.39	
1512	6.4	5.54	14.02	544	1.0	6.71	239	64.39	
1517	8.4	5.55	14.02	543	1.0	6.76	238	64.39	
1522	10.4	5.58	14.05	541	1.0	6.78	239	64.39	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20S
Sample Date: 4/17/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.11
Final Water Level (feet TOIC):64.20
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-20S-SP13
Purge Start Time: 1630
Sample Time:1705
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.44

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1632	0	6.58	15.13	1110	129	6.17	120	64.18	
1637	2.8	6.68	14.89	1120	3.9	5.80	128	64.18	
1642	4.8	6.70	14.78	1120	1.4	6.59	134	64.18	> 2 system volumes
1647	6.8	6.72	14.71	1110	0.3	6.64	139	64.20	
1652	8.8	6.72	14.66	1110	0.0	6.63	142	64.20	
1657	10.8	6.73	14.67	1110	0.0	6.56	144	64.20	
1702	12.8	6.74	14.62	1110	0.0	5.52	146	64.20	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21D
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):63.25
Final Water Level (feet TOIC):63.25
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-21D
Purge Start Time: 840
Sample Time:945
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 420/500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.69

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
845	2.1	5.84	15.00	547	0.0	6.85	212	63.25	
850	4.2	5.81	14.94	549	0.0	3.31	215	63.25	
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900	5.0	5.80	14.92	543	0.0	3.42	222	63.25	Flow rate increased to 500 ml/min
905	7.5	5.76	14.88	450	0.0	4.09	224	63.25	after connecting to car battery
910	10.0	5.58	14.86	318	2.2	5.33	235	63.25	
915	12.5	5.56	14.86	313	0.0	5.47	240	63.25	
920	15.0	5.54	14.88	311	0.0	5.60	245	63.25	
925	17.5	5.55	14.87	308	0.0	5.54	249	63.25	
930	20.0	5.53	14.86	305	0.0	5.60	253	63.25	
935	22.5	5.53	14.84	304	0.0	5.64	257	63.25	> 2 system volumes
940	25.0	5.53	14.84	303	0.0	5.59	260	63.25	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21I
Sample Date: 4/18/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 180
Screen Interval (feet TOIC):170-180
Initial Water Level (Feet TOIC):63.38
Final Water Level (feet TOIC):63.38
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MW-21I-SP13
Purge Start Time: 825
Sample Time:920
Final Turbidity (NTUs) : 15.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 10.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
830	1.7	4.65	14.86	829	107	4.01	256	63.38	
835	3.4	4.61	14.94	829	103	5.86	302	63.38	
840	5.1	4.61	14.91	829	65.7	6.38	331	63.38	
845	6.8	4.62	14.88	827	25.5	6.52	345	63.38	
850	8.5	4.61	14.88	824	15.1	6.51	357	63.38	
855	10.2	4.63	14.86	821	12.1	6.48	365	63.38	
900	11.9	4.63	14.84	818	12.4	6.55	370	63.38	> 2 system volumes
905	13.6	4.63	14.91	818	16.7	6.55	375	63.38	
910	15.3	4.62	14.91	820	16.4	6.44	378	63.38	
915	17.0	4.64	14.93	822	15.3	6.47	379	63.38	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21S
Sample Date: 4/18/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.40
Final Water Level (feet TOIC):63.40
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-21S-SP13
Purge Start Time: 820
Sample Time:920
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.47

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
825	1.7	6.77	14.92	120	28.7	6.36	194	63.40	
830	3.4	6.34	15.03	112	17.3	6.10	199	63.40	
835	5.1	6.24	15.09	110	9.0	6.07	203	63.40	> 2 system volumes
840	6.8	6.21	15.16	108	7.5	6.21	206	63.40	
845	8.5	6.21	15.21	108	5.0	6.00	209	63.40	
850	10.2	6.20	15.27	108	4.6	5.73	211	63.40	
855	11.9	6.20	15.31	108	2.9	5.63	214	63.40	
900	13.6	6.19	15.32	107	2.9	5.51	215	63.40	
905	15.3	6.20	15.36	108	0.0	5.72	216	63.40	
910	17.0	6.21	15.39	108	0.0	5.57	217	63.40	
915	18.7	6.20	15.45	108	0.0	5.36	218	63.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22D
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 315
Screen Interval (feet TOIC):305-315
Initial Water Level (Feet TOIC):64.83
Final Water Level (feet TOIC):65.48
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-22D-SP13
Purge Start Time: 1259
Sample Time:1440
Final Turbidity (NTUs) : 49.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1301	1.0	6.63	14.45	143	7.4	1.07	134	65.03	
1306	3.5	7.24	14.32	3560	2.8	0.84	108	65.48	
1311	6.0	7.27	14.29	3490	957	1.39	112	65.48	
1345	23.0	6.71	14.17	3460	528	1.78	130	65.48	> 2 system volumes
1400	30.5	6.51	14.17	3450	165	1.64	142	65.48	
1415	38.0	6.52	13.91	3420	77.8	1.52	149	65.48	
1425	43.0	6.57	13.85	3390	53.7	1.45	149	65.48	
1430	45.5	6.59	13.86	3380	51.9	1.45	149	65.48	
1435	48.0	6.59	13.87	3380	49.9	1.42	149	65.48	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22I
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):64.58
Final Water Level (feet TOIC):64.58
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-22I-SP13
Purge Start Time: 1519
Sample Time:1552
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.51

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1523	2.0	6.23	14.67	694	1.6	7.22	171	64.58	
1528	4.5	5.72	14.33	685	0.0	7.11	206	64.58	
1533	7.0	5.68	14.33	684	0.0	7.15	214	64.58	
1538	9.5	5.64	14.28	684	0.0	7.01	225	64.58	> 2 system volumes
1543	12.0	5.63	14.29	684	0.0	7.00	232	64.58	
1548	14.5	5.61	14.26	683	0.0	6.98	234	64.58	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22S
Sample Date: 4/18/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.54
Final Water Level (feet TOIC):64.55
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne & M. Werth

Sample ID: MW-22S-SP13
Purge Start Time: 1600
Sample Time:1635
Final Turbidity (NTUs) : 2.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.42

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1602	0.9	5.86	14.23	609	18.5	6.13	224	64.55	
1607	3.15	5.89	14.26	616	11.1	6.03	227	64.55	
1612	5.4	5.90	14.26	615	6.7	6.02	229	64.55	> 2 system volumes
1617	7.65	5.90	14.26	615	3.8	5.87	229	64.55	
1622	9.9	5.91	14.26	615	2.2	5.71	230	64.55	
1627	12.15	5.91	14.25	614	2.1	5.77	231	64.55	
1632	14.4	5.92	14.23	614	2.0	5.75	232	64.55	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23D
Sample Date: 4/16/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC):330-340
Initial Water Level (Feet TOIC):62.37
Final Water Level (feet TOIC):62.38
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-23D-SP13
Purge Start Time: 1037
Sample Time:1155
Final Turbidity (NTUs) : 24.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 475
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 22.99

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1049	5.7	6.81	15.22	1010	6.5	0.95	93	62.37	
1055	8.55	6.97	14.93	1010	145	0.85	87	62.37	
1100	10.92	6.84	15.01	1170	395	1.30	80	62.41	
1105	13.29	6.46	14.88	1230	166	1.65	99	62.38	
1110	15.66	6.33	14.83	1230	70.0	1.61	102	62.37	
1115	16.04	6.26	14.74	1260	38.1	2.06	93	62.38	
1120	20.04	6.26	14.79	1270	35.5	1.99	91	62.40	
1125	22.79	6.28	14.77	1310	35.4	2.08	91	62.41	
1130	25.16	6.27	14.75	1320	31.8	2.11	93	62.42	> 2 system volumes
1135	27.54	6.29	14.76	1320	30.8	1.98	95	62.43	
1140	29.91	6.27	14.75	1340	26.2	2.13	98	62.43	
1145	32.28	6.23	14.72	1340	25.9	2.27	101	62.40	
1150	35.56	6.28	14.66	1340	24.9	2.31	106	62.38	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23I
Sample Date: 4/16/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 180
Screen Interval (feet TOIC):170-180
Initial Water Level (Feet TOIC):62.20
Final Water Level (feet TOIC):62.20
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-23I-SP13
Purge Start Time: 904
Sample Time:952
Final Turbidity (NTUs) : 2.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 10.86

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
914	5.0	6.26	14.69	836	13.7	1.59	128	62.20	
919	7.5	6.19	14.66	855	6.0	1.11	132	62.20	
924	10.0	6.11	14.60	859	4.9	0.91	137	62.20	
929	12.5	6.07	14.58	854	4.5	0.87	140	62.20	> 2 system volumes
934	15.0	6.03	14.62	851	3.7	0.84	141	62.20	
939	17.5	5.95	14.63	851	2.4	0.81	142	62.20	
944	20.0	5.99	14.70	853	2.4	0.88	147	62.20	
949	22.5	5.92	14.74	853	2.4	0.80	145	62.20	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23S
Sample Date: 4/15/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):62.55
Final Water Level (feet TOIC):62.55
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-23S-SP13 & DUP
Purge Start Time: 1649
Sample Time:1822
Final Turbidity (NTUs) : 26.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500/420
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.26

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1653	2.0	6.17	15.06	85	27.8	8.79	207	62.56	
1658	4.5	6.11	15.03	85	26.3	8.40	217	62.55	> 2 system volumes
1703	7.0	6.17	15.03	85	26.3	8.19	220	62.56	
1708	9.5	6.18	15.04	85	26.1	7.85	223	62.56	
1713	12.0	6.23	14.97	85	25.9	7.34	222	62.57	
1804	14.1	6.09	15.03	86	26.1	8.71	216	62.56	Decreased flow rate to 420 ml/min
1809	16.2	6.02	14.94	86	26.0	8.44	226	62.56	
1814	18.3	6.07	14.91	86	26.0	8.35	231	62.55	
1819	20.4	6.01	14.88	86	26.1	8.21	236	62.55	
									Duplicate Sample Collected
									MW-803-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-24DD
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC):66.26
Final Water Level (feet TOIC):66.24
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-24DD-SP13
Purge Start Time: 1126
Sample Time:1505
Final Turbidity (NTUs) : 49.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 25.11

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1131	2.4	5.28	15.35	584	25.3	9.52	214	66.28	
1136	4.8	5.18	15.19	583	26.0	9.16	226	66.28	
1141	7.2	5.16	15.09	585	31.8	8.71	234	66.28	
1146	9.6	5.13	15.15	582	69.8	9.70	240	66.28	
1151	12.0	5.08	15.20	588	74.9	8.42	250	66.28	
1156	14.4	5.06	15.19	571	39.9	9.48	256	66.28	
1338	21.12	5.00	15.21	566	43.5	9.50	262	66.25	
1342	23.52	5.01	14.94	572	54.8	9.51	275	66.25	
1347	25.92	5.01	14.88	575	53.1	9.47	280	66.25	> 2 system volumes
1352	28.32	5.00	14.82	571	50.7	9.39	282	66.25	
1357	30.72	5.00	14.76	574	49.7	9.54	286	66.25	
1402	33.12	4.99	14.75	550	69.7	9.61	289	66.25	
1407	35.52	5.00	14.67	569	66.4	9.59	294	66.25	
1412	37.92	4.98	14.71	577	63.5	9.72	294	66.25	
1417	40.32	5.01	14.73	576	63.4	8.31	294	66.25	
1450	56.16	5.00	14.75	577	53.8	9.32	297	66.25	

Key:
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°C = Degrees centigrade.
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1455	58.56	5.03	14.74	582	52.2	9.14	300	66.24	
1500	60.96	5.02	14.74	584	49.9	9.09	300	66.24	

Key:

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-24S
Sample Date: 4/18/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):62.81
Final Water Level (feet TOIC):62.81
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-24S-SP13
Purge Start Time: 1016
Sample Time:1055
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.49

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1016	0	5.86	15.19	1180	6.4	7.88	205	62.81	
1021	2.5	5.75	15.12	1140	4.7	7.54	213	62.81	
1026	5.0	5.69	15.12	1140	5.3	7.32	219	62.81	> 2 system volumes
1031	7.5	5.72	15.09	1160	3.5	6.75	222	62.81	
1036	10.0	5.68	15.07	1160	1.4	6.86	223	62.81	
1041	12.5	5.72	15.09	1170	1.0	6.79	224	62.81	
1046	15.0	5.71	15.09	1170	1.0	6.67	226	62.81	
1051	17.5	5.71	15.10	1170	1.0	6.92	226	62.81	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25D
Sample Date: 4/17/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 350
Screen Interval (feet TOIC):340-350
Initial Water Level (Feet TOIC):62.87
Final Water Level (feet TOIC):62.86
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth

Sample ID: MW-25D-SP13
Purge Start Time: 815
Sample Time:925
Final Turbidity (NTUs) : 9.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 23.72

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
815	0	6.75	14.78	928	0.7	1.32	126	62.85	
820	2.5	6.71	14.62	926	2.7	0.99	104	62.86	
825	5.0	7.56	14.57	932	42.0	0.89	72	62.86	
830	7.5	7.34	14.48	981	88.2	2.80	82	62.86	
835	10.0	6.28	14.41	885	20.8	4.37	131	62.86	
840	12.5	5.72	14.38	873	10.3	4.92	159	62.86	
845	15.0	5.52	14.37	870	9.7	5.06	177	62.86	
855	20.0	5.41	14.36	869	9.5	5.24	195	62.86	
900	22.5	5.38	14.33	870	9.5	5.26	201	62.86	
905	25.0	5.36	14.33	867	9.2	5.26	207	62.86	> 2 system volumes
910	27.5	5.33	14.32	872	9.3	5.23	211	62.86	
915	30.0	5.33	14.29	871	9.6	5.26	216	62.86	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25I
Sample Date: 4/16/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):62.49
Final Water Level (feet TOIC):62.50
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-25I-SP13
Purge Start Time: 1544
Sample Time:1625
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 15.40

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1547	1.4	7.39	15.34	749	0.0	1.40	145	62.50	
1552	3.8	7.26	15.13	753	0.0	1.04	144	62.50	
1557	6.2	5.67	15.03	669	1.1	5.67	212	62.51	
1602	8.6	5.51	15.04	666	0.0	6.08	228	62.51	
1607	11.0	5.47	15.02	665	0.0	6.27	242	62.50	
1612	13.4	5.44	14.91	665	0.0	6.34	254	62.50	
1617	15.8	5.44	14.89	665	0.0	6.34	258	62.50	> 2 system volumes
1622	18.2	5.43	14.88	667	0.0	6.41	263	62.50	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25S
Sample Date: 4/16/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 115
Screen Interval (feet TOIC):105-115
Initial Water Level (Feet TOIC):62.77
Final Water Level (feet TOIC):62.75
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-25S-SP13
Purge Start Time: 800
Sample Time:820
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 460
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.82

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
800	0	5.56	14.56	595	2.2	8.28	247	62.77	
805	2.3	5.08	14.60	594	0.0	8.22	261	62.75	
810	4.6	5.02	14.57	589	0.0	8.18	267	62.75	
815	6.9	5.01	14.58	582	0.0	7.99	271	62.75	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-26D
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 276
Screen Interval (feet TOIC):266-276
Initial Water Level (Feet TOIC):62.33
Final Water Level (feet TOIC):62.33
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MW-26D
Purge Start Time: 830
Sample Time:930
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.13

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
835	2.0	5.71	15.40	508	0.0	3.43	217	62.33	
840	4.0	5.70	15.28	505	0.0	3.91	221	62.33	
845	6.0	5.71	15.25	503	0.0	4.67	228	62.33	
850	8.0	5.66	15.23	355	15.5	5.42	228	62.33	
855	10.0	5.59	15.19	265	0.0	5.65	234	62.33	
900	12.0	5.58	15.17	253	0.0	5.73	239	62.33	
905	14.0	5.58	15.13	246	0.0	5.84	244	62.33	
910	16.0	5.60	15.14	243	0.0	5.93	249	62.33	
915	18.0	5.60	15.15	239	0.0	5.97	249	62.33	
920	20.0	5.57	15.17	238	0.0	5.97	251	62.33	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-26S
Sample Date: 4/15/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):62.80
Final Water Level (feet TOIC):62.79
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-26S-SP13
Purge Start Time: 1240
Sample Time:1315
Final Turbidity (NTUs) : 25.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.29

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1242	0	6.53	15.75	365	28.1	6.19	161	62.80	
1247	3.5	5.95	15.31	359	26.7	5.75	193	62.80	
1252	6.0	5.80	15.26	353	26.1	5.74	213	62.79	
1257	8.5	5.78	15.27	350	25.9	5.77	222	62.79	> 2 system volumes
1302	11.0	5.71	15.21	349	25.9	5.90	233	62.79	
1307	13.5	5.77	15.27	349	26.0	5.72	235	62.79	
1312	16.0	5.76	15.34	347	25.7	5.78	239	62.79	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27D
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):61.90
Final Water Level (feet TOIC):62.10
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MW-27D-SP13
Purge Start Time: 1340
Sample Time: 1520
Final Turbidity (NTUs) : 42.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
4x Pump System Volume (liters): 38.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1350	4.8	6.69	15.24	328	8.1	6.79	127	62.10	
1355	7.2	6.75	15.45	220	6.1	6.78	126	62.10	
1400	9.6	6.73	15.44	220	5.0	6.75	129	62.10	
1405	12.0	5.62	15.37	180	14.2	5.03	171	62.10	
1410	14.4	5.24	15.35	237	26.1	5.24	203	62.10	
1415	16.8	5.19	15.32	246	26.5	4.09	224	62.10	
1420	19.2	5.16	15.31	247	28.5	3.92	232	62.10	
1425	21.6	5.18	15.41	248	29.8	3.73	241	62.10	
1430	24.0	5.16	15.30	247	37.6	3.64	247	62.10	
1435	26.4	5.17	15.33	247	40.7	3.57	250	62.10	
1440	28.8	5.19	15.31	246	52.9	3.53	255	62.10	
1445	30.2	5.19	15.25	244	59.0	3.75	234	62.10	
1450	32.6	5.19	15.24	245	54.5	3.63	250	62.10	
1455	35.0	5.17	15.25	245	53.0	3.60	254	62.10	
1500	37.4	5.20	15.33	245	50.2	3.58	257	62.10	
1505	39.4	5.21	15.27	245	44.3	3.60	262	62.10	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1510	41.8	5.21	15.42	246	43.2	3.58	265	62.10	
1515	44.2	5.20	15.33	245	42.3	3.56	267	62.10	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27DD
Sample Date: 4/16/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC):365-375
Initial Water Level (Feet TOIC):62.40
Final Water Level (feet TOIC):62.55
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-27DD-SP13
Purge Start Time: 1358
Sample Time:1505
Final Turbidity (NTUs) : 15.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 25.64

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1400	1.0	5.82	14.65	280	6.1	5.23	182	62.44	
1405	3.5	5.53	14.68	280	5.6	5.90	207	62.51	
1410	6.0	5.43	14.61	279	6.8	6.04	221	62.48	
1415	8.5	5.40	14.62	224	305	6.39	230	62.51	
1420	11.0	5.35	14.61	216	127	6.40	241	62.49	
1425	13.5	5.34	14.71	219	60.9	7.23	249	62.49	
1435	18.5	5.35	14.62	218	36.8	6.52	255	62.55	
1445	23.5	5.34	14.60	218	25.5	6.45	262	62.55	
1450	26.0	5.33	14.64	217	15.7	6.52	267	62.55	> 2 system volumes
1455	28.5	5.32	14.65	217	16.2	6.54	268	62.55	
1500	31.0	5.31	14.61	217	15.5	6.57	270	62.55	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27S
Sample Date: 4/15/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 88
Screen Interval (feet TOIC):78-88
Initial Water Level (Feet TOIC):62.15
Final Water Level (feet TOIC):62.15
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-27S-SP13
Purge Start Time: 1530
Sample Time:1600
Final Turbidity (NTUs) : 26.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.82

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1530	0	6.23	14.67	99	39.9	9.67	182	62.15	
1535	2.5	6.22	14.66	97	33.2	8.94	199	62.15	
1540	5.0	6.22	14.67	97	28.5	8.55	206	62.15	> 2 system volumes
1545	7.5	6.25	14.67	97	27.2	8.27	211	62.15	
1550	10.0	6.23	14.62	96	26.7	8.12	217	62.15	
1555	12.5	6.24	14.65	96	26.2	7.96	218	62.15	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28D
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 287
Screen Interval (feet TOIC):277-287
Initial Water Level (Feet TOIC):67.46
Final Water Level (feet TOIC):67.51
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-28D
Purge Start Time: 831
Sample Time:1255
Final Turbidity (NTUs) : 48.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.78

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
836	2.5	6.71	13.84	2450	73.3	7.76	114	67.51	
841	5.0	6.80	13.77	2490	233	6.35	40	67.51	
846	7.5	6.48	13.76	2500	237	5.96	80	67.57	
851	10.0	6.06	13.72	2490	239	5.49	114	67.57	
856	12.5	5.91	13.69	2490	261	5.22	126	67.57	
901	15.0	5.80	13.69	2490	277	4.87	137	67.57	
906	17.5	5.77	13.66	2490	297	4.61	142	67.57	
911	20.0	5.75	13.67	2490	296	4.40	148	67.57	> 2 system volumes
916	22.5	5.73	13.65	2490	295	4.16	154	67.57	
921	25.0	5.73	13.64	2490	319	4.06	156	67.57	
926	27.5	5.72	13.65	2490	323	3.09	159	67.57	
936	32.5	5.72	13.59	2490	273	3.59	163	67.55	
946	37.5	5.71	13.64	2490	274	3.46	164	67.55	
956	42.5	5.71	13.60	2490	254	3.33	165	67.55	
1006	47.5	5.71	13.59	2490	242	3.24	252	67.58	
1016	52.5	5.71	13.64	2490	196	3.17	163	67.51	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1026	57.5	5.71	13.69	2490	162	3.07	163	67.51	
1036	62.5	5.71	13.76	2490	166	3.03	161	67.51	
1046	67.5	5.71	13.91	2480	134	2.96	159	67.51	
1056	72.5	5.71	13.94	2480	125	2.93	158	67.51	
1106	77.5	5.72	14.11	2480	104	2.86	157	67.51	
1116	82.5	5.72	14.22	2480	89.6	2.85	156	67.51	
1126	87.5	5.71	14.16	2480	80.1	2.81	157	67.51	
1136	92.5	5.72	14.19	2470	80.0	2.82	158	67.51	
1146	97.5	5.73	14.31	2470	73.0	2.80	157	67.51	
1156	102.5	5.72	14.43	2470	71.4	2.80	156	67.51	
1206	107.5	5.72	14.67	2470	65.3	2.76	156	67.51	
1216	112.5	5.72	15.39	2460	61..3	2.70	155	67.51	
1226	117.5	5.73	14.58	2470	63.1	2.91	157	67.51	
1236	122.5	5.72	13.93	2470	56.9	2.81	160	67.51	
1241	125.0	5.72	13.91	2470	51.8	2.81	160	67.51	
1246	127.5	5.72	13.89	2480	48.6	2.82	156	67.51	
1251	130.0	5.71	13.83	2480	48.2	2.82	159	67.51	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28I
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 159
Screen Interval (feet TOIC):149-159
Initial Water Level (Feet TOIC):67.68
Final Water Level (feet TOIC):67.68
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth

Sample ID: MW-28I-SP13 & DUP
Purge Start Time: 840
Sample Time:920
Final Turbidity (NTUs) : 25.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 9.07

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
841	0.5	5.84	14.48	1750	29.8	6.15	172	67.68	
846	3.0	5.89	14.38	1770	28.4	7.05	173	67.68	
851	5.5	5.92	14.34	1780	27.2	6.93	178	67.68	
856	8.0	5.89	14.29	1780	26.8	6.90	178	67.68	
901	10.5	5.90	14.29	1780	26.4	6.86	178	67.68	> 2 system volumes
906	13.0	5.88	14.28	1780	26.1	6.83	178	67.68	
911	15.5	5.88	14.27	1780	25.9	6.83	178	67.68	
									Duplicate Sample Collected
									MW-808-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28S
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):65.01
Final Water Level (feet TOIC):65.01
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth

Sample ID: MW-28S-SP13
Purge Start Time: 1005
Sample Time:1030
Final Turbidity (NTUs) : 26.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.16

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1007	1.0	5.74	14.54	308	31.0	6.81	188	65.01	
1012	3.5	5.44	14.52	339	27.0	6.59	213	65.01	
1017	6.0	5.40	14.50	346	26.4	6.36	224	65.01	> 2 system volumes
1022	8.5	5.38	14.50	349	26.3	6.33	229	65.01	
1027	11.0	5.36	14.50	349	26.9	6.29	229	65.01	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-29S
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 76
Screen Interval (feet TOIC):66-76
Initial Water Level (Feet TOIC):62.83
Final Water Level (feet TOIC):62.85
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-29S-SP13
Purge Start Time: 1515
Sample Time: 1540
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 540
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1515	0	6.53	16.08	245	4.4	7.19	208	62.83	
1520	2.7	6.52	15.80	233	0.0	6.41	211	62.85	
1525	5.4	6.48	15.69	234	0.6	6.04	214	62.85	> 2 system volumes
1530	8.1	6.49	15.65	235	0.0	5.89	217	62.87	
1535	10.8	6.51	15.65	235	0.0	5.82	216	62.85	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30D
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC):330-340
Initial Water Level (Feet TOIC):60.11
Final Water Level (feet TOIC):62.14
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-30D-SP13
Purge Start Time: 1335
Sample Time: 1445
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 23.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1345	4.8	8.39	15.31	992	4.8	3.42	35	62.14	
1355	9.6	6.74	15.54	1090	2.6	4.72	171	62.14	
1405	14.4	5.94	15.48	1100	2.6	4.89	198	62.14	
1415	19.2	5.69	15.39	1100	1.2	4.94	199	62.14	
1425	24.0	5.64	15.28	1110	0.4	5.01	202	62.14	> 2 system volumes
1430	26.4	5.62	15.28	1110	0.0	5.02	202	62.14	
1435	28.8	5.60	15.27	1110	0.0	5.02	201	62.14	
1440	31.2	5.61	15.30	1110	0.0	5.02	198	62.14	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30I
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):61.53
Final Water Level (feet TOIC):61.53
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MW-30I-SP13 & DUP
Purge Start Time: 1150
Sample Time: 1250
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 320
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 15.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1155	1.6	6.37	15.67	565	0.2	2.62	128	61.53	
1200	3.2	5.97	15.55	570	3.7	3.22	143	61.53	
1205	4.8	5.90	15.53	588	11.5	6.61	158	61.53	
1210	5.4	5.87	15.51	593	3.4	7.53	168	61.53	
1215	7.0	5.86	15.47	594	0.0	7.83	176	61.53	
1220	8.6	5.86	15.44	595	0.0	7.93	180	61.53	
1225	10.2	5.88	15.80	596	0.0	7.98	184	61.53	
1230	11.8	5.87	15.39	597	0.0	8.02	186	61.53	
1235	13.4	5.87	15.41	597	0.0	8.09	188	61.53	
1240	15.0	5.88	15.37	599	0.0	8.11	189	61.53	
1245	16.6	5.88	15.37	600	0.0	8.13	191	61.53	> 2 system volumes
									Duplicate Sample Collected
									MW-817-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30S
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):61.60
Final Water Level (feet TOIC):61.60
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-30S-SP13
Purge Start Time: 1325
Sample Time: 1355
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1330	2.4	5.40	15.96	167	0.3	8.16	268	61.60	
1335	4.8	5.36	15.97	167	0.0	7.00	295	61.60	> 2 system volumes
1340	7.2	5.33	15.70	168	0.0	7.03	285	61.60	
1345	9.6	5.33	15.72	167	0.0	7.01	289	61.60	
1350	12.0	5.32	15.78	167	0.0	6.92	292	61.60	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-31D
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 330
Screen Interval (feet TOIC):320-330
Initial Water Level (Feet TOIC):61.91
Final Water Level (feet TOIC):61.91
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-31D-SP13
Purge Start Time: 945
Sample Time: 1115
Final Turbidity (NTUs) : 23.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400/480
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 22.22

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
950	2.0	6.56	15.99	1400	76.1	8.86	221	61.91	
955	4.0	7.09	15.76	1430	76.4	4.18	210	61.91	
1000	6.0	7.48	15.62	1440	40.1	3.76	206	61.91	
1005	8.0	7.65	15.59	1440	44.1	3.39	201	61.91	Flow rate increased to 480ml/min
1010	10.4	7.78	15.58	1445	78.9	1.90	197	61.91	
1015	12.8	6.82	15.64	1720	1000	2.73	213	61.91	
1020	15.2	6.03	15.54	1870	542	3.09	222	61.91	
1025	17.6	5.72	15.57	1880	157	3.07	228	61.91	
1030	20.0	5.70	15.60	1870	93.2	2.93	230	61.91	
1035	22.4	5.68	15.65	1870	65.5	2.87	232	61.91	> 2 system volumes
1040	24.8	5.67	15.70	1870	49.5	3.00	233	61.91	
1045	27.2	5.66	15.70	1870	37.6	2.99	236	61.91	
1050	29.6	5.65	15.70	1880	29.7	3.09	239	61.91	
1055	32.0	5.65	15.65	1870	28.0	2.92	240	61.91	
1100	34.4	5.66	15.61	1870	23.2	2.98	242	61.91	
1105	36.8	5.66	15.66	1870	23.1	2.94	244	61.91	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1110	39.2	5.65	15.66	1870	23.1	3.00	246	61.91	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-31I
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC):180-190
Initial Water Level (Feet TOIC):61.63
Final Water Level (feet TOIC):61.63
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-31I-SP13 & DUP
Purge Start Time: 1340
Sample Time: 1420
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.57

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1345	2.5	6.58	16.64	481	0.0	5.95	218	61.63	
1350	5.0	6.81	16.17	465	0.0	4.70	218	61.63	
1355	7.5	5.73	16.04	429	0.0	5.71	236	61.63	
1400	10.0	5.69	15.95	422	0.0	5.72	240	61.63	
1405	12.5	5.69	15.86	420	0.0	5.88	242	61.63	> 2 system volumes
1410	15.0	5.69	15.82	420	0.0	5.76	244	61.63	
1415	17.5	5.69	15.77	420	0.0	5.72	246	61.63	
									Duplicate Sample Collected
									MW-816-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-32D
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 305
Screen Interval (feet TOIC):295-305
Initial Water Level (Feet TOIC):62.30
Final Water Level (feet TOIC):62.38
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MW-32D-SP13
Purge Start Time: 820
Sample Time: 1105
Final Turbidity (NTUs) : 46.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
825	1.25	6.17	13.82	150	14.0	2.11	10	62.38	
830	2.50	6.65	13.74	149	8.4	1.53	-67	62.38	
835	3.75	7.03	13.77	149	15.1	1.55	-106	62.38	
840	5.0	7.31	13.75	149	15.8	2.45	-156	62.38	
845	6.25	6.75	13.78	150	19.0	2.30	-166	62.38	
850	7.5	5.84	13.72	157	411	3.05	-123	62.38	
855	8.75	5.53	13.66	162	355	3.93	-94	62.38	
900	10.0	5.26	13.71	165	149	5.12	-40	62.38	
905	11.25	5.19	13.72	164	135	5.34	-17	62.38	
910	12.5	5.14	13.69	165	127	5.48	1	62.38	
915	13.75	5.11	13.61	165	119	5.64	39	62.38	
920	15.0	5.09	13.75	165	107	5.79	63	62.38	
925	16.25	5.08	13.72	165	103	5.83	73	62.38	
930	17.5	---	---	---	---	---	---	62.38	Cleaned Horiba flow cell
935	18.75	---	---	---	---	---	---	62.38	Fixed leaking Horiba
940	20.0	5.07	13.54	165	90.5	6.26	107	62.38	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
945	21.25	5.06	13.77	166	85.1	6.15	116	62.38	> 2 system volumes
950	22.5	5.05	13.80	166	72.1	6.08	123	62.38	
955	23.75	5.05	13.83	166	69.7	6.05	132	62.38	
1000	25.0	5.05	13.92	166	79.7	6.09	140	62.38	
1005	26.25	5.06	13.90	166	73.3	6.02	145	62.38	
1010	27.5	5.06	13.94	166	63.1	6.02	152	62.38	
1015	28.75	5.06	14.05	166	59.7	6.06	157	62.38	
1020	30.0	5.06	14.24	165	57.9	6.12	166	62.38	
1025	31.25	5.07	14.26	166	56.3	6.05	173	62.38	
1030	32.5	5.07	14.27	167	50.3	6.02	177	62.38	
1035	33.75	5.07	14.35	166	52.9	6.08	184	62.38	
1040	35.0	5.07	14.42	166	54.5	6.08	188	62.38	
1045	36.25	5.07	14.50	166	50.4	6.09	194	62.38	
1050	37.5	5.07	14.48	166	49.3	6.02	199	62.38	
1055	38.75	5.07	14.54	166	47.5	6.04	204	62.38	
1100	40.0	5.07	14.50	166	46.7	6.09	207	62.38	

Key:

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-33D
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 300
Screen Interval (feet TOIC):290-300
Initial Water Level (Feet TOIC):56.39
Final Water Level (feet TOIC):56.65
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-33D-SP13
Purge Start Time: 1110
Sample Time:1330
Final Turbidity (NTUs) : 30.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 325
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.18

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1110	0	5.68	12.55	536	15.2	3.70	219	56.68	
1115	1.63	5.68	12.58	537	5.9	3.20	210	56.60	
1120	3.24	5.71	12.56	537	3.5	3.10	203	56.58	
1125	4.87	5.85	12.57	535	3.0	2.94	187	56.60	
1135	8.13	5.77	12.61	535	21.2	2.81	190	56.58	Flow increased to 400 ml/min
1145	11.38	5.88	12.90	527	1000	2.69	167	56.60	
1150	13.38	5.85	13.16	490	379	2.81	157	56.68	
1155	15.38	5.79	13.06	482	57	2.91	166	56.65	
1205	18.38	5.73	12.96	488	26.5	3.29	182	56.59	Flow decreased to 300 ml/min
1210	19.88	5.72	12.81	486	65.8	3.28	188	56.55	
1215	21.38	5.71	12.83	486	97.7	3.34	192	56.55	> 2 system volumes
1220	22.63	5.69	12.82	482	113	3.39	197	56.52	Flow decreased to 250 ml/min
1225	23.63	5.68	12.56	482	114	3.46	201	56.52	Flow decreased to 200 ml/min
1230	24.63	5.68	12.40	482	95.4	3.48	203	56.45	
1235	25.63	5.67	12.23	483	99.6	3.48	204	56.48	
1245	27.63	5.66	12.15	487	104	3.39	207	56.45	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1255	29.63	5.66	12.89	491	101	3.30	199	56.61	Flow increased to 250 ml/min
1305	30.88	5.64	13.18	509	53.7	2.91	206	56.64	
1310	32.13	5.64	13.19	513	34.0	2.93	208	56.64	
1315	33.38	5.63	13.26	518	33.1	2.91	210	56.65	
1320	34.63	5.64	13.23	525	30.8	2.91	211	56.65	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-33S
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):56.23
Final Water Level (feet TOIC):56.30
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-33S-SP13 & DUP
Purge Start Time: 1115
Sample Time:1150
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 600/300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.55

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1115	0	4.51	12.18	89	1.6	12.86	326	56.23	
1120	3.0	4.22	12.25	93	4.9	15.16	393	56.31	Flow decreased to 300 ml/min
1125	4.5	4.21	11.96	98	3.7	10.35	402	56.28	> 2 system volumes
1130	6.0	4.21	11.84	98	0.0	10.22	413	56.28	
1135	7.5	4.17	11.89	96	0.0	10.08	419	56.30	
1140	9.0	4.17	11.90	99	0.0	9.95	421	56.30	
									Duplicate Sample Collected
									MW-812-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-34D
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC):270-280
Initial Water Level (Feet TOIC):57.04
Final Water Level (feet TOIC):57.73
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-34D-SP13
Purge Start Time: 1420
Sample Time:1635
Final Turbidity (NTUs) : 44.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 460
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1420	0	6.32	13.24	261	19.7	3.48	215	57.79	
1425	2.3	6.29	13.38	261	23.3	3.13	213	57.81	
1435	6.9	6.04	13.45	260	103	3.15	214	57.81	
1445	11.5	5.90	13.50	258	536	5.61	219	57.82	
1455	16.1	5.90	13.50	258	476	6.09	229	57.68	
1505	20.7	5.87	13.45	259	405	6.26	238	57.68	> 2 system volumes
1515	25.3	5.85	13.43	260	261	6.34	245	57.74	
1525	29.9	5.83	13.21	260	148	6.23	251	57.74	
1535	34.5	5.83	13.43	261	120	6.27	254	57.71	
1545	39.1	5.83	13.41	260	98.5	6.35	258	57.71	
1555	43.7	5.83	13.42	261	69.2	6.44	262	57.71	
1605	48.3	5.82	13.44	261	61.0	6.43	264	57.73	
1615	52.9	5.83	13.45	261	53.3	6.45	266	57.71	
1620	55.2	5.82	13.44	261	47.2	6.44	267	57.73	
1625	57.5	5.82	13.43	261	46.9	6.49	268	57.73	
1630	59.8	5.82	13.43	261	44.4	6.49	269	57.73	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-34S
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):57.23
Final Water Level (feet TOIC):57.23
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-34S-SP13
Purge Start Time: 1440
Sample Time:1525
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 700
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.52

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1440	0	5.02	11.02	72	0.0	12.16	327	57.23	
1445	3.5	5.34	12.60	61	0.0	10.61	324	57.23	
1450	7.0	5.35	12.63	64	0.0	10.60	323	57.23	> 2 system volumes
1455	10.5	5.35	12.65	67	0.0	10.48	328	57.23	
1500	14.0	5.35	12.65	68	0.0	10.21	325	57.23	
1505	17.5	5.39	12.65	71	0.0	10.08	327	57.23	
1510	21.0	5.38	12.67	72	0.0	9.86	331	57.23	
1515	24.5	5.38	12.65	72	0.0	9.86	330	57.23	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-39S
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 86
Screen Interval (feet TOIC):76-86
Initial Water Level (Feet TOIC):61.65
Final Water Level (feet TOIC):61.65
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-39S-SP13
Purge Start Time: 1230
Sample Time: 1305
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.76

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1235	1.0	5.82	16.34	203	12.3	7.25	221	61.65	
1240	2.0	5.71	16.34	227	4.4	6.18	227	61.65	
1245	3.0	5.69	16.37	173	1.5	6.54	232	61.65	
1250	4.0	5.68	16.45	173	0.0	5.78	235	61.65	> 2 system volumes
1255	5.0	5.68	16.51	175	0.0	5.80	237	61.65	
1300	6.0	5.68	16.55	176	0.0	5.75	239	61.65	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-41S
Sample Date: 4/17/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 76
Screen Interval (feet TOIC):66-76
Initial Water Level (Feet TOIC):63.86
Final Water Level (feet TOIC):63.87
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-41S-SP13
Purge Start Time: 1511
Sample Time:1555
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.30

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1517	3.0	6.37	15.30	337	9.5	6.51	148	63.85	
1522	5.5	6.17	15.20	340	4.7	6.14	161	63.87	> 2 system volumes
1527	8.0	6.11	15.22	340	2.6	6.14	167	63.87	
1532	10.5	6.09	15.20	341	1.1	6.13	170	63.87	
1537	13.0	6.03	15.18	342	0.5	6.13	176	63.87	
1542	15.5	6.01	15.23	342	0.1	6.13	180	63.87	
1547	18.0	6.01	15.23	343	0.0	6.03	184	63.87	
1552	20.5	6.00	15.20	343	0.0	6.01	188	63.87	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-42I
Sample Date: 4/18/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):64.07
Final Water Level (feet TOIC):64.05
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-42I-SP13
Purge Start Time: 814
Sample Time:925
Final Turbidity (NTUs) : 5.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.52

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
816	1.0	5.23	13.76	1110	25.0	7.02	205	64.05	
821	3.5	5.21	13.84	1090	22.4	7.16	224	64.05	
826	6.0	5.21	13.88	1070	17.4	7.15	232	64.05	
831	8.5	5.21	13.81	1060	13.2	7.08	240	64.05	
836	11.0	5.21	13.87	1050	10.9	6.97	246	64.05	> 2 system volumes
841	13.5	5.20	13.90	1050	10.5	6.88	250	64.05	
846	16.0	5.18	13.91	1050	8.3	6.90	254	64.05	
851	18.5	5.19	13.92	1050	7.9	6.98	255	64.05	
856	21.0	5.19	13.94	1050	6.1	6.75	256	64.05	
901	23.5	5.19	13.95	1050	6.3	6.74	257	64.05	
906	26.0	5.19	13.95	1050	5.6	6.75	258	64.05	
911	28.5	5.18	13.99	1050	5.1	6.79	258	64.05	
916	31.0	5.18	14.01	1040	5.1	6.48	260	64.05	
921	33.5	5.18	13.95	1040	5.0	6.62	265	64.05	

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NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-43S
Sample Date: 4/17/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 73
Screen Interval (feet TOIC):63-73
Initial Water Level (Feet TOIC):64.32
Final Water Level (feet TOIC):64.34
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-43S-SP13
Purge Start Time: 1737
Sample Time:1815
Final Turbidity (NTUs) : 0.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.17

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1740	1.5	6.85	14.65	622	21.3	6.77	152	64.32	
1745	4.0	6.47	14.62	658	2.8	6.45	165	64.35	> 2 system volumes
1750	6.5	6.38	14.53	663	1.7	6.55	169	64.34	
1755	9.0	6.36	14.54	666	1.11	6.57	173	64.34	
1800	11.5	6.35	14.56	669	0.8	6.59	177	64.34	
1805	14.0	6.34	14.53	672	0.4	6.60	178	64.34	
1810	16.5	6.35	14.54	676	0.4	6.58	180	64.34	
1815	19.0	6.35	14.54	680	0.4	6.57	180	64.34	

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ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-44S
Sample Date: 4/18/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):63.24
Final Water Level (feet TOIC):63.24
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-44S-SP13
Purge Start Time: 1120
Sample Time:1145
Final Turbidity (NTUs) : 2.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.28

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1122	1.0	6.09	15.39	366	4.0	6.97	200	63.25	
1127	3.5	6.17	15.42	368	4.0	6.88	200	63.25	> 2 system volumes
1132	6.0	6.23	15.40	371	2.4	6.96	197	63.25	
1137	8.5	6.25	15.38	374	2.3	7.12	196	63.24	
1142	11.0	6.27	15.40	373	2.2	6.98	194	63.24	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-49S
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):64.18
Final Water Level (feet TOIC):64.18
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-49S-SP13
Purge Start Time: 825
Sample Time:900
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.49

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
825	0	5.52	14.41	150	2.1	8.31	210	64.18	
830	2.5	5.44	14.45	161	0.0	7.99	221	64.18	
835	5.0	5.42	14.44	165	0.0	7.99	224	64.18	
840	7.5	5.41	14.44	173	0.0	7.91	229	64.18	> 2 system volumes
845	10.0	5.39	14.44	181	0.0	7.66	235	64.18	
850	12.5	5.39	14.44	180	0.0	7.41	238	64.18	
855	15.0	5.38	14.47	184	0.0	7.45	244	64.18	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-50I
Sample Date: 4/18/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):62.19
Final Water Level (feet TOIC):62.19
Casing Type: **PVC** Steel (circle one)
Personnel: M. Werth & J. Rhyne

Sample ID: MW-50I-SP13
Purge Start Time: 1330
Sample Time:1125
Final Turbidity (NTUs) : 7.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 7.08

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1331	0.3	5.83	14.86	476	247	3.90	200	62.19	
1336	1.8	5.36	14.82	468	152	5.04	227	62.19	
1341	3.3	5.29	14.85	464	76.2	5.16	237	62.19	
1346	4.8	5.25	14.86	462	48.2	5.18	245	62.19	
1351	6.3	5.24	14.79	459	25.8	5.43	252	62.19	
1356	7.8	5.23	14.75	457	19.8	5.15	257	62.19	> 2 system volumes
1401	9.3	5.22	14.75	455	13.4	5.36	260	62.19	
1406	10.8	5.21	14.77	454	11.5	5.32	263	62.19	
1411	12.3	5.20	14.78	455	8.6	5.40	264	62.19	
1416	13.8	5.21	14.73	454	8.3	5.44	266	62.19	
1421	15.3	5.20	14.72	455	7.9	5.32	268	62.19	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-51I
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 140
Screen Interval (feet TOIC):130-140
Initial Water Level (Feet TOIC):61.09
Final Water Level (feet TOIC):61.09
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-51I-SP13
Purge Start Time: 835
Sample Time: 915
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 7.87

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
840	1.25	5.68	14.91	518	0.0	6.41	201	61.09	
845	2.5	5.70	14.94	515	0.0	5.07	207	61.09	
850	3.75	5.65	14.93	523	1.3	4.82	213	61.09	
855	5.0	5.62	14.82	546	0.0	4.52	219	61.09	
900	6.25	5.60	14.84	556	0.0	4.27	223	61.09	
905	7.5	5.60	14.82	562	0.0	4.24	227	61.09	
910	8.75	5.60	14.87	565	0.0	4.07	230	61.09	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-52D
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):57.95
Final Water Level (feet TOIC):58.58
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-52D-SP13
Purge Start Time: 820
Sample Time:1055
Final Turbidity (NTUs) : 48.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 540/500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.99

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
820	0	5.58	13.61	218	39.3	7.787	211	58.71	
825	2.7	5.64	13.67	217	43.4	3.59	216	58.70	
830	5.4	5.60	13.67	215	42.1	2.96	224	58.71	
835	8.1	5.51	13.69	219	158	2.82	232	58.71	
840	10.8	5.47	13.72	219	314	2.70	243	58.68	
845	13.5	5.45	13.71	212	336	2.75	248	58.70	
850	16.2	5.46	13.74	208	332	2.73	251	58.67	
855	18.9	5.47	13.76	206	282	2.69	255	58.67	
900	21.6	5.47	13.70	205	195	2.95	246	58.67	> 2 system volumes
905	24.3	5.46	13.72	204	159	2.72	250	58.60	
910	27.0	5.48	13.74	203	148	2.68	256	58.62	
915	29.7	5.48	13.75	203	117	2.66	258	58.52	
920	32.4	5.48	13.79	203	106	2.62	261	58.60	
930	37.8	5.50	13.83	203	101	2.54	263	58.52	Flow decreased to 500 ml/min
940	42.8	5.50	13.83	204	76.4	2.46	264	58.52	
950	47.8	5.52	13.84	205	70.0	2.31	268	58.60	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1000	52.8	5.54	13.87	206	70.2	2.14	268	58.60	
1010	57.8	5.55	13.87	268	66.1	2.08	268	58.55	
1020	62.8	5.57	13.87	208	60.7	2.08	268	58.55	
1030	67.8	5.57	13.92	208	53.1	2.07	268	58.58	
1040	72.8	5.57	13.91	209	48.9	2.12	268	58.58	
1045	75.3	5.57	13.93	208	46.6	2.15	269	58.58	
1050	77.8	5.57	13.94	208	48.7	2.15	270	58.58	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-53S
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):57.67
Final Water Level (feet TOIC):57.70
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-53S-SP13 & DUP
Purge Start Time: 1125
Sample Time:1210
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.69

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1125	0	5.17	14.17	101	2.5	7.14	272	57.67	
1130	2.4	4.76	14.18	98	0.0	6.65	322	57.67	
1135	4.8	5.10	14.16	98	0.0	6.38	331	57.67	> 2 system volumes
1140	7.2	5.43	14.11	109	0.0	6.18	322	57.67	
1145	9.6	5.51	14.07	117	0.0	6.12	315	57.70	
1150	12.0	5.58	14.09	121	0.0	6.10	311	57.70	
1155	14.4	5.60	14.07	123	0.0	6.05	305	57.70	
1200	16.8	5.64	14.08	123	0.0	6.01	304	57.70	
									Duplicate Sample Collected
									MW-815-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-55S
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 95.5
Screen Interval (feet TOIC):85.5-95.5
Initial Water Level (Feet TOIC):56.82
Final Water Level (feet TOIC):56.80
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-55S-SP13
Purge Start Time: 955
Sample Time:1025
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 700
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.31

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
955	0	6.69	12.70	1040	6.5	16.45	207	56.91	
1000	3.5	6.31	12.71	1050	0.0	12.07	215	56.82	
1005	7.0	6.24	12.71	1050	0.0	11.16	219	56.82	> 2 system volumes
1010	10.5	6.23	12.58	1050	0.0	10.51	222	56.82	
1015	14.0	6.15	12.41	1050	0.0	10.13	225	56.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-201-220
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 220
Screen Interval (feet TOIC):210-220
Initial Water Level (Feet TOIC):62.26
Final Water Level (feet TOIC):62.26
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-201-220-SP13
Purge Start Time: 1401
Sample Time: 1440
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 13.90

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1402	0.4	6.36	16.97	378	10.3	8.13	169	62.26	
1411	4.0	5.65	16.00	390	0.0	7.83	204	62.26	
1416	6.0	5.63	15.97	382	0.0	7.60	213	62.26	
1421	8.0	5.53	16.19	379	0.0	7.58	229	62.26	
1426	10.0	5.49	16.21	376	0.0	7.57	234	62.26	
1431	12.0	5.42	16.21	373	0.0	7.55	236	62.26	
1436	14.0	5.40	16.22	373	0.0	7.48	239	62.26	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-220
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 220
Screen Interval (feet TOIC):210-220
Initial Water Level (Feet TOIC):56.26
Final Water Level (feet TOIC):56.35
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-202-220-SP13
Purge Start Time: 1015
Sample Time: 1055
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 600
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 14.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1015	0	5.54	12.54	177	0.0	8.77	245	56.26	
1020	3.0	5.72	12.52	208	0.0	8.43	248	56.35	
1025	6.0	5.80	12.53	204	0.0	7.85	241	56.31	
1030	9.0	5.70	12.53	197	0.0	7.60	252	56.34	
1035	12.0	5.50	12.50	193	0.0	7.52	268	56.31	
1040	15.0	5.47	12.51	193	0.0	7.48	269	56.29	> 2 system volumes
1045	18.0	5.45	12.54	192	0.0	7.40	267	56.35	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-380
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):56.75
Final Water Level (feet TOIC):56.79
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-202-380-SP13
Purge Start Time: 840
Sample Time: 935
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 600
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 26.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
840	0	6.91	12.17	286	3.5	6.41	150	56.75	
845	3.0	6.86	12.18	286	2.2	6.45	153	56.77	
850	6.0	6.28	12.22	299	13.7	6.79	178	56.79	
855	9.0	6.10	12.18	307	4.8	7.03	194	56.79	
900	12.0	6.03	12.20	307	2.5	7.19	204	56.79	
905	15.0	5.99	12.22	306	1.2	7.26	209	56.79	
910	18.0	5.94	12.21	304	0.6	7.29	209	56.79	
915	21.0	5.94	12.21	305	0.0	7.35	216	56.79	
920	24.0	5.94	12.22	305	0.0	7.27	219	56.79	
925	27.0	5.94	12.22	304	0.0	7.31	217	56.79	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-495
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 495
Screen Interval (feet TOIC):485-495
Initial Water Level (Feet TOIC):57.02
Final Water Level (feet TOIC):57.45
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-202-495-SP13 & MS/MSD
Purge Start Time: 820
Sample Time: 1040
Final Turbidity (NTUs) : 6.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 34.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
820	0	11.12	13.27	317	10.1	8.47	43	57.42	
830	4.8	10.97	13.32	304	7.7	7.99	41	57.45	
840	9.6	11.91	13.36	825	7.4	6.05	5	57.51	
850	14.4	11.96	13.41	876	6.4	5.18	-37	57.42	
900	19.2	11.55	13.44	483	25.1	4.48	-46	57.46	
910	24.0	11.32	13.51	377	28.5	4.09	-40	57.48	
920	28.8	11.25	13.52	349	22.5	3.94	-37	57.42	
925	31.2	11.18	13.50	326	18.8	3.89	-33	57.46	
930	33.6	11.16	13.51	320	17.2	3.85	-32	57.48	
935	36.0	11.09	13.54	306	14.1	3.82	-29	57.46	> 2 system volumes
940	38.4	11.06	13.51	299	12.7	3.81	-28	57.52	
945	40.8	11.01	13.53	288	11.4	3.82	-27	57.46	
950	43.2	10.99	13.53	286	10.2	3.82	-25	57.44	
1000	45.6	10.91	13.53	268	8.5	3.85	-24	57.51	
1005	48.0	10.84	13.54	258	7.9	3.87	-22	57.45	
1010	50.4	10.81	13.55	252	6.9	3.91	-21	57.49	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1015	52.8	10.96	13.60	245	6.7	3.97	-21	57.51	
1020	53.2	10.75	13.57	244	6.2	4.00	-22	57.45	
									MS/MSD collected

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-160
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC):150-160
Initial Water Level (Feet TOIC):59.80
Final Water Level (feet TOIC):59.84
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-203-160-SP13
Purge Start Time: 915
Sample Time:1125
Final Turbidity (NTUs) : 45.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 9.293

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
925	2.2	5.21	13.31	239	19.0	2.63	227	59.80	
930	3.3	5.20	13.56	238	59.4	2.44	231	59.80	
935	4.4	5.30	13.54	237	112	2.50	231	59.80	
940	5.5	5.32	13.53	237	162	2.34	236	59.80	
945	6.6	5.31	13.74	236	187	2.53	242	59.80	
950	7.7	5.31	13.71	235	194	2.50	245	59.80	
955	8.8	5.32	13.61	236	190	2.29	251	59.83	
1000	9.9	5.32	13.65	235	183	2.50	250	59.83	> 2 system volumes
1005	11.0	5.32	13.72	235	174	2.57	251	59.83	
1015	13.2	5.32	13.76	236	138	2.49	253	59.84	
1025	15.4	5.32	13.67	236	125	2.59	255	59.84	
1035	17.6	5.32	13.74	236	98.6	2.41	257	59.84	
1045	19.8	5.33	13.61	237	83.9	2.41	255	59.84	
1055	22.0	5.33	13.50	238	74.0	2.41	252	59.84	
1105	24.2	5.31	13.72	237	68.6	2.35	257	59.84	
1110	25.3	5.31	13.74	237	49.7	2.35	258	59.84	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1115	26.4	5.30	13.74	237	48.6	2.37	260	59.84	
1120	27.5	5.31	13.73	237	45.2	2.37	260	59.84	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-360
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 360
Screen Interval (feet TOIC):350-360
Initial Water Level (Feet TOIC):60.41
Final Water Level (feet TOIC):60.48
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-203-360-SP13
Purge Start Time: 915
Sample Time:1135
Final Turbidity (NTUs) : 1.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 24.43

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
925	2.2	8.15	13.32	354	9.4	4.05	184	60.41	
935	4.4	8.52	13.32	353	6.8	3.99	168	60.41	
945	6.6	11.48	13.54	600	19.8	4.32	31	60.42	
955	8.8	11.41	13.46	560	20.5	4.59	-6	60.46	
1005	11.0	11.03	13.47	450	21.7	4.93	0	60.46	
1015	13.2	10.49	13.47	397	12.1	5.00	22	60.48	
1025	15.4	10.12	13.54	376	8.6	5.34	39	60.48	
1035	17.6	9.86	13.53	368	6.2	5.29	52	60.48	
1045	19.8	9.65	13.50	362	3.7	5.36	68	60.48	
1055	22.0	9.46	13.60	358	3.4	5.44	78	60.48	
1100	23.1	9.41	13.58	357	3.1	5.48	80	60.48	
1105	24.2	9.45	13.57	358	2.8	5.48	82	60.48	
1110	25.3	9.42	13.58	357	2.4	5.45	85	60.48	> 2 system volumes
1115	26.4	9.19	13.66	353	2.1	5.53	91	60.48	
1120	27.5	9.04	13.66	352	1.1	5.64	97	60.48	
1125	28.6	9.03	13.64	352	1.2	5.64	98	60.48	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1130	29.7	9.02	13.68	351	1.1	5.66	99	60.48	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-440
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 440
Screen Interval (feet TOIC):430-440
Initial Water Level (Feet TOIC):60.18
Final Water Level (feet TOIC):60.18
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-203-440-SP13
Purge Start Time: 1150
Sample Time:1340
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 30.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1200	3.5	9.05	13.94	196	0.0	3.74	-23	60.18	
1220	10.5	8.12	13.96	201	18.3	5.14	114	60.18	
1240	17.5	7.12	13.97	191	0.9	6.50	182	60.18	
1300	24.5	6.48	14.00	188	0.0	6.85	200	60.18	
1305	26.25	6.37	14.02	188	0.0	6.68	203	60.18	
1310	28.0	6.30	14.05	187	0.0	6.70	206	60.18	
1315	29.75	6.25	14.03	187	0.0	6.82	206	60.18	
1320	31.5	6.21	14.02	187	0.0	6.78	207	60.18	> 2 system volumes
1325	33.25	6.16	14.01	187	0.0	6.81	209	60.18	
1330	35.0	6.13	14.03	187	0.0	6.78	211	60.18	
1335	36.75	6.09	14.04	187	0.0	6.85	212	60.18	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-204-320
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):61.01
Final Water Level (feet TOIC):61.12
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-204-320-SP13
Purge Start Time: 1122
Sample Time:1300
Final Turbidity (NTUs) : 8.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 250/400
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1122	1.25	10.37	13.05	855	5.2	7.90	203	61.11	
1127	2.5	10.61	12.46	854	0.6	4.72	170	61.11	
1132	3.75	10.56	13.47	858	0.4	3.67	81	61.08	
1137	5.0	10.40	13.58	857	0.0	3.49	31	61.08	
1142	6.25	10.92	13.54	990	53.7	3.54	-4	61.08	
1147	7.5	12.06	13.65	1780	88.5	3.24	-11	61.07	
1152	8.75	12.37	13.68	2080	123	3.09	-63	61.11	
1157	10.0	12.45	13.70	2120	125	2.92	-100	61.11	
1202	11.25	12.44	13.70	2090	47.4	3.40	-113	61.13	
1207	12.5	12.40	13.75	1970	20.7	2.86	-121	61.11	
1212	13.75	12.37	13.79	1910	18.3	2.82	-122	61.09	
1217	15.0	12.30	13.60	1750	12.6	2.78	-119	61.09	
1222	16.25	12.24	13.52	1630	11.5	3.53	-111	61.11	
1227	17.5	12.21	13.69	1560	8.8	2.63	-105	61.11	Flow rate increased to 400 ml/min
1232	19.5	12.08	13.34	1430	17.4	2.77	-94	61.20	
1237	21.5	12.03	13.70	1410	8.7	2.89	-90	61.11	

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1242	23.5	12.03	13.62	1390	7.9	2.97	-82	61.11	> 2 system volumes
1247	25.5	12.02	13.59	1350	8.7	3.01	-75	61.12	
1252	27.5	12.01	13.59	1360	8.0	3.21	-72	61.12	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-204-470
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):61.10
Final Water Level (feet TOIC):61.25
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-204-470-SP13 & DUP
Purge Start Time: 905
Sample Time:1110
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 210/340
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 32.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
905	0	11.58	13.83	714	27.2	4.37	185	61.22	
910	1.75	11.70	13.85	693	0.2	3.06	114	61.22	Flow rate increased to 350 ml/min
915	3.5	11.66	14.31	667	1.6	2.37	71	61.27	
920	5.15	11.64	14.40	644	2.8	2.32	42	61.22	Flow rate decreased to 330 ml/min
925	6.75	11.63	14.40	627	2.3	2.29	23	61.22	Flow rate decreased to 320 ml/min
930	7.75	11.75	14.51	865	14.3	2.23	-4	61.25	Flow rate decreased to 200 ml/min
935	9.35	11.69	14.07	1410	12.8	2.40	-29	61.25	Flow rate increased to 320 ml/min
940	10.95	12.12	14.20	1750	7.7	2.51	-57	61.25	
945	12.65	12.11	14.25	1660	3.6	2.76	-69	61.22	Flow rate increased to 340 ml/min
950	14.35	12.05	14.22	1460	1.8	3.23	-75	61.22	
955	16.05	12.02	14.25	1370	1.6	3.38	-75	61.22	
1000	17.75	11.98	14.31	1260	0.0	3.64	-75	61.21	
1005	19.45	11.93	14.41	1160	0.0	3.86	-74	61.21	
1010	21.15	11.90	14.55	1100	0.0	4.05	-73	61.23	
1015	22.85	11.88	14.58	1187	0.0	4.18	-71	61.22	
1020	24.55	11.85	14.69	1000	0.0	4.27	-69	61.22	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1025	26.25	11.82	14.80	953	0.0	4.36	-67	61.25	
1030	27.95	11.80	14.82	912	0.0	4.42	-65	61.24	
1035	29.65	11.79	14.87	887	0.0	4.39	-64	61.24	
1040	31.35	11.77	14.99	861	0.0	4.37	-62	61.22	
1045	33.05	11.76	15.00	838	0.0	4.35	-60	61.24	> 2 system volumes
1050	34.75	11.73	15.12	800	0.0	4.38	-59	61.25	
									Duplicate Sample Collected
									MW-811-SP13

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-205-285
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):64.51
Final Water Level (feet TOIC):64.48
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-205-285-SP13
Purge Start Time: 1440
Sample Time:1630
Final Turbidity (NTUs) : 13.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 340/200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1440	0	12.00	14.07	2150	7.5	2.76	-90	64.51	
1445	1.7	11.95	14.16	2120	0.4	2.42	-151	65.15	Flow rate decreased to 40 ml/min
1505	2.5	12.17	14.08	2520	79.7	2.48	-183	64.59	Flow rate increased to 230 ml/min
1510	3.65	12.50	14.16	3150	7.2	1.91	-210	64.57	
1515	4.8	12.56	14.14	3180	3.4	1.84	-215	64.58	
1520	5.95	12.55	14.08	3150	6.8	1.81	-217	64.55	
1525	7.1	12.50	14.09	3030	6.8	1.74	-214	64.52	
1530	8.25	12.49	14.06	2970	7.5	2.96	-209	64.52	Flow rate decreased to 200 ml/min
1535	9.25	12.42	14.19	2910	7.7	2.65	-201	64.52	
1540	10.25	12.41	14.13	2840	4.7	1.80	-194	64.52	
1545	11.25	12.36	14.17	2770	11.1	1.81	-187	64.51	
1550	12.25	12.33	14.14	2710	13.0	1.82	-179	64.51	
1555	13.25	12.31	14.15	2640	7.5	1.86	-173	64.50	
1600	14.25	12.28	14.03	2590	12.0	1.93	-168	64.50	
1605	15.25	12.22	13.99	2550	20.4	2.65	-161	64.49	
1610	16.25	12.22	14.01	2530	14.2	1.99	-160	64.49	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1615	17.25	12.18	13.99	2480	13.8	1.99	-157	64.48	
1620	18.25	12.14	13.86	2440	13.7	2.02	-153	64.48	
1625	19.25	12.12	13.81	2410	13.2	2.03	-149	64.48	> 2 system volumes

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-205-470
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):63.87
Final Water Level (feet TOIC):64.11
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-205-470-SP13
Purge Start Time: 1420
Sample Time:1610
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 32.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1420	0	10.11	15.22	219	0.0	4.72	89	63.87	
1425	1.7	10.46	15.39	219	0.0	2.78	73	64.13	
1430	2.4	10.30	15.42	209	0.0	2.50	69	64.13	
1435	4.1	10.31	15.37	212	0.0	2.43	64	64.13	
1440	5.8	10.22	15.18	213	0.0	2.46	64	64.11	
1445	7.5	10.65	15.23	270	3.0	2.57	53	64.11	
1500	12.6	10.74	15.34	278	4.0	3.60	23	64.09	Missed readings due to adjustment
1505	14.3	10.56	15.26	245	4.5	4.02	27	64.11	on MW-205-285
1510	16.0	10.38	15.32	225	4.1	4.23	32	64.11	
1515	17.7	10.23	15.30	212	3.9	4.32	37	64.11	
1520	19.4	10.10	15.16	202	2.8	4.25	43	64.11	
1525	21.1	10.01	15.20	197	1.3	4.36	48	64.08	
1530	22.8	9.97	15.16	195	1.1	4.55	51	64.08	
1535	24.5	9.87	15.13	192	0.2	4.77	55	64.10	
1540	26.2	9.84	15.07	192	0.0	4.90	56	64.09	
1545	27.9	9.81	15.01	192	0.0	4.99	59	64.08	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1550	29.6	9.79	15.01	192	0.0	5.01	60	64.09	
1555	31.3	9.78	15.01	194	0.0	5.14	61	64.11	
1600	33.0	9.76	14.94	194	0.0	5.20	63	64.11	> 2 system volumes

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-206-320
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):62.99
Final Water Level (feet TOIC):63.00
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-206-320-SP13
Purge Start Time: 1715
Sample Time:1810
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300/750/340
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1715	0	7.92	15.51	514	0.0	4.31	14	63.01	
1720	1.5	8.01	15.17	517	0.0	2.63	-164	62.97	
1725	3.0	8.47	15.00	517	0.0	2.16	-203	62.99	
1730	6.75	6.64	14.91	527	9.6	2.55	-133	63.15	Flow rate increased to 750 ml/min
1735	10.5	5.48	14.56	529	3.6	3.09	1	63.10	
1740	14.25	5.33	14.43	525	0.0	3.13	58	63.10	
1745	18.0	5.30	14.34	527	0.0	3.04	89	63.10	
1750	21.75	5.30	14.29	532	0.0	3.16	101	63.08	> 2 system volumes
1755	25.5	5.28	14.22	534	0.0	3.12	112	63.10	Flow rate decreased to 340 ml/min
1800	27.2	5.28	14.24	529	0.0	3.08	116	63.01	
1805	28.9	5.28	14.31	528	0.0	3.05	116	63.00	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-206-470
Sample Date: 4/22/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):63.00
Final Water Level (feet TOIC):63.03
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-206-470-SP13
Purge Start Time: 1700
Sample Time:1840
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 230/480
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 32.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1700	0	9.91	13.95	746	0.0	2.03	31	63.00	
1705	1.15	9.82	14.03	745	0.0	1.96	34	63.02	
1710	2.3	9.75	13.83	744	0.0	2.10	38	63.02	
1715	3.45	9.69	13.83	743	0.0	2.27	43	63.02	
1720	4.6	9.52	13.91	747	0.0	3.24	50	63.03	
1725	5.75	9.24	13.76	754	9.7	3.35	76	63.08	Flow rate increased to 480 ml/min
1735	10.55	8.53	13.29	561	2.6	5.20	114	63.05	
1745	15.35	8.16	13.13	561	2.1	5.50	129	63.05	
1755	20.15	7.80	13.06	577	0.0	6.68	133	63.05	
1805	24.95	7.68	12.95	596	0.0	5.63	141	63.05	
1815	29.75	7.44	12.88	623	0.0	5.64	150	63.04	
1825	34.55	7.17	12.89	653	0.0	5.72	159	63.04	> 2 system volumes
1830	36.95	7.13	12.88	670	0.0	5.74	162	63.03	
1835	39.35	7.10	12.85	672	0.0	5.75	163	63.03	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-170
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC):160-170
Initial Water Level (Feet TOIC):56.28
Final Water Level (feet TOIC):57.10
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-207-170-SP13
Purge Start Time: 1400
Sample Time: 1445
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 380
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1400	0	5.53	15.62	213	76.4	4.59	229	57.10	
1405	1.9	5.47	15.42	217	23.9	3.71	229	57.12	
1410	3.8	5.49	15.50	217	16.9	3.65	230	57.07	
1415	5.7	5.49	15.49	216	5.1	4.72	234	57.11	
1420	7.6	5.50	15.42	215	3.8	4.43	230	57.10	
1425	9.5	5.48	15.42	214	1.8	4.23	225	57.11	> 2 system volumes
1430	11.4	5.47	15.39	213	0.5	4.00	225	57.10	
1435	13.3	5.46	15.32	212	0.0	3.86	225	57.10	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-250
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 250
Screen Interval (feet TOIC):240-250
Initial Water Level (Feet TOIC):56.67
Final Water Level (feet TOIC):56.70
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-207-250-SP13
Purge Start Time: 1225
Sample Time: 1325
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 16.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1225	0	8.08	15.62	310	0.0	4.13	92	56.72	
1230	2.4	6.90	15.27	312	19.7	3.98	122	56.67	
1335	4.8	5.61	15.33	314	15.4	6.67	193	56.70	
1240	7.2	5.42	15.21	313	4.6	7.05	230	56.70	
1245	9.6	5.41	15.21	312	6.2	7.12	244	56.67	
1250	12.0	5.40	15.22	312	0.6	7.30	260	56.67	
1255	14.4	5.40	15.16	311	0.0	7.25	269	56.67	
1300	16.8	5.39	15.21	311	0.0	7.24	276	56.67	> 2 system volumes
1305	19.2	5.40	15.22	310	0.0	7.49	283	56.67	
1310	21.6	5.40	15.19	310	0.0	7.26	286	56.70	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-320
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):56.77
Final Water Level (feet TOIC):56.94
Casing Type: **PVC** Steel (circle one)
Personnel: M. Fronckowiak & R. Moxley

Sample ID: MW-207-320-SP13
Purge Start Time: 1220
Sample Time: 1320
Final Turbidity (NTUs) : 6.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 600
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1220	0	6.02	14.87	356	2.4	11.49	199	56.77	
1225	3.0	9.28	13.98	363	4.5	4.544	-271	56.98	
1230	6.0	7.91	13.90	442	40.6	4.16	-114	56.90	
1235	9.0	7.10	13.87	403	31.5	4.53	-8	56.96	
1240	12.0	6.61	13.82	374	32.1	4.98	27	56.98	
1245	15.0	6.27	13.82	350	21.7	4.88	53	56.94	
1250	18.0	6.05	13.81	341	13.9	4.67	74	56.96	
1255	21.0	5.82	13.76	332	12.2	4.72	84	56.94	
1300	24.0	5.91	13.81	329	11.9	4.84	90	56.97	> 2 system volumes
1305	27.0	5.89	13.79	324	7.2	4.84	89	56.96	
1310	30.0	5.86	13.73	322	6.9	4.91	87	56.96	
1315	33.0	5.85	13.68	321	6.6	4.89	87	56.94	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-208-350
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 350
Screen Interval (feet TOIC):340-350
Initial Water Level (Feet TOIC):54.94
Final Water Level (feet TOIC):55.30
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze & L. Roedl

Sample ID: MW-208-350-SP13 & DUP
Purge Start Time: 855
Sample Time:1055
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 14.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
855	0	7.68	13.76	1630	0.0	3.70	218	55.05	
905	2.0	9.25	14.82	1660	0.0	3.26	-34	55.30	
915	4.0	9.17	14.84	1630	0.0	3.02	-32	55.30	
925	6.0	8.70	14.93	1700	0.1	2.64	-8	55.30	
935	8.0	7.98	15.18	1700	9.3	2.46	9	55.30	
945	10.0	5.76	15.16	1750	1.0	2.37	79	55.30	
955	12.0	5.93	14.84	1710	0.0	2.43	135	55.30	
1005	14.0	5.90	14.82	1720	0.0	2.40	135	55.30	
1015	16.0	5.47	14.79	1780	0.0	2.02	157	55.30	> 2 system volumes
1025	18.0	5.50	14.79	1770	0.0	1.87	167	55.30	
1035	20.0	5.56	14.79	1760	0.0	1.63	163	55.30	
1040	21.0	5.59	15.06	1760	0.0	1.62	170	55.30	
1045	22.0	5.59	15.09	1760	0.0	1.62	171	55.30	
1050	23.0	5.59	15.06	1760	0.0	1.62	171	55.30	
									Collected Duplicate Sample
									MW-809-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-208-540
Sample Date: 4/19/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 540
Screen Interval (feet TOIC):530-540
Initial Water Level (Feet TOIC):56.04
Final Water Level (feet TOIC):56.05
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze & L. Roedl

Sample ID: MW-208-540-SP13
Purge Start Time: 900
Sample Time:1200
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
900	0	11.08	14.78	659	0.9	3.50	-34	56.05	
910	2.5	11.40	13.30	585	0.0	3.26	-37	56.05	
920	5.0	11.55	13.34	549	1.5	3.00	-200	56.05	
930	7.5	11.56	13.31	541	3.7	4.08	-198	56.05	
940	10.0	11.67	13.21	648	175	2.99	-189	56.05	
950	12.5	12.38	13.21	1890	27.0	2.94	-182	56.05	
100	15.0	12.79	13.15	2580	8.5	4.16	-170	56.05	
1010	17.5	12.81	13.27	2470	7.8	3.67	-162	56.05	
1020	20.0	12.78	13.28	2250	6.1	3.83	-154	56.05	
1030	22.5	12.73	13.32	2000	3.1	4.06	-147	56.05	> 2 system volumes
1040	25.0	12.66	13.59	1770	2.3	5.71	-141	56.05	
1050	27.5	12.60	13.75	1570	5.0	4.55	-36	56.05	
1100	30.0	12.55	14.00	1470	5.56	4.58	-133	56.05	
1110	32.5	12.48	14.33	1340	7.2	5.36	-127	56.05	
1120	35.0	12.46	14.32	1320	6.8	4.94	-126	56.05	
1130	37.5	12.41	14.52	1250	5.4	4.90	-122	56.05	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1140	40.0	12.34	14.40	1100	3.3	5.55	-122	56.05	
1150	42.5	12.36	14.56	1140	0.3	5.13	-120	56.05	
1155	43.75	12.36	14.68	1130	0.0	5.11	-119	56.05	
1200	45.0	12.36	14.67	1120	0.0	5.11	-118	56.05	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-209-380
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):39.50
Final Water Level (feet TOIC):39.50
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-209-380-SP13
Purge Start Time: 1440
Sample Time:1730
Final Turbidity (NTUs) : 44.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 26.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1450	5.0	9.42	13.95	431	19.3	9.38	129	39.50	
1500	10.0	12.16	13.83	1890	28.1	0.58	-126	39.50	
1510	15.0	11.86	13.77	1080	167	0.76	-101	39.50	
1520	20.0	11.50	13.81	703	337	0.95	-68	39.50	
1530	25.0	11.35	13.71	631	292	1.05	-50	39.50	
1535	27.5	11.22	13.66	594	283	1.25	-51	39.50	> 2 system volumes
1540	30.0	11.02	13.67	538	288	1.24	-38	39.50	
1545	32.5	10.92	13.61	528	258	1.41	-36	39.50	
1550	35.0	10.87	13.59	517	242	1.34	-32	39.50	
1620	50.0	10.22	13.55	503	94.9	1.60	-4	39.50	
1650	65.0	9.84	13.50	509	81.6	1.82	9	39.50	
1700	70.0	9.74	13.48	514	58.6	1.79	15	39.50	
1710	75.0	9.56	13.45	518	57.9	1.80	24	39.50	
1715	77.5	9.68	13.46	518	49.7	1.70	20	39.50	
1720	80.0	9.68	13.45	520	47.3	1.68	19	39.50	
1725	82.5	9.68	13.45	521	44.9	1.72	18	39.50	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-209-530
Sample Date: 4/23/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 530
Screen Interval (feet TOIC):520-530
Initial Water Level (Feet TOIC):39.95
Final Water Level (feet TOIC):39.95
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-209-530-SP13 & DUP
Purge Start Time: 1440
Sample Time:1635
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 38.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1450	5.0	10.96	13.85	203	1.5	4.44	73	39.95	
1500	10.0	11.59	13.77	655	13.1	4.76	26	39.95	
1510	15.0	12.03	13.71	1400	7.3	5.24	-57	39.95	
1520	20.0	11.70	13.66	750	5.3	6.00	-49	39.95	
1530	25.0	11.42	13.60	524	2.0	6.40	-36	39.95	
1540	30.0	11.32	13.58	464	0.2	6.78	-28	39.95	
1550	35.0	11.17	13.52	406	0.0	6.68	-18	39.95	
1600	40.0	10.99	13.52	361	0.0	7.08	-7	39.95	> 2 system volumes
1605	42.5	10.97	13.52	346	0.0	7.15	-4	39.95	
1610	45.0	10.91	13.48	330	0.0	6.72	0	39.95	
1615	47.5	10.87	13.51	320	0.0	6.76	2	39.95	
1620	50.0	10.78	13.51	301	0.0	6.76	6	39.95	
1625	52.5	10.75	13.48	298	0.0	6.81	5	39.95	
1630	55.0	10.74	13.48	295	0.0	6.82	6	39.95	
									Duplicate Sample Collected
									MW-814-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-280
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC):270-280
Initial Water Level (Feet TOIC):46.81
Final Water Level (feet TOIC):46.81
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-210-280-SP13
Purge Start Time: 1025
Sample Time: 1140
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 360
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	3.6	5.22	13.59	366	0.0	2.81	245	46.81	
1045	7.2	5.06	13.63	293	1.1	1.95	264	46.81	
1055	10.8	5.05	13.68	288	0.2	1.70	275	46.81	
1105	14.4	5.05	16.86	279	0.0	1.48	296	46.81	
1115	18.0	5.04	14.04	286	0.0	1.39	288	46.81	
1120	19.8	5.04	13.97	287	0.0	1.38	289	46.81	> 2 system volumes
1125	21.6	5.07	14.00	288	0.0	1.31	285	46.81	
1130	23.4	5.07	14.04	290	0.0	1.33	285	46.81	
1135	25.2	5.07	14.04	289	0.0	1.32	284	46.81	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-380
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):46.57
Final Water Level (feet TOIC):46.58
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-210-380-SP13
Purge Start Time: 815
Sample Time: 945
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 24.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
830	5.25	5.27	13.06	980	6.6	1.65	243	46.61	
840	8.75	5.29	13.11	1010	13.0	1.56	249	46.61	
850	12.25	5.29	13.11	1020	9.0	1.51	246	46.58	
900	15.75	5.34	13.09	1020	4.3	1.50	243	46.58	
910	19.25	5.50	13.13	1020	1.7	1.46	249	46.58	
920	22.75	5.47	13.14	1020	1.2	1.48	255	46.58	
925	24.5	5.46	13.12	1020	0.5	1.50	257	46.58	> 2 system volumes
930	26.25	5.44	13.18	1020	0.0	1.50	258	46.58	
935	28.0	5.44	13.22	1020	0.0	1.52	255	46.58	
940	29.75	5.44	13.20	1020	0.0	1.51	257	46.58	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-470
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):46.75
Final Water Level (feet TOIC):47.52
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-210-470-SP13 & MS/MSD
Purge Start Time: 810
Sample Time: 1005
Final Turbidity (NTUs) : 13.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 420
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 34.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
830	8.4	12.27	13.44	1910	9.3	6.47	-171	47.48	
840	12.6	12.26	13.41	1890	9.3	6.25	-163	47.50	
850	16.8	12.24	13.39	1710	10.6	6.34	-134	47.50	
900	21.0	12.13	13.31	1440	10.5	5.95	-105	47.52	
910	25.2	12.06	13.36	1230	10.7	5.76	-87	47.52	
920	29.4	11.98	13.32	1070	13.6	5.70	-77	47.52	
930	33.6	11.90	13.34	956	14.9	5.62	-73	47.52	
935	35.7	11.86	13.40	907	13.5	5.60	-72	47.52	> 2 system volumes
940	37.8	11.86	13.34	874	13.0	5.61	-69	47.52	
945	39.9	11.82	13.37	843	12.9	5.59	-66	47.52	
950	42.0	11.80	13.32	820	14.0	5.60	-62	47.52	
955	44.1	11.78	13.39	809	13.1	5.59	-68	47.52	
1000	46.2	11.77	13.36	796	13.4	5.58	-65	47.52	
									MS/MSD collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-190
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC):180-190
Initial Water Level (Feet TOIC):51.77
Final Water Level (feet TOIC):51.77
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-211-190-SP13
Purge Start Time: 1040
Sample Time: 1130
Final Turbidity (NTUs) : 1.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.03

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1050	4.5	6.09	15.71	408	0.0	3.68	107	51.77	
1100	9.0	6.09	15.66	403	0.3	3.64	116	51.77	
1105	11.25	6.08	15.53	400	1.2	3.68	116	51.77	
1110	13.5	6.06	15.25	401	2.1	3.85	116	51.77	> 2 system volumes
1115	15.75	6.08	15.64	396	2.0	3.78	117	51.77	
1120	18.0	6.09	15.56	396	2.1	3.77	117	51.77	
1125	20.25	6.09	15.60	396	1.9	3.79	116	51.77	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-250
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 250
Screen Interval (feet TOIC):240-250
Initial Water Level (Feet TOIC):52.02
Final Water Level (feet TOIC):52.02
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-211-250-SP13
Purge Start Time: 845
Sample Time: 1025
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 420
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 16.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
905	8.4	6.21	15.04	586	3.5	3.99	45	52.02	
915	12.6	6.19	15.09	587	0.3	3.83	57	52.02	
925	16.8	6.18	15.22	589	1.8	3.58	78	52.02	> 2 system volumes
935	21.0	6.15	15.00	593	1.6	3.57	90	52.02	
945	25.2	6.18	15.25	590	0.6	3.33	101	52.02	
955	29.4	6.15	14.96	594	0.3	3.50	105	52.02	
1005	33.6	6.18	15.27	592	0.0	3.48	108	52.02	
1010	35.7	6.17	15.22	593	0.0	3.47	110	52.02	
1015	37.8	6.18	15.27	596	0.0	3.50	111	52.02	
1020	39.9	6.17	15.26	593	0.0	3.43	111	52.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-455
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 455
Screen Interval (feet TOIC):445-455
Initial Water Level (Feet TOIC):52.59
Final Water Level (feet TOIC):53.96
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: MW-211-455-SP13
Purge Start Time: 910 & cont. purge @ 1300
Sample Time: 1610
Final Turbidity (NTUs) : 23.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 100/400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 32.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
925	1.5	11.70	15.46	774	6.7	1.15	21	52.85	
955	4.5	11.74	15.98	778	5.4	0.57	-187	52.85	
1025	7.5	11.67	16.50	772	16.2	0.45	-260	52.85	
1055	10.5	12.03	17.65	1060	705	0.18	-617	52.85	
1125	13.5	12.08	16.79	1250	21.4	0.19	-676	52.85	
155	16.5	12.07	16.75	1230	16.9	0.21	-677	52.85	
1200	17.0	12.06	16.50	1230	14.7	0.21	-676	52.85	
1205	17.5	12.06	16.54	1220	18.0	0.21	-676	52.85	
1210	18.0	12.07	16.48	1220	17.4	0.21	-675	52.85	
1215	18.5	12.07	16.52	1230	16.8	0.21	-676	52.85	
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1330	21.5	12.05	14.63	1190	27.1	0.31	-585	52.88	
1400	24.5	11.97	14.14	1160	33.8	0.22	-638	52.88	
1410	25.5	11.93	14.92	1060	26.3	0.31	-586	52.88	Increased flow to 400 ml/min per
1415	27.5	11.87	14.80	1130	17.4	0.26	-369	54.02	Dan K.
1420	29.5	11.94	14.82	1090	11.9	0.23	-385	54.14	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1425	31.5	11.89	14.78	1020	11.2	0.22	-383	54.15	
1430	33.5	11.89	14.77	998	11.5	0.21	-380	54.15	> 2 system volumes
1435	35.5	11.87	14.70	997	10.5	0.21	-361	54.15	
1440	37.5	11.79	14.74	908	82.3	0.20	-427	53.95	
1445	39.5	11.72	14.71	822	116	0.19	-464	54.05	
1450	41.5	11.71	14.77	784	109	0.20	-480	54.06	
1455	43.5	11.69	14.76	765	88.6	0.19	-487	54.00	
1500	45.5	11.68	14.83	762	79.7	0.19	-449	53.90	
1505	47.5	11.67	14.87	774	60.0	0.19	-339	53.88	
1510	49.5	11.65	14.88	779	63.5	0.19	-261	53.87	
1525	55.5	11.72	14.96	784	49.7	0.45	-187	54.02	
1530	57.5	11.72	14.94	794	43.7	0.57	-180	54.01	
1535	59.5	11.73	14.90	793	47.6	0.76	-173	53.98	
1540	61.5	11.74	15.10	792	36.3	0.88	-164	53.96	
1545	63.5	11.73	15.07	781	33.4	1.02	-166	53.96	
1555	67.5	11.72	14.89	774	23.9	1.27	-161	53.96	
1600	69.5	11.72	14.80	778	24.1	1.38	-159	53.96	
1605	71.5	11.71	14.84	777	23.6	1.37	-155	53.96	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-212-580
Sample Date: 4/25/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 580
Screen Interval (feet TOIC):570-580
Initial Water Level (Feet TOIC):47.31
Final Water Level (feet TOIC):47.48
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-212-580-SP13
Purge Start Time: 940
Sample Time: 1300
Final Turbidity (NTUs) : 48.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 41.75

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
943	1.5	6.93	14.14	337	33.2	2.84	6	47.43	
953	6.5	8.24	14.07	347	14.0	3.21	-17	47.40	
1023	21.5	7.45	14.26	337	22.2	5.67	72	47.44	
1053	36.5	6.84	14.54	336	69.1	5.67	101	47.44	
1103	41.5	6.84	14.54	336	67.9	5.70	100	47.44	
1108	46.5	6.84	14.46	338	88.8	5.83	107	47.44	> 2 system volumes
1113	49.0	6.81	14.34	338	84.6	5.73	106	47.45	
1140	62.5	6.74	14.34	328	58.8	5.64	114	47.47	
1159	67.0	6.72	14.41	301	50.6	5.63	117	47.47	
1204	69.5	6.72	14.31	295	50.7	5.58	118	47.48	
1234	84.5	6.66	14.36	264	53.0	5.57	122	47.48	
1245	90.0	6.67	14.39	258	52.6	5.58	124	47.48	
1250	92.5	6.64	14.41	255	50.2	5.54	125	47.48	
1255	95.0	6.63	14.44	254	48.4	5.59	126	47.48	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-213-570
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 570
Screen Interval (feet TOIC):560-570
Initial Water Level (Feet TOIC):47.46
Final Water Level (feet TOIC):47.44
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-213-570-SP13
Purge Start Time: 1157
Sample Time: 1420
Final Turbidity (NTUs) : 11.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 40.99

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1203	1.8	7.72	14.90	58	28.4	0.86	17	47.44	
1233	10.8	6.46	14.55	69	2.4	3.76	102	47.44	
1303	19.8	6.05	14.30	58	18.4	5.15	151	47.44	
1333	28.8	5.90	14.08	56	28.0	5.56	166	47.44	
1403	37.8	5.91	14.08	55	12.9	5.33	174	47.44	
1413	40.8	5.90	14.09	55	12.5	5.39	174	47.44	
1418	42.3	5.87	14.11	55	11.8	5.31	174	47.44	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-214-570
Sample Date: 4/24/2013
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 570
Screen Interval (feet TOIC):560-570
Initial Water Level (Feet TOIC):47.52
Final Water Level (feet TOIC):48.10
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: MW-214-570-SP13
Purge Start Time: 1454
Sample Time: 1658
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 40.99

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1458	1.4	5.90	14.56	63	0.0	4.03	193	47.60	
1503	3.15	5.83	14.44	63	1.1	4.37	200	47.68	
1533	13.65	5.79	14.34	64	0.5	6.02	208	47.77	
1603	24.15	5.77	14.15	62	0.2	6.67	201	47.95	
1633	34.65	5.75	13.99	62	0.0	6.60	204	48.15	
1648	39.90	5.74	13.87	62	0.0	6.63	207	48.10	
1653	41.65	5.77	13.85	62	0.0	6.45	206	48.10	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-110-355
Sample Date: 4/23/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 355
Screen Interval (feet TOIC):345-355
Initial Water Level (Feet TOIC):45.22
Final Water Level (feet TOIC):50.14
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MWP-110-355-SP13
Purge Start Time: 1425
Sample Time:1535
Final Turbidity (NTUs) : 6.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 24.75

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1430	2.0	6.03	13.59	292	16.6	5.23	208	46.60	
1435	4.0	6.16	13.78	288	14.2	3.49	202	47.20	
1440	6.0	6.14	13.88	286	10.1	2.91	200	47.62	
1445	8.0	6.03	13.88	283	12.2	2.20	201	48.40	
1450	10.0	5.99	13.94	283	14.0	2.00	202	48.72	
1455	12.0	6.00	13.93	283	13.8	1.56	203	49.14	
1500	14.0	6.00	13.95	282	14.4	1.52	203	49.34	
1505	16.0	6.00	13.93	282	13.7	1.34	204	49.65	
1510	18.0	5.99	13.94	282	10.4	1.28	204	49.84	
1515	20.0	5.97	13.93	282	7.3	1.18	205	49.98	
1520	22.0	5.94	13.95	281	6.5	1.18	205	50.05	
1525	24.0	5.93	13.92	281	6.3	1.13	206	50.10	> 2 system volumes
1530	26.0	5.89	13.92	281	6.0	1.12	208	50.14	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-110-440
Sample Date: 4/23/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 440
Screen Interval (feet TOIC):410-440
Initial Water Level (Feet TOIC):47.51
Final Water Level (feet TOIC):47.52
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MWP-110-440-SP13
Purge Start Time: 1425
Sample Time:1550
Final Turbidity (NTUs) : 1.4
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 31.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1430	2.0	5.98	13.74	406	9.1	3.96	204	47.52	
1435	4.0	5.87	13.81	402	1.1	3.71	206	47.52	
1440	6.0	5.66	13.87	400	0.0	4.22	214	47.52	
1445	8.0	5.50	13.84	401	0.0	4.61	226	47.52	
1450	10.0	5.45	13.89	400	1.5	4.69	230	47.52	
1455	12.0	5.40	13.91	399	7.4	4.79	242	47.52	
1500	14.0	5.41	13.88	399	2.8	4.77	246	47.52	
1505	16.0	5.40	13.88	399	2.8	4.86	250	47.52	
1510	18.0	5.38	13.88	399	3.2	4.99	254	47.52	
1515	20.0	5.36	13.87	399	3.8	5.19	258	47.52	
1520	22.0	5.36	13.88	399	2.5	5.32	261	47.52	
1525	24.0	5.36	13.85	399	1.4	5.53	266	47.52	
1530	26.0	5.36	13.85	399	1.4	5.68	268	47.52	
1535	28.0	5.34	13.84	400	1.5	5.81	272	47.52	
1540	30.0	5.33	13.82	400	1.5	5.84	273	47.52	
1545	32.0	5.34	13.83	399	1.4	5.94	273	47.52	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-114-170
Sample Date: 4/23/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC):160-170
Initial Water Level (Feet TOIC):47.54
Final Water Level (feet TOIC):47.49
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: MWP-114-170-SP13
Purge Start Time: 945
Sample Time:1100
Final Turbidity (NTUs) : 12.7
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 100/250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 7.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
950	0.5	6.20	11.19	585	3.6	4.92	260	47.47	
955	1.0	6.07	11.81	558	12.6	4.00	300	47.43	
100	1.5	6.01	12.27	549	21.8	3.38	276	47.44	
1005	2.0	6.01	12.36	547	21.3	3.51	249	47.46	
1010	2.5	6.01	12.52	545	21.4	3.68	221	47.48	
1015	3.0	6.01	12.35	545	14.6	3.99	211	47.48	
1020	3.5	6.01	12.82	544	16.6	4.80	201	47.48	
1025	4.75	6.01	13.00	542	15.1	6.03	197	47.49	
1030	6.0	6.01	13.15	541	15.2	7.06	195	47.49	
1035	7.25	5.99	13.20	540	13.7	7.59	195	47.49	
1040	8.5	6.00	13.34	539	12.6	7.61	195	47.49	> 2 system volumes
1045	9.75	5.99	13.44	537	13.4	8.41	197	47.49	
1050	11.0	5.97	13.50	537	12.3	8.38	200	47.49	
1055	12.25	5.96	13.52	534	12.7	8.59	200	47.49	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-114-290
Sample Date: 4/23/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):48.20
Final Water Level (feet TOIC):48.22
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MWP-114-290-SP13 & MS/MSD
Purge Start Time: 920
Sample Time:1045
Final Turbidity (NTUs) : 41.5
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 200/360
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.71

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
925	1.0	5.83	12.86	373	0.0	6.06	163	48.20	
930	2.0	5.78	13.29	368	0.0	4.31	169	48.20	
935	3.8	5.72	13.93	362	0.0	3.41	180	48.22	Flow increased to 360 ml/min
940	5.6	5.64	14.02	352	0.0	2.72	187	48.22	
945	7.4	5.57	14.02	347	4.8	1.86	194	48.22	
950	9.2	5.55	14.03	346	8.6	1.53	199	48.22	
955	11.0	5.56	14.02	346	12.5	1.34	203	48.22	
1000	12.8	5.53	14.00	345	15.6	1.20	206	48.22	
1005	14.6	5.53	14.02	345	19.5	1.09	207	48.22	
1010	16.4	5.53	14.03	344	20.8	1.00	209	48.22	
1015	18.2	5.52	14.04	344	31.0	0.94	207	48.22	
1020	20.0	---	---	---	---	---	---	---	> 2 system volumes
1025	21.8	5.53	14.00	340	38.2	1.00	209	48.22	
1030	23.6	5.51	14.03	342	40.2	0.95	209	48.22	
1035	25.4	5.50	13.98	344	41.5	0.91	207	48.22	
									MS/MSD collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-01
Sample Date: 4/17/2013
Sampling Device: Watera
Well Depth (feet TOIC): 72.0
Screen Interval (feet TOIC):71-73
Initial Water Level (Feet TOIC):56.08
Final Water Level (feet TOIC):56.09
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-02-01-SP13
Purge Start Time: 1700
Sample Time:1805
Final Turbidity (NTUs) : 10.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1715	1.5	5.56	17.93	173	13.4	5.36	266	----------	> 2 volumes
1720	2.0	5.57	17.93	198	14.0	5.66	270	----------	> 3 volumes
1725	2.5	5.57	17.99	229	14.9	5.77	273	----------	
1730	3.0	5.57	18.06	245	14.0	5.71	278	----------	
1735	3.5	5.57	18.13	252	14.6	5.64	280	----------	
1740	4.0	5.58	18.24	267	13.7	5.43	283	----------	
1745	4.5	5.58	18.22	274	12.9	5.45	284	----------	
1750	5.0	5.58	18.15	279	11.4	5.54	286	----------	
1755	5.5	5.58	18.17	281	10.6	5.41	288	----------	
1800	6.0	5.59	18.17	281	10.4	5.39	289	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-02
Sample Date: 4/18/2013
Sampling Device: Watera
Well Depth (feet TOIC): 87.0
Screen Interval (feet TOIC):86-88
Initial Water Level (Feet TOIC):56.14
Final Water Level (feet TOIC):56.14
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-02-02-SP13
Purge Start Time: 1135
Sample Time:1215
Final Turbidity (NTUs) : 7.5
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 180
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1150	2.7	5.69	16.22	215	8.7	7.43	253	----------	> 2 volumes
1155	3.6	5.70	16.15	215	11.6	7.44	256	----------	
1200	4.5	5.70	16.12	215	8.2	7.40	260	----------	> 3 volumes
1205	5.4	5.70	16.13	215	7.9	7.36	260	----------	
1210	6.3	5.70	16.10	215	7.5	7.27	263	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-03
Sample Date: 4/17/2013
Sampling Device: Watera
Well Depth (feet TOIC): 102.0
Screen Interval (feet TOIC):101-103
Initial Water Level (Feet TOIC):56.10
Final Water Level (feet TOIC):56.10
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-02-03-SP13
Purge Start Time: 1425
Sample Time:1545
Final Turbidity (NTUs) : 21.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1500	3.5	5.42	18.12	451	108	7.48	257	----------	> 2 volumes
1505	4.0	5.40	17.95	451	89.8	7.40	263	----------	
1510	4.5	5.40	17.75	451	49.6	7.34	268	----------	
1515	5.0	5.39	17.74	450	38.9	7.19	271	----------	
1520	5.5	5.38	17.64	450	22.6	7.22	275	----------	> 3 volumes
1525	6.0	5.38	17.67	449	28.0	7.17	277	----------	
1530	6.5	5.38	17.68	449	22.4	7.15	278	----------	
1535	7.0	5.37	17.63	449	22.0	7.10	279	----------	
1540	7.5	5.37	17.64	449	21.2	7.16	279	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-04
Sample Date: 4/18/2013
Sampling Device: Watera
Well Depth (feet TOIC): 117.0
Screen Interval (feet TOIC):116-118
Initial Water Level (Feet TOIC):56.11
Final Water Level (feet TOIC):56.11
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-02-04-SP13
Purge Start Time: 910
Sample Time:1035
Final Turbidity (NTUs) : 7.5
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1000	5.0	6.23	16.55	110	20.4	7.56	204	----------	> 2 volumes
1005	5.5	5.70	16.52	107	13.0	7.18	209	----------	
1010	6.0	5.64	16.42	106	9.1	7.13	216	----------	
1015	6.5	5.62	16.27	106	9.1	7.11	223	----------	
1020	7.0	5.62	16.22	107	7.9	7.05	228	----------	> 3 volumes
1025	7.5	5.61	16.18	107	7.8	7.07	233	----------	
1030	8.0	5.61	16.14	106	7.5	7.05	235	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-05
Sample Date: 4/18/2013
Sampling Device: Watera
Well Depth (feet TOIC): 132.0
Screen Interval (feet TOIC):131-133
Initial Water Level (Feet TOIC):56.16
Final Water Level (feet TOIC):56.16
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-02-05-SP13
Purge Start Time: 1325
Sample Time:1435
Final Turbidity (NTUs) : 15.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1355	6.0	5.56	15.75	195	57.9	7.56	261	----------	> 2 volumes
1400	7.0	5.54	15.76	194	45.8	7.57	266	----------	
1405	8.0	5.54	15.75	192	31.4	7.50	270	----------	
1410	9.0	5.53	15.74	191	26.7	7.55	273	----------	> 3 volumes
1415	10.0	5.53	15.71	190	21.4	7.53	278	----------	
1420	11.0	5.53	15.71	190	17.5	7.48	280	----------	
1425	12.0	5.53	15.67	190	16.4	7.50	283	----------	
1430	13.0	5.54	15.66	190	15.9	7.50	283	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-06
Sample Date: 4/17/2013
Sampling Device: Watera
Well Depth (feet TOIC): 147.0
Screen Interval (feet TOIC):146-148
Initial Water Level (Feet TOIC):56.10
Final Water Level (feet TOIC):56.10
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-02-06-SP13
Purge Start Time: 1425
Sample Time:1610
Final Turbidity (NTUs) : 7.5
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 120
Purge Rate d/sampling (ml/min): 120
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1520	6.6	5.33	17.49	294	15.1	5.55	254	----------	
1525	7.2	5.32	17.43	294	14.5	5.49	259	----------	> 2 volumes
1530	8.4	5.30	17.30	293	13.1	5.21	264	----------	
1535	9.0	5.32	17.25	293	12.6	5.18	265	----------	
1540	9.6	5.31	17.22	293	12.1	4.97	271	----------	
1545	10.2	5.30	17.20	292	11.1	4.84	276	----------	
1550	10.8	5.29	17.17	292	9.0	4.76	281	----------	
1555	11.4	5.28	17.06	291	7.8	4.80	285	----------	> 3 volumes
1600	12.0	5.28	17.05	291	7.7	4.82	286	----------	
1605	12.6	5.28	17.05	291	7.5	4.85	287	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-07
Sample Date: 4/18/2013
Sampling Device: Watera
Well Depth (feet TOIC): 161.0
Screen Interval (feet TOIC):162.5-163
Initial Water Level (Feet TOIC):56.17
Final Water Level (feet TOIC):56.17
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-02-07-SP13
Purge Start Time: 905
Sample Time:1705 w/ filter
Final Turbidity (NTUs) : 1000F
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 140/250
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1005	8.4	5.71	16.63	304	749	4.35	221	----------	> 2 volumes
1010	9.1	5.71	16.44	304	735	4.20	230	----------	
1015	9.8	5.71	16.32	301	833	4.15	236	----------	
1020	10.5	5.71	16.29	301	812	4.02	240	----------	
1025	11.2	5.70	16.27	300	826	4.00	245	----------	
1030	11.9	5.70	16.22	300	852	3.95	248	----------	
1035	12.6	5.69	16.12	300	840	3.89	251	----------	> 3 volumes
1105	16.8	5.70	16.10	298	773	3.50	257	----------	
1205	25.2	5.67	16.24	295	623	3.34	266	----------	
1305	33.6	5.57	15.84	295	525	4.01	284	----------	
1405	42.0	5.61	15.96	288	555	4.05	283	----------	Cleaned flow cell
1505	50.4	5.57	15.94	289	570	4.08	290	----------	
1605	58.8	5.60	15.55	284	1000F	4.49	289	----------	Flow rate increased to 250 ml/min
1650	70.05	5.50	15.42	288	1000F	4.42	309	----------	
1655	71.3	5.50	15.42	288	1000F	4.43	309	----------	
1700	72.55	5.49	15.39	288	1000F	4.42	310	----------	F=Flashing

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-03-01
Sample Date: 4/16/2013
Sampling Device: Watera
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC):70-72
Initial Water Level (Feet TOIC):55.97
Final Water Level (feet TOIC):55.97
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-03-01-SP13 & DUP
Purge Start Time: 1535
Sample Time:1620
Final Turbidity (NTUs) : 11.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1550	1.5	5.59	17.13	156	18.8	5.40	266	----------	> 2 volumes
1555	2.0	5.59	16.56	153	15.0	5.39	268	----------	> 3 volumes
1600	2.5	5.57	16.33	153	13.6	5.12	270	----------	
1605	3.0	5.57	16.22	153	12.4	5.06	273	----------	
1610	3.5	5.57	16.06	153	12.1	5.07	278	----------	
1615	4.0	5.56	15.88	153	11.7	5.03	283	----------	
									Duplicate Sample Collected
									MW-804-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-03-02
Sample Date: 4/16/2013
Sampling Device: Watera
Well Depth (feet TOIC): 86
Screen Interval (feet TOIC):85-87
Initial Water Level (Feet TOIC):55.98
Final Water Level (feet TOIC):55.99
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-03-02-SP13 & MS/MSD
Purge Start Time: 845
Sample Time:945
Final Turbidity (NTUs) : 14.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
910	2.5	5.66	15.28	264	8.3	4.21	232	----------	> 2 volumes
915	3.0	5.65	15.47	268	9.8	3.96	230	----------	
920	3.5	5.65	15.60	269	11.5	3.90	231	----------	> 3 volumes
925	4.0	5.64	15.78	270	13.1	3.81	233	----------	
930	4.5	5.64	15.88	270	15.1	3.72	236	----------	
935	5.0	5.64	16.00	270	13.9	3.67	239	----------	
940	5.5	5.63	16.05	270	14.1	3.62	240	----------	
									MS/MSD collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-03-03
Sample Date: 4/16/2013
Sampling Device: Watera
Well Depth (feet TOIC): 101
Screen Interval (feet TOIC):100-102
Initial Water Level (Feet TOIC):55.95
Final Water Level (feet TOIC):55.95
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-03-03-SP13
Purge Start Time: 1205
Sample Time:1340
Final Turbidity (NTUs) : 37.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1230	3.75	5.26	16.82	278	143	6.39	262	----------	> 2 volumes
1235	4.5	5.25	16.55	277	130	5.97	267	----------	
1240	5.25	5.25	16.44	275	91.7	5.91	274	----------	> 3 volumes
1245	6.0	5.24	16.19	276	70.5	6.03	278	----------	
1250	6.75	5.25	16.08	275	65.1	6.06	282	----------	
1255	7.5	5.24	16.03	274	58.1	6.24	288	----------	
1300	8.25	5.24	15.98	273	54.6	6.09	291	----------	
1305	9.0	5.25	15.96	272	54.4	6.23	294	----------	
1310	9.75	5.24	15.92	274	51.3	6.26	297	----------	
1315	10.5	5.24	15.99	271	45.3	6.28	299	----------	
1320	11.25	5.23	16.04	273	41.6	6.19	301	----------	
1325	12.0	5.24	15.88	273	39.3	6.24	303	----------	
1330	12.75	5.24	15.85	273	37.2	6.31	304	----------	
1335	13.5	5.25	16.01	272	37.8	6.22	307	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-03-04
Sample Date: 4/17/2013
Sampling Device: Watera
Well Depth (feet TOIC): 116.0
Screen Interval (feet TOIC):115-117
Initial Water Level (Feet TOIC):55.95
Final Water Level (feet TOIC):55.95
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-03-04-SP13
Purge Start Time: 835
Sample Time:1225
Final Turbidity (NTUs) : 49.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 140
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
910	4.9	6.04	14.39	239	429	6.72	200	----------	> 2 volumes
915	5.6	5.97	14.40	238	416	6.54	197	----------	
920	6.3	5.96	14.37	237	373	6.52	194	----------	
925	7.0	5.95	14.39	237	329	6.40	192	----------	> 3 volumes
930	7.7	5.95	14.43	237	339	6.36	190	----------	
935	8.4	5.95	14.48	237	296	6.30	189	----------	
940	9.1	5.95	14.45	237	279	6.29	189	----------	
945	9.8	5.95	14.47	237	261	6.27	188	----------	
950	10.5	5.95	14.54	237	246	6.21	187	----------	
955	11.2	5.95	14.58	237	241	6.20	186	----------	
1000	11.9	5.95	14.65	238	226	6.15	186	----------	
1005	12.6	5.96	14.65	237	231	6.17	186	----------	
1010	13.3	5.96	14.70	238	221	6.13	187	----------	
1015	14.0	5.96	14.67	237	230	6.09	187	----------	
1045	17.0	5.98	15.60	240	148	5.93	185	----------	
1115	20.0	6.00	15.91	241	68.1	5.84	187	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1145	23.0	6.01	16.04	241	64.7	5.84	187	----------	
1205	25.0	6.01	16.20	242	50.1	5.78	187	----------	
1210	25.5	6.01	16.32	242	48.9	5.78	188	----------	
1215	26.0	6.02	16.34	242	49.4	5.76	188	----------	
1220	26.5	6.02	16.37	242	49.1	5.83	187	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-03-05
Sample Date: 4/17/2013
Sampling Device: Watera
Well Depth (feet TOIC): 131.0
Screen Interval (feet TOIC):130-132
Initial Water Level (Feet TOIC):55.95
Final Water Level (feet TOIC):55.95
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-03-05-SP13
Purge Start Time: 835
Sample Time:1020
Final Turbidity (NTUs) : 3.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
935	6.0	5.56	14.65	279	8.2	6.95	222	----------	> 2 volumes
940	6.5	5.51	14.57	280	6.7	6.84	225	----------	
945	7.0	5.50	14.55	281	5.9	6.80	229	----------	
950	7.5	5.48	14.59	281	6.5	6.78	234	----------	
955	8.0	5.49	14.66	281	5.2	6.75	237	----------	
1000	8.5	5.49	14.72	280	5.6	6.74	239	----------	
1005	9.0	5.48	14.77	280	3.9	6.78	241	----------	> 3 volumes
1010	9.5	5.48	14.83	280	3.7	6.75	244	----------	
1015	10.0	5.48	14.85	280	3.6	6.74	246	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-03-06
Sample Date: 4/16/2013
Sampling Device: Watera
Well Depth (feet TOIC): 146
Screen Interval (feet TOIC):145-147
Initial Water Level (Feet TOIC):55.97
Final Water Level (feet TOIC):55.97
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-03-06-SP13
Purge Start Time: 845
Sample Time:1035
Final Turbidity (NTUs) : 21.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
955	7.0	5.70	16.06	207	37.4	7.11	200	----------	> 2 volumes
1000	7.5	5.62	15.79	203	31.0	7.08	202	----------	
1005	8.0	5.58	15.79	200	26.9	7.03	204	----------	
1010	8.5	5.56	15.76	199	23.7	6.96	207	----------	
1015	9.0	5.55	15.79	199	17.1	6.95	210	----------	
1020	9.5	5.55	15.81	199	22.5	6.89	213	----------	
1025	10.0	5.54	15.73	198	22.3	6.82	217	----------	
1030	10.5	5.54	15.93	198	21.4	6.75	219	----------	> 3 volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-03-07
Sample Date: 4/16/2013
Sampling Device: Watera
Well Depth (feet TOIC): 161
Screen Interval (feet TOIC):162.5-163
Initial Water Level (Feet TOIC):55.99
Final Water Level (feet TOIC):55.99
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-03-07-SP13
Purge Start Time: 1205
Sample Time:1505
Final Turbidity (NTUs) : 41.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1325	8.0	5.46	17.39	211	115	6.55	218	----------	> 2 volumes
1330	8.5	5.45	17.22	210	108	5.85	222	----------	
1335	9.0	5.44	17.15	209	102	5.16	226	----------	
1340	9.5	5.43	17.05	209	101	5.10	228	----------	
1345	10.0	5.42	16.81	207	91.2	4.79	237	----------	
1350	10.5	5.41	16.69	206	83.3	4.70	246	----------	
1355	11.0	5.40	16.61	206	76.7	4.68	250	----------	
1400	11.5	5.40	16.43	206	78.2	4.71	256	----------	
1405	12.0	5.39	16.44	206	76.1	4.71	258	----------	> 3 volumes
1410	12.5	5.39	16.50	206	70.4	4.67	261	----------	
1415	13.0	5.39	16.47	206	63.3	4.67	264	----------	
1420	13.5	5.39	16.36	206	65.4	4.64	267	----------	
1425	14.0	5.38	16.36	206	55.8	4.64	269	----------	
1430	14.5	5.38	16.43	205	56.4	4.61	271	----------	
1435	15.0	5.39	16.42	205	53.1	4.62	272	----------	
1440	15.5	5.39	16.36	205	51.1	4.66	276	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1445	16.0	5.39	16.29	205	47.1	4.66	278	----------	
1450	16.5	5.38	16.26	205	42.5	4.71	279	----------	
1455	17.0	5.39	16.28	204	41.5	4.69	280	----------	
1500	17.5	5.40	16.29	204	41.4	4.75	283	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-04-01
Sample Date: 4/10/2013
Sampling Device: Watera
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC):71-73
Initial Water Level (Feet TOIC):52.51
Final Water Level (feet TOIC):52.54
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-04-01-SP13
Purge Start Time: 1550
Sample Time:1630
Final Turbidity (NTUs) : 19.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1600	2.5	5.89	16.43	244	21.3	6.81	203	----------	> 3 volumes
1605	3.75	5.84	16.29	230	27.5	6.18	215	----------	
1610	5.0	5.84	16.29	227	17.1	6.20	219	----------	
1615	6.25	5.82	16.11	223	21.8	6.10	227	----------	
1620	7.5	5.82	16.08	220	20.2	6.03	229	----------	
1625	8.75	5.82	16.02	219	19.9	6.01	230	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-04-02
Sample Date: 4/11/2013
Sampling Device: Watera
Well Depth (feet TOIC): 87
Screen Interval (feet TOIC):86-88
Initial Water Level (Feet TOIC):52.54
Final Water Level (feet TOIC):52.54
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-04-02-SP13
Purge Start Time: 900
Sample Time:1010
Final Turbidity (NTUs) : 22.3
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
915	3.0	5.78	14.57	281	477	6.74	227	----------	> 2 volumes
920	4.0	5.75	14.58	285	418	6.52	230	----------	> 3 volumes
925	5.0	5.71	14.58	293	240	6.21	235	----------	
930	6.0	5.69	14.62	304	127	5.70	240	----------	
935	7.0	5.68	14.64	313	70.4	5.34	244	----------	
940	8.0	5.66	14.64	309	51.5	5.34	247	----------	
945	9.0	5.64	14.65	316	41.1	5.90	251	----------	
950	10.0	5.62	14.66	302	33.8	5.93	254	----------	
955	11.0	5.63	14.66	291	24.6	5.70	257	----------	
1000	12.0	5.63	14.66	290	24.0	5.65	258	----------	
1005	13.0	5.64	14.64	290	22.3	5.82	261	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-04-03
Sample Date: 4/11/2013
Sampling Device: Watera
Well Depth (feet TOIC): 102
Screen Interval (feet TOIC):101-103
Initial Water Level (Feet TOIC):52.55
Final Water Level (feet TOIC):52.56
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-04-03-SP13
Purge Start Time: 1130
Sample Time:1320
Final Turbidity (NTUs) : 11.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1210	4.0	5.98	15.19	209	47.7	5.89	232	----------	> 2 volumes
1215	4.5	5.95	15.18	213	48.7	5.55	234	----------	
1220	5.0	5.92	15.15	219	42.2	6.11	237	----------	
1225	5.5	5.90	15.19	225	48.8	6.18	238	----------	
1230	6.0	5.87	15.13	233	39.7	6.15	241	----------	> 3 volumes
1235	6.5	5.84	15.14	244	24.7	6.39	244	----------	
1240	7.0	5.81	15.18	258	18.0	6.38	246	----------	
1245	7.5	5.79	15.17	270	17.2	6.45	251	----------	
1250	8.0	5.77	15.16	284	22.1	6.33	253	----------	
1255	8.5	5.74	15.15	296	27.5	6.27	255	----------	
1300	9.0	5.69	15.24	302	14.6	6.28	259	----------	
1305	9.5	5.73	15.27	317	11.8	5.83	260	----------	
1310	10.0	5.72	15.35	319	10.9	5.77	260	----------	
1315	10.5	5.72	15.37	321	11.1	5.72	260	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-04-04
Sample Date: 4/10/2013
Sampling Device: Watera
Well Depth (feet TOIC): 116
Screen Interval (feet TOIC):116-118
Initial Water Level (Feet TOIC):52.55
Final Water Level (feet TOIC):52.57
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-04-04-SP13
Purge Start Time: 955
Sample Time:1615
Final Turbidity (NTUs) : 11.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 125/100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	4.8	5.91	16.23	239	358	5.89	230	----------	> 2 volumes
1040	5.425	5.89	16.23	240	270	5.67	231	----------	
1045	6.05	5.89	16.22	239	278	5.63	237	----------	
1050	6.675	5.89	16.26	239	250	5.53	244	----------	
1055	7.3	5.88	16.30	238	194	5.49	247	----------	> 3 volumes
1100	7.925	5.88	16.46	237	180	5.45	249	----------	
1105	8.55	5.89	16.61	237	162	5.39	252	----------	
1110	9.175	5.89	16.68	237	170	5.49	251	----------	
1115	9.8	5.89	16.87	236	150	5.35	252	----------	
1120	10.425	5.90	17.13	236	144	5.29	252	----------	
1125	11.05	5.91	17.02	235	141	5.39	259	----------	
1130	11.675	5.91	17.00	234	149	5.36	260	----------	
1135	12.3	---------	----------	----------	----------	---------	----------	----------	Cleaned flow cell
1140	12.925	5.93	16.97	226	148	5.50	254	----------	
1145	13.55	5.91	17.11	233	154	5.25	258	----------	
1150	14.175	5.91	17.28	235	149	5.24	263	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1155	14.8	5.91	17.23	236	135	5.07	265	----------	
1200	15.425	5.91	17.36	236	152	5.29	267	----------	
1205	16.05	5.91	17.31	235	128	5.24	267	----------	
1210	16.675	5.91	17.31	235	123	5.04	270	----------	
1215	17.3	5.91	17.34	235	119	5.30	272	----------	
1220	17.925	5.92	17.41	234	116	5.37	273	----------	
1225	18.55	5.92	17.27	234	126	5.38	271	----------	
1230	19.175	5.92	17.26	234	142	5.33	272	----------	
1235	19.8	5.92	17.38	233	160	5.29	276	----------	
1240	20.425	5.92	17.32	233	157	5.31	276	----------	
1245	21.05	5.92	17.24	233	143	5.36	277	----------	
1250	21.675	5.92	17.45	232	150	5.15	276	----------	
1255	22.3	5.92	17.58	233	132	5.34	277	----------	
1300	22.925	5.93	17.64	233	133	5.36	275	----------	
1305	23.55	5.93	17.54	233	132	5.21	275	----------	
1310	24.175	5.93	17.57	233	128	5.18	275	----------	
1315	24.8	5.94	17.68	232	126	5.15	276	----------	
1320	25.425	5.93	17.66	232	149	5.15	276	----------	
1325	26.05	5.93	17.53	232	136	5.41	277	----------	
1330	26.675	5.94	17.67	232	117	5.20	276	----------	
1335	27.3	5.94	17.46	232	116	5.26	276	----------	
1340	27.925	5.93	17.64	232	97.6	5.31	278	----------	
1345	28.55	5.94	17.80	232	124	5.15	276	----------	
1350	29.175	5.93	17.71	232	119	5.22	276	----------	
1355	29.8	5.93	17.77	232	106	5.28	277	----------	
1400	30.425	5.94	17.85	232	104	5.29	277	----------	
1405	31.05	5.94	17.69	232	113	5.22	276	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1410	31.675	5.94	17.59	232	96.7	5.28	278	----------	
1415	32.3	5.95	17.81	232	89.8	5.27	278	----------	
1420	32.929	5.94	17.74	232	81.6	5.32	279	----------	
1425	33.55	5.95	17.89	232	78.3	5.18	278	----------	
1430	34.175	5.95	18.00	232	75.9	5.01	277	----------	
1435	34.8	5.94	17.79	232	74.3	5.34	279	----------	
1440	35.425	5.95	17.79	231	58.6	5.14	278	----------	
1445	36.05	5.95	17.86	231	65.1	5.22	278	----------	Decreased flow rate to 100 ml/min
1450	36.55	5.95	18.03	232	70.1	5.27	279	----------	
1455	37.05	5.95	18.10	232	77.6	5.39	280	----------	
1500	37.55	5.94	18.80	234	73.5	5.03	280	----------	
1505	38.05	5.95	18.98	236	82.9	4.94	280	----------	
1510	38.55	5.97	18.20	234	120	5.20	277	----------	
1515	39.05	5.95	17.70	233	99.3	5.37	280	----------	
1520	39.55	5.96	17.52	232	93.2	5.26	280	----------	
1525	40.05	5.95	17.68	233	97.1	5.41	287	----------	
1530	40.55	5.95	17.65	232	82.7	5.37	288	----------	
1535	41.05	5.95	17.68	233	75.2	5.20	287	----------	
1540	41.55	5.95	17.65	234	90.2	5.18	287	----------	
1545	42.05	5.96	16.22	233	143	5.78	295	----------	
1550	42.55	5.95	15.87	233	99.9	5.67	298	----------	
1555	43.05	5.96	15.82	233	52.1	5.62	301	----------	
1600	43.55	5.96	15.80	233	13.1	5.66	303	----------	
1605	44.05	5.95	15.76	234	12.4	5.68	305	----------	
1610	44.55	5.95	15.74	233	11.9	5.69	304	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-04-05
Sample Date: 4/11/2013
Sampling Device: Watera
Well Depth (feet TOIC): 132
Screen Interval (feet TOIC):131-133
Initial Water Level (Feet TOIC):52.56
Final Water Level (feet TOIC):52.57
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-04-05-SP13
Purge Start Time: 1355
Sample Time:1535
Final Turbidity (NTUs) : 12.5
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1455	6.0	5.70	15.80	278	11.9	8.01	279	----------	> 2 volumes
1500	6.5	5.71	15.77	277	13.1	7.40	280	----------	
1505	7.0	5.70	15.72	277	11.6	6.80	283	----------	
1510	7.5	5.70	15.66	276	10.8	6.51	286	----------	
1515	8.0	5.70	15.63	276	10.6	6.42	289	----------	
1520	8.5	5.70	15.54	276	12.2	6.25	290	----------	
1525	9.0	5.70	15.37	276	12.7	6.29	291	----------	
1530	9.5	5.70	15.26	276	12.5	6.25	293	----------	> 3 volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-04-06
Sample Date: 4/11/2013
Sampling Device: Watera
Well Depth (feet TOIC): 147
Screen Interval (feet TOIC):146-148
Initial Water Level (Feet TOIC):52.56
Final Water Level (feet TOIC):52.57
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-04-06-SP13
Purge Start Time: 900
Sample Time:1045
Final Turbidity (NTUs) : 45.7
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
930	7.5	5.86	14.51	308	274	7.68	236	----------	> 2 volumes
935	8.75	5.86	14.48	308	177	7.48	242	----------	
940	10.0	5.87	14.48	308	154	7.44	246	----------	
945	11.25	5.88	14.50	308	110	7.38	249	----------	> 3 volumes
950	12.5	5.89	14.48	308	103	7.34	250	----------	
955	13.75	5.90	14.49	308	97.9	7.23	253	----------	
1000	15.0	5.90	14.50	308	80.6	7.20	254	----------	
1005	16.25	5.91	14.48	308	78.0	7.19	257	----------	
1010	17.5	5.91	14.47	307	72.3	7.17	258	----------	
1015	18.75	5.92	14.45	306	68.4	7.13	260	----------	
1020	20.0	5.92	14.46	306	56.6	7.07	260	----------	
1025	21.25	5.93	14.46	306	56.5	7.09	261	----------	
1030	22.5	5.93	14.50	305	44.5	7.17	261	----------	
1035	23.75	5.93	14.51	305	44.3	7.19	261	----------	
1040	25.0	5.93	14.52	305	45.7	7.19	262	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-04-07
Sample Date: 4/11/2013
Sampling Device: Watera
Well Depth (feet TOIC): 162
Screen Interval (feet TOIC):162.5-163
Initial Water Level (Feet TOIC):52.52
Final Water Level (feet TOIC):52.52
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: PW-04-07-SP13
Purge Start Time: 1130
Sample Time:1250
Final Turbidity (NTUs) : 18.3
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1215	9.0	5.85	14.96	300	23.0	6.94	268	----------	> 2 volumes
1220	10.0	5.84	14.96	299	21.1	6.88	270	----------	
1225	11.0	5.83	14.99	299	13.7	6.75	271	----------	
1230	12.0	5.84	14.97	297	16.4	6.78	273	----------	
1235	13.0	5.84	14.98	297	18.5	6.80	275	----------	> 3 volumes
1240	14.0	5.84	14.99	296	17.4	6.72	275	----------	
1245	15.0	5.84	15.04	297	18.3	6.71	275	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-01
Sample Date: 4/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 71.0
Screen Interval (feet TOIC):70-72
Initial Water Level (Feet TOIC):54.48
Final Water Level (feet TOIC):54.49
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-06-01-SP13
Purge Start Time: 1455
Sample Time:1545
Final Turbidity (NTUs) : 17.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 130
Purge Rate d/sampling (ml/min): 130
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1505	1.3	5.85	14.67	113	47.3	6.05	262	----------	> 2 volumes
1510	1.95	5.89	14.58	116	40.8	6.10	260	----------	> 3 volumes
1515	2.6	5.87	14.54	117	37.9	6.22	260	----------	
1520	3.25	5.85	14.56	119	34.1	6.30	261	----------	
1525	3.9	5.85	14.57	121	26.2	6.34	261	----------	
1530	4.55	5.83	14.56	123	19.6	6.35	263	----------	
1535	5.2	5.83	14.59	124	18.2	6.38	265	----------	
1540	5.85	5.83	14.60	125	17.8	6.34	266	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-02
Sample Date: 4/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 91.0
Screen Interval (feet TOIC):90-92
Initial Water Level (Feet TOIC):54.49
Final Water Level (feet TOIC):54.51
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-06-02-SP13
Purge Start Time: 1330
Sample Time:1440
Final Turbidity (NTUs) : 31.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1350	3.0	5.39	14.59	124	106	5.73	286	----------	> 2 volumes
1355	3.75	5.36	14.36	121	93.0	5.72	289	----------	
1400	4.5	5.37	14.29	119	91.9	5.79	291	----------	> 3 volumes
1405	5.25	5.36	14.34	117	75.9	5.91	292	----------	
1410	6.0	5.37	14.41	116	61.9	5.99	292	----------	
1415	6.75	5.37	14.53	116	48.1	6.07	293	----------	
1420	7.5	5.36	14.60	115	39.7	6.11	294	----------	
1425	8.25	5.37	14.57	114	30.1	6.11	295	----------	
1430	9.0	5.37	14.61	114	31.2	6.08	297	----------	
1435	9.75	5.37	14.65	114	31.6	6.09	298	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-03
Sample Date: 4/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 119.0
Screen Interval (feet TOIC):118-120
Initial Water Level (Feet TOIC):54.50
Final Water Level (feet TOIC):54.50
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-06-03-SP13
Purge Start Time: 745
Sample Time:845
Final Turbidity (NTUs) : 33.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 180
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
815	5.4	5.54	12.59	297	96.3	7.51	221	----------	> 2 volumes
820	6.3	5.43	12.60	297	68.1	7.30	231	----------	
825	7.2	5.38	12.63	297	52.4	7.63	237	----------	
830	8.1	5.36	12.69	297	36.4	7.56	245	----------	> 3 volumes
835	9.0	5.34	12.73	297	35.3	7.45	249	----------	
840	9.9	5.33	12.77	297	33.1	7.38	252	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-04
Sample Date: 4/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 151.0
Screen Interval (feet TOIC):150-152
Initial Water Level (Feet TOIC):54.54
Final Water Level (feet TOIC):54.54
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-06-04-SP13
Purge Start Time: 1230
Sample Time:1645
Final Turbidity (NTUs) : 45.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 170
Purge Rate d/sampling (ml/min): 170
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1315	7.65	5.25	13.89	267	175	6.41	256	----------	> 2 volumes
1320	8.50	5.23	13.75	267	157	6.27	265	----------	
1325	9.35	5.19	13.67	267	132	6.19	276	----------	
1330	10.2	5.13	13.69	266	221	6.07	285	----------	
1335	11.05	5.14	13.79	267	194	6.07	267	----------	> 3 volumes
1340	11.9	5.16	13.81	267	177	6.17	288	----------	
1345	12.75	5.14	13.78	266	170	6.23	287	----------	
1350	13.6	5.14	13.78	267	156	6.02	287	----------	
1355	14.45	5.12	13.69	266	167	6.20	288	----------	
1400	15.3	5.11	13.80	266	204	6.09	289	----------	
1430	20.4	5.13	13.86	266	160	6.15	292	----------	
1500	25.5	5.11	13.66	266	138	6.12	303	----------	
1530	30.6	5.12	13.54	266	92.6	6.08	313	----------	
1600	35.7	5.12	13.49	266	70.6	6.14	321	----------	
1630	40.8	5.11	13.20	266	46.4	6.09	325	----------	
1635	41.65	5.12	13.29	266	47.2	6.02	326	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1640	42.5	5.12	13.33	266	45.4	6.04	326	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-05
Sample Date: 4/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 167.0
Screen Interval (feet TOIC):166-168
Initial Water Level (Feet TOIC):54.54
Final Water Level (feet TOIC):54.54
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-06-05-SP13
Purge Start Time: 1045
Sample Time:1215
Final Turbidity (NTUs) : 45.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 190
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1130	8.55	5.09	13.14	255	111	6.65	281	----------	> 2 volumes
1135	9.5	5.05	13.27	256	87.5	6.65	287	----------	
1140	10.45	5.05	13.37	256	69.3	6.48	290	----------	
1145	11.4	5.02	13.43	256	58.1	6.55	293	----------	
1150	12.35	5.02	13.43	256	53.8	6.60	297	----------	
1155	13.3	5.01	13.42	256	51.6	6.63	298	----------	> 3 volumes
1200	14.25	5.00	13.46	255	48.8	6.64	301	----------	
1205	15.2	5.03	13.49	255	47.5	6.65	304	----------	
1210	16.15	5.01	13.55	255	45.4	6.45	304	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-06
Sample Date: 4/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 181.0
Screen Interval (feet TOIC):180-182
Initial Water Level (Feet TOIC):54.50
Final Water Level (feet TOIC):54.50
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-06-06-SP13
Purge Start Time: 855
Sample Time:1035
Final Turbidity (NTUs) : 45.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
935	10.0	5.31	12.65	284	120	6.52	255	----------	> 2 volumes
940	11.25	5.28	12.70	284	140	6.42	262	----------	
945	12.5	5.28	12.72	284	109	6.55	266	----------	
950	13.75	5.25	12.71	284	113	6.44	271	----------	
955	15.0	5.26	12.77	284	98.5	6.36	273	----------	> 3 volumes
1010	18.75	5.23	12.92	284	60.0	6.43	282	----------	
1015	20.0	5.22	12.93	284	52.6	6.44	286	----------	
1020	21.25	5.21	12.92	284	48.4	6.46	287	----------	
1025	22.5	5.20	12.94	284	47.1	6.38	289	----------	
1030	23.75	5.21	12.98	284	45.2	6.39	290	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-07
Sample Date: 4/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 221.5
Screen Interval (feet TOIC):221.5-222
Initial Water Level (Feet TOIC):54.95
Final Water Level (feet TOIC):55.01
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & J. Rhyne

Sample ID: PW-06-07-SP13
Purge Start Time: 745
Sample Time:1315
Final Turbidity (NTUs) : 48.5
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 250/140
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
840	13.75	5.33	12.46	255	850	5.30	230	----------	> 2 volumes
845	15.00	5.33	12.41	252	650	5.05	236	----------	
850	16.25	5.33	12.44	248	510	4.83	242	----------	
855	17.5	5.33	12.41	247	390	4.75	249	----------	
900	18.75	5.33	12.42	246	380	4.52	254	----------	
905	20.0	5.32	12.43	246	350	4.37	259	----------	> 3 volumes
910	21.25	5.32	12.53	245	330	4.34	263	----------	
915	22.5	5.32	12.55	246	351	4.32	266	----------	
945	30.0	5.29	12.60	245	320	4.08	279	----------	Cleaned flow cell
1015	34.2	5.31	12.02	246	281	4.99	276	----------	Flow rate decreased to 140 ml/min
1045	38.4	5.33	12.46	246	133	4.94	282	----------	
1115	42.6	5.32	12.91	246	77.2	4.87	288	----------	
1145	46.8	5.35	13.62	245	71.2	4.83	283	----------	
1215	51.0	5.40	13.90	244	55.8	4.71	286	----------	
1245	55.2	5.40	13.97	244	54.6	4.64	287	----------	
1300	57.3	5.39	14.12	243	49.9	4.64	290	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1305	58.0	5.39	14.13	243	49.3	4.66	290	----------	
1310	58.7	5.39	14.10	243	48.5	4.60	291	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-01
Sample Date: 4/22/2013
Sampling Device: Watera
Well Depth (feet TOIC): 71.0
Screen Interval (feet TOIC):70-72
Initial Water Level (Feet TOIC):51.31
Final Water Level (feet TOIC):51.32
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-07-01-SP13 & DUP
Purge Start Time: 915
Sample Time:1050
Final Turbidity (NTUs) : 23.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 160
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
925	1.6	5.06	15.05	504	73.1	6.25	205	----------	> 2 volumes
930	2.4	5.03	15.14	505	54.7	6.25	214	----------	> 3 volumes
935	3.2	5.00	15.14	505	53.8	5.94	228	----------	
940	4.0	4.98	15.06	502	52.9	5.84	239	----------	
945	4.8	4.97	15.06	501	54.7	5.71	245	----------	
950	5.6	4.98	15.03	499	60.1	5.59	249	----------	
955	6.4	5.00	15.19	495	78.8	6.02	255	----------	
1000	7.2	4.99	15.19	494	79.4	6.00	260	----------	
1005	8.0	5.01	15.22	491	69.4	5.85	264	----------	
1010	8.8	4.99	15.27	489	68.6	5.99	269	----------	
1015	9.6	5.00	15.29	487	67.7	5.82	274	----------	
1030	12.0	5.01	15.28	483	48.7	5.59	279	----------	
1035	12.8	5.03	15.31	481	24.7	5.52	281	----------	
1040	13.6	5.03	15.30	481	25.0	5.56	284	----------	
1045	14.4	5.03	15.29	480	23.8	5.54	285	----------	*Duplicate Sample Collected*
									MW-807-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-02
Sample Date: 4/22/2013
Sampling Device: Watera
Well Depth (feet TOIC): 96.0
Screen Interval (feet TOIC):95-97
Initial Water Level (Feet TOIC):51.33
Final Water Level (feet TOIC):51.33
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-07-02-SP13
Purge Start Time: 915
Sample Time:1020
Final Turbidity (NTUs) : 36.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
950	3.5	5.60	14.86	254	77.3	7.45	180	----------	> 2 volumes
955	4.0	5.59	15.07	253	70.1	7.53	182	----------	
1000	4.5	5.59	15.12	253	52.3	7.54	183	----------	
1005	5.0	5.59	15.22	253	39.3	7.53	185	----------	
1010	5.5	5.58	15.34	253	39.1	7.52	185	----------	> 3 volumes
1015	6.0	5.59	15.31	253	36.2	7.54	186	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-03
Sample Date: 4/15/2013
Sampling Device: Watera
Well Depth (feet TOIC): 121
Screen Interval (feet TOIC):120-122
Initial Water Level (Feet TOIC):51.34
Final Water Level (feet TOIC):51.34
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-07-03-SP13
Purge Start Time: 1155
Sample Time:1300
Final Turbidity (NTUs) : 11.3
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1225	5.6	5.63	15.29	222	21.5	6.21	163	----------	> 2 volumes
1230	6.6	5.64	15.27	220	18.3	6.02	163	----------	
1235	7.6	5.64	15.24	219	15.8	6.02	167	----------	
1240	8.6	5.64	15.23	219	13.8	6.00	168	----------	> 3 volumes
1245	9.6	5.64	15.25	219	11.5	6.02	169	----------	
1250	10.6	5.63	15.24	220	10.8	6.09	172	----------	
1255	11.6	5.62	15.26	220	11.3	6.11	173	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-04
Sample Date: 4/15/2013
Sampling Device: Watera
Well Depth (feet TOIC): 146
Screen Interval (feet TOIC):145-147
Initial Water Level (Feet TOIC):51.34
Final Water Level (feet TOIC):51.34
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-07-04-SP13 & DUP
Purge Start Time: 935
Sample Time:1105
Final Turbidity (NTUs) : 12.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1025	7.2	5.45	14.79	324	19.8	6.21	241	----------	> 2 volumes
1030	7.95	5.44	14.85	343	19.0	5.91	259	----------	
1035	8.7	5.42	14.90	342	16.2	5.79	268	----------	
1040	9.45	5.41	14.93	334	13.2	5.84	272	----------	
1045	10.2	5.39	14.92	326	12.8	5.72	273	----------	
1050	10.95	5.39	14.95	319	12.3	5.76	273	----------	> 3 volumes
1055	11.7	5.39	14.94	315	12.1	5.57	273	----------	
1100	12.45	5.39	14.98	311	12.1	5.64	273	----------	
									Duplicate Sample Collected
									MW-802-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-05
Sample Date: 4/15/2013
Sampling Device: Watera
Well Depth (feet TOIC): 171
Screen Interval (feet TOIC):170-172
Initial Water Level (Feet TOIC):51.35
Final Water Level (feet TOIC):51.37
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-07-05-SP13
Purge Start Time: 1345
Sample Time:1620
Final Turbidity (NTUs) : 3.3
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1515	9.1	5.70	17.90	292	4.4	4.50	232	----------	> 2 volumes
1520	9.6	5.69	17.55	291	4.0	4.48	242	----------	
1525	10.1	5.68	17.43	290	4.0	4.37	249	----------	
1530	10.6	5.67	17.25	289	3.7	4.26	254	----------	
1535	11.1	5.66	17.24	289	3.5	4.26	258	----------	
1540	11.6	5.66	17.22	288	3.0	4.21	261	----------	
1545	12.1	5.66	17.17	287	2.5	4.14	264	----------	
1550	12.6	5.66	17.04	286	3.2	4.16	265	----------	
1555	13.1	5.66	16.88	286	3.0	4.11	267	----------	
1600	13.6	5.65	16.71	286	3.1	4.05	268	----------	
1605	14.1	5.65	16.64	285	3.6	4.02	269	----------	> 3 volumes
1610	14.6	5.65	16.48	285	3.4	3.97	271	----------	
1615	15.1	5.65	16.39	286	3.3	3.96	272	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-06
Sample Date: 4/22/2013
Sampling Device: Watera
Well Depth (feet TOIC): 198.0
Screen Interval (feet TOIC):197-199
Initial Water Level (Feet TOIC):51.72
Final Water Level (feet TOIC):51.72
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Zarnadze

Sample ID: PW-07-06-SP13 & MS/MSD
Purge Start Time: 1350
Sample Time:1540
Final Turbidity (NTUs) : 5.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1450	12.0	5.39	16.40	450	13.5	5.90	247	----------	> 2 volumes
1455	13.0	5.38	16.36	450	11.9	5.78	251	----------	
1500	14.0	5.38	16.32	451	9.8	5.74	256	----------	
1505	15.0	5.36	16.29	451	8.3	5.80	260	----------	
1510	16.0	5.36	16.24	452	9.6	5.72	260	----------	
1515	17.0	5.35	16.00	455	6.3	5.86	264	----------	> 3 volumes
1520	18.0	5.32	15.69	463	15.9	6.12	268	----------	
1525	19.0	5.31	15.71	464	5.8	5.91	275	----------	
1530	20.0	5.31	15.72	463	6.2	5.69	276	----------	
1535	21.0	5.29	15.69	463	5.4	5.72	278	----------	
									MS/MSD collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-07
Sample Date: 4/15/2013
Sampling Device: Watera
Well Depth (feet TOIC): 220.5
Screen Interval (feet TOIC):220.5-221
Initial Water Level (Feet TOIC):51.62
Final Water Level (feet TOIC):52.35
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt & A. Wreschnig

Sample ID: PW-07-07-SP13
Purge Start Time: 935
Sample Time:1510
Final Turbidity (NTUs) : 46.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1145	13.0	6.39	15.61	602	196	6.75	212	----------	> 2 volumes
1150	13.5	5.60	15.31	598	172	6.13	232	----------	
1155	14.0	5.46	15.24	598	156	5.92	242	----------	
1200	14.5	5.42	15.24	598	156	5.75	250	----------	
1205	15.0	5.41	15.19	598	168	5.67	255	----------	
1210	15.5	5.40	15.19	599	148	5.54	259	----------	
1215	16.0	5.40	15.19	599	122	5.47	263	----------	
1220	16.5	5.39	15.17	600	120	5.44	265	----------	
1225	17.0	5.39	15.14	600	131	5.37	268	----------	
1230	17.5	5.39	15.13	600	98.2	5.36	269	----------	
1235	18.0	5.39	15.13	600	93.8	5.33	271	----------	
1240	18.5	5.39	15.16	601	93.4	5.28	272	----------	
1245	19.0	5.40	15.17	601	104	5.28	274	----------	
1250	19.5	5.39	15.20	601	102	5.35	275	----------	> 3 volumes
1320	22.5	5.39	15.33	604	90.9	5.39	279	----------	
1350	25.5	5.36	15.38	603	87.6	5.22	285	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1405	27.0	5.39	15.40	603	60.1	5.20	288	----------	
1410	27.5	5.39	15.65	603	60.9	5.11	287	----------	
1440	30.5	5.40	15.49	600	49.0	5.30	292	----------	
1445	31.0	5.40	15.52	601	42.8	5.21	293	----------	
1450	31.5	5.39	15.54	601	49.5	5.16	294	----------	
1455	32.0	5.39	15.50	602	44.0	5.18	295	----------	
1500	32.5	5.40	15.40	602	45.9	5.17	296	----------	
1505	33.0	5.39	15.44	602	46.4	5.16	297	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-325
Sample Date: 4/17/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC):285-325
Initial Water Level (Feet TOIC):47.90
Final Water Level (feet TOIC):47.90
Casing Type: PVC **Steel** (circle one)
Personnel: A. Zarnadze

Sample ID: S-1-325-SP13
Purge Start Time: 1310
Sample Time:1655
Final Turbidity (NTUs) : 23.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 24.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1310	0	7.18	17.60	372	102	4.89	193	47.90	
1320	2.0	6.92	15.13	360	82	5.85	-57	47.90	
1330	4.0	6.92	15.15	364	85.2	4.23	-59	47.90	
1340	6.0	6.92	15.19	366	82.7	3.03	-70	47.90	
1350	8.0	6.87	15.24	375	123	2.89	-75	47.90	
1400	10.0	6.72	15.20	373	273	3.25	-63	47.90	
1410	12.0	6.44	15.20	365	1000	3.07	-29	47.90	
1420	14.0	5.84	15.21	364	1000	3.17	33	47.90	
1430	16.0	5.82	15.22	364	1000	3.18	35	47.90	
1440	18.0	5.80	15.25	364	1000	3.25	39	47.90	
1450	20.0	---	---	---	---	---	---	---	Cleaned flow cell
1500	22.0	5.65	16.55	361	178	3.39	80	47.90	
1501	24.0	5.63	16.45	361	100	3.30	86	47.90	
1520	26.0	5.62	16.47	361	88.0	3.22	89	47.90	> 2 system volumes
1530	28.0	5.62	16.60	361	78.0	4.18	94	47.90	
1540	30.0	5.62	16.50	360	227	3.25	98	47.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1550	32.0	5.60	16.68	359	128	3.26	102	47.90	
1600	34.0	5.59	16.67	359	126	3.26	104	47.90	
1610	36.0	5.58	16.64	359	79.5	3.11	107	47.90	
1620	38.0	5.57	16.59	359	51.9	3.26	111	47.90	
1630	40.0	5.56	16.50	358	34.9	3.79	116	47.90	
1640	42.0	5.56	16.55	358	25.3	3.34	116	47.90	
1650	44.0	5.56	16.33	360	24.1	3.32	117	47.90	
1655	45.0	5.56	16.23	360	23.0	3.32	118	47.90	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-450
Sample Date: 4/17/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 450
Screen Interval (feet TOIC):410-450
Initial Water Level (Feet TOIC):48.12
Final Water Level (feet TOIC):48.25
Casing Type: PVC **Steel** (circle one)
Personnel: L. Roedl

Sample ID: S-1-450-SP13
Purge Start Time: 1631
Sample Time:2105 w/filter
Final Turbidity (NTUs) : 82.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250/270
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 30.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1631	0	8.14	16.03	181	83.1	3.95	170	48.28	
1641	2.5	9.85	14.59	135	109	2.26	88	48.25	
1651	5.2	9.78	14.46	135	130	1.79	-13	48.25	Flow rate increased to 270 ml/min
1701	7.9	9.81	14.19	139	161	2.30	-38	48.25	
1711	10.6	8.57	14.16	164	379	1.42	-60	48.25	
1721	13.3	7.51	14.20	220	1000	1.93	56	48.25	
1731	16.0	6.73	14.28	219	1000	3.11	127	48.25	
1741	18.7	6.21	14.30	211	1000	3.43	123	48.25	
1751	21.4	5.95	14.26	213	1000	5.70	104	48.25	
1801	24.1	5.90	14.15	213	860	4.71	105	48.25	
1811	26.8	5.80	14.42	215	729	3.66	112	48.25	
1821	29.5	5.75	14.59	215	1000	3.65	125	48.28	
1831	32.2	5.70	14.33	215	721	6.72	130	48.28	> 2 system volumes
1841	34.9	5.68	14.13	215	521	3.78	135	48.28	
1851	37.6	5.68	14.22	213	452	4.26	132	48.25	Cleaned flow cell
1901	40.3	5.66	14.00	214	380	4.08	137	48.25	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1911	43.0	5.62	13.70	216	249	4.05	141	48.25	
1921	45.7	5.65	14.69	217	230	4.00	141	48.25	
1931	48.4	5.67	14.72	210	189	4.21	141	48.25	
1941	51.1	5.67	13.40	215	146	3.92	139	48.25	
1951	53.8	5.69	13.11	215	150	3.92	139	48.25	
2001	56.5	5.67	12.46	217	151	4.03	139	48.25	
2011	59.2	5.69	12.29	218	159	3.96	139	48.25	
2021	61.9	5.69	11.99	218	143	3.96	139	48.25	
2031	64.6	5.69	11.98	218	146	3.96	139	48.25	
2041	67.3	5.70	11.64	217	140	4.09	140	48.25	
2051	70.0	5.69	11.37	218	134	3.99	139	48.25	
2101	72.7	5.69	11.42	218	82.5	4.00	139	48.25	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-1-75
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):58.11
Final Water Level (feet TOIC):58.18
Casing Type: PVC **Steel** (circle one)
Personnel: B. Kroon

Sample ID: W-1-75-SP13
Purge Start Time: 1035
Sample Time:1120
Final Turbidity (NTUs) : 0.4
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1040	1.3	6.19	15.87	1310	1.4	7.15	207	58.23	
1045	2.6	6.15	15.89	1310	2.4	5.71	207	58.23	
1050	3.9	6.14	15.95	1320	1.5	4.56	210	58.22	> 2 system volumes
1055	5.2	6.16	15.97	1310	0.2	4.38	210	58.23	
1100	6.5	6.19	16.00	1290	0.2	4.21	208	58.23	
1105	7.8	6.23	16.06	1210	0.3	4.02	195	58.22	
1110	9.1	6.26	16.10	1170	0.5	3.72	185	58.18	
1115	10.4	6.30	16.11	1150	0.3	3.79	182	58.19	
1120	11.7	6.32	16.16	1160	0.4	3.76	184	58.18	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-1-120
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):59.80
Final Water Level (feet TOIC):58.60
Casing Type: PVC **Steel** (circle one)
Personnel: A. Zarnadze

Sample ID: W-1-120-SP13
Purge Start Time: 1025
Sample Time:1235
Final Turbidity (NTUs) : 48.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.11

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1030	1.1	6.61	15.69	2650	319	3.14	-54	59.80	
1040	3.3	6.60	15.79	2670	254	3.70	-58	59.70	
1045	4.4	6.60	15.78	2670	224	3.08	-60	59.70	
1050	5.5	6.60	15.78	2680	210	2.99	-61	59.70	> 2 system volumes
1100	7.7	6.61	15.85	2690	165	2.89	-62	59.70	
1110	9.9	6.61	16.00	2690	120	2.86	-62	59.70	
1115	11.0	6.61	16.04	2690	107	2.85	-62	59.70	
1120	12.1	6.61	16.03	2680	92.6	2.81	-62	59.60	
1130	14.3	6.61	16.01	2680	82.6	2.82	-61	59.60	
1135	15.4	6.61	16.02	2690	76.8	2.83	-61	59.60	
1140	16.5	6.61	16.04	2690	66.2	2.86	-61	59.60	
1150	18.7	6.61	16.23	2690	59.2	2.85	-61	59.60	
1200	20.9	6.61	16.23	2690	58.2	2.86	-61	59.60	
1210	23.1	6.61	16.24	2690	56.2	2.85	-60	59.60	
1220	25.3	6.61	16.39	2690	51.4	2.98	-61	59.60	
1225	26.4	6.61	16.35	2690	49.4	2.96	-61	59.60	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1230	27.5	6.61	16.38	2680	49.6	2.95	-61	59.60	
1235	28.6	6.61	16.38	2690	48.2	2.95	-60	59.60	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-2-70
Sample Date: 4/15/2013
Sampling Device: Bladder Pump (QED)
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):60.02
Final Water Level (feet TOIC):60.02
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-2-70-SP13
Purge Start Time: 1332
Sample Time:1440
Final Turbidity (NTUs) : 18.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 280
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.22

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1335	1.4	6.33	16.97	586	1000	7.27	195	60.02	
1340	2.8	6.38	16.64	577	645	6.73	189	60.02	
1345	4.2	6.38	16.59	577	397	6.35	177	60.02	> 2 system volumes
1350	5.6	6.37	16.60	578	259	6.06	168	60.02	
1355	7.0	---	---	---	---	---	---	60.02	Cleaned flow cell
1400	8.4	6.35	16.45	569	95.8	5.02	157	60.02	
1405	9.8	6.34	16.50	572	62.8	4.87	152	60.02	
1410	11.2	6.34	16.48	572	44.1	5.04	147	60.02	
1415	12.6	6.32	16.46	567	33.0	4.94	148	60.02	
1420	14.0	6.32	16.54	566	25.5	4.66	150	60.02	
1425	15.4	6.32	16.57	563	19.8	4.67	151	60.02	
1430	16.8	6.31	16.53	560	18.6	4.76	151	60.02	
1435	18.2	6.31	16.54	556	18.1	4.80	151	60.02	
									Split sample collected by
									Heather Usle

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-3-72
Sample Date: 4/10/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC):62-72
Initial Water Level (Feet TOIC):61.10
Final Water Level (feet TOIC):61.63
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: W-3-72-SP13
Purge Start Time: 1230
Sample Time:1420
Final Turbidity (NTUs) : 2.8
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.53

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1240	3.0	9.72	18.05	1760	6.7	5.10	47	61.56	
1250	6.0	9.60	18.02	1770	6.0	3.95	41	61.56	
1300	9.0	9.57	18.06	1770	6.5	3.26	35	61.56	> 2 system volumes
1310	12.0	9.59	18.06	1770	6.5	2.83	28	61.56	
1320	15.0	10.05	18.25	1770	4.6	3.92	24	61.58	
1330	18.0	9.67	18.34	1770	3.6	252	20	61.61	
1340	21.0	9.72	18.31	1790	3.3	2.21	19	61.62	
1350	24.0	9.68	18.25	1800	3.2	2.10	24	61.62	
1400	27.0	9.66	18.36	1810	3.1	2.17	28	61.62	
1410	30.0	9.68	18.66	1820	2.8	1.99	30	61.63	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-3-112
Sample Date: 4/10/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 112
Screen Interval (feet TOIC):102-112
Initial Water Level (Feet TOIC):61.46
Final Water Level (feet TOIC):61.72
Casing Type: **PVC** Steel (circle one)
Personnel: B. Kroon

Sample ID: W-3-112-SP13 & DUP
Purge Start Time: 1305
Sample Time:1440
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 7.09

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1310	1.0	6.37	18.56	1920	9.8	9.33	-36	61.68	
1315	3.0	6.37	18.51	1940	9.3	7.25	-52	61.70	
1320	5.0	6.36	18.47	1960	6.0	6.71	-60	61.69	
1325	7.0	6.38	18.03	1940	2.9	5.83	-62	61.67	
1340	13.0	6.38	17.83	1940	4.4	5.77	-68	61.71	> 2 system volumes
1345	15.0	6.41	17.31	1960	0.6	5.14	-68	61.71	
1350	17.0	6.42	17.45	1950	0.6	4.90	-69	61.70	
1355	19.0	6.43	17.66	1930	0.2	4.69	-69	61.70	
1400	21.0	6.44	17.69	1910	0.0	4.00	-68	61.72	
1405	23.0	6.46	18.01	1900	0.0	4.16	-69	61.71	
1410	25.0	6.48	18.14	1900	0.0	4.87	-68	61.73	
1415	27.0	6.47	18.00	1900	0.0	4.47	-68	61.72	
1420	29.0	6.48	18.31	1880	0.0	4.03	-67	61.71	
1425	31.0	6.48	17.97	1890	0.0	3.77	-66	61.73	
1430	33.0	6.48	18.00	1890	0.0	3.65	-65	61.71	*Duplicate Sample Collected*
1435	35.0	6.48	17.75	1900	0.0	3.54	-64	61.72	MW-800-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-5-78
Sample Date: 4/10/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):68-78
Initial Water Level (Feet TOIC):62.27
Final Water Level (feet TOIC):62.30
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-5-78-SP13
Purge Start Time: 1510
Sample Time:1604
Final Turbidity (NTUs) : 18.5
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 100/150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.80

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1514	0.4	5.91	20.19	241	17.3	6.21	166	62.27	
1519	1.15	6.14	18.77	255	17.8	6.87	161	62.30	
1524	1.90	6.21	18.35	258	17.7	6.97	168	62.30	
1529	2.65	6.21	18.39	257	17.3	6.95	170	62.30	
1534	3.4	6.23	18.20	258	17.7	6.89	176	62.30	
1539	4.15	6.23	18.16	259	17.8	6.80	178	62.30	
1544	4.9	6.23	18.05	259	18.1	7.01	179	62.30	
1549	5.65	6.24	17.89	259	18.0	7.12	180	62.30	
1554	6.4	6.24	17.80	258	18.2	7.20	181	62.30	> 2 system volumes
1559	7.15	6.24	17.77	258	18.4	7.13	181	62.30	
1604	7.9	6.24	17.71	258	18.5	7.09	182	62.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-6-79
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 79
Screen Interval (feet TOIC):69-79
Initial Water Level (Feet TOIC):61.58
Final Water Level (feet TOIC):61.61
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: W-6-79-SP13 & DUP
Purge Start Time: 915
Sample Time:955
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.56

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
915	1.7	5.57	16.43	61	0.0	7.19	233	61.61	
920	3.4	5.49	16.37	57	0.0	6.39	250	61.61	
925	5.1	5.49	16.24	63	0.0	7.84	240	61.61	
930	6.8	5.49	16.25	58	0.0	7.49	241	61.61	> 2 system volumes
935	8.5	5.49	16.19	56	0.0	7.22	253	61.61	
940	10.2	5.51	16.11	55	0.0	6.82	264	61.61	
945	11.9	5.50	16.05	55	0.0	6.63	269	61.61	
950	13.6	5.49	16.01	55	0.0	6.50	271	61.61	
									Duplicate Sample Collected
									MW-801-SP13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-8-71
Sample Date: 4/15/2013
Sampling Device: Bladder Pump (QED)
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC):61-71
Initial Water Level (Feet TOIC):61.85
Final Water Level (feet TOIC):61.85
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-8-71-SP13
Purge Start Time: 1325
Sample Time:1425
Final Turbidity (NTUs) : 40.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 240
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.19

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1330	1.2	5.81	15.84	148	226	6.86	198	61.85	
1335	2.4	5.83	15.72	153	198	6.73	204	61.85	
1340	3.6	5.82	15.71	154	162	6.75	206	61.85	> 2 system volumes
1345	4.8	5.84	15.84	157	127	5.53	208	61.85	
1350	6.0	5.84	16.08	159	107	5.35	208	61.85	
1355	7.2	5.84	16.68	158	99.9	4.89	204	61.85	
1400	8.4	5.84	17.11	158	77.7	4.79	203	61.85	
1405	9.6	5.85	17.38	158	71.9	4.74	202	61.85	
1410	10.8	5.85	16.16	165	43.9	6.73	209	61.85	
1415	12.0	5.85	15.99	164	42.7	6.70	211	61.85	
1420	13.2	5.85	16.05	163	40.1	6.67	212	61.85	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-71
Sample Date: 4/10/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC):61-71
Initial Water Level (Feet TOIC):59.73
Final Water Level (feet TOIC):59.73
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-10-71-SP13
Purge Start Time: 1030
Sample Time:1120
Final Turbidity (NTUs) : 21.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 240
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.49

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1035	1.2	5.47	17.21	334	42.4	9.06	213	59.73	
1040	2.4	5.43	17.04	324	42.1	8.51	221	59.73	
1045	3.6	5.44	16.97	312	31.4	8.05	220	59.73	
1050	4.8	5.43	16.96	303	25.0	7.61	218	59.73	
1100	7.2	5.44	17.04	296	22.5	7.03	215	59.73	> 2 system volumes
1005	8.4	5.44	16.97	296	22.4	6.74	216	59.73	
1110	9.6	5.44	17.07	290	21.6	6.40	217	59.73	
1115	10.8	5.44	17.00	286	21.2	6.24	218	59.73	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-120
Sample Date: 4/10/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):60.40
Final Water Level (feet TOIC):60.40
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-10-120-SP13
Purge Start Time: 1100
Sample Time:1415
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 480
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1210	33.6	5.66	16.47	837	0.0	6.09	217	60.40	> 2 system volumes
1307	60.96	5.64	16.34	852	0.0	6.06	204	60.40	
1404	88.32	5.64	16.30	847	0.0	6.09	205	60.40	
1409	90.72	5.65	16.61	845	0.0	6.12	200	60.40	
1414	93.12	5.63	16.56	843	0.0	6.20	203	60.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-11-70
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):60.28
Final Water Level (feet TOIC):60.28
Casing Type: **PVC** Steel (circle one)
Personnel: N. Diehl

Sample ID: W-11-70-SP13
Purge Start Time: 1155
Sample Time:1251
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 140
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.49

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1206	1.54	5.50	15.89	373	4.4	6.50	230	60.28	
1211	2.24	5.50	15.96	372	3.8	6.59	230	60.28	
1216	2.94	5.51	16.00	372	2.6	6.55	230	60.28	
1221	3.64	5.51	16.06	372	1.6	6.52	231	60.28	
1226	4.34	5.51	16.08	371	1.4	6.62	232	60.28	
1231	5.04	5.51	16.09	372	1.0	6.55	233	60.28	
1236	5.74	5.51	16.12	372	0.0	6.56	235	60.28	> 2 system volumes
1241	6.44	5.51	16.16	372	0.0	6.55	235	60.28	
1246	7.14	5.51	16.18	371	0.0	6.51	235	60.28	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-12-70
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):60.40
Final Water Level (feet TOIC):60.40
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-12-70-SP13
Purge Start Time: 1155
Sample Time:1250
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.22

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1200	1.5	4.86	15.90	39	51.7	7.01	321	60.40	
1205	3.0	4.86	15.90	40	39.6	6.72	337	60.40	
1210	4.5	4.86	15.84	40	30.6	6.39	346	60.40	
1215	6.0	4.85	15.88	39	24.4	6.34	349	60.40	> 2 system volumes
1220	7.5	4.85	15.92	37	13.1	6.27	354	60.40	
1225	9.0	4.85	15.91	35	5.2	6.24	357	60.40	
1230	10.5	4.84	15.92	35	0.0	6.12	359	60.40	
1235	12.0	4.84	15.94	36	0.0	6.15	362	60.40	
1240	13.5	4.82	15.94	36	0.0	6.18	365	60.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-12-120
Sample Date: 4/15/2013
Sampling Device: Bladder Pump (QED)
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):59.64
Final Water Level (feet TOIC):59.64
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-12-120-SP13
Purge Start Time: 1630
Sample Time:1715
Final Turbidity (NTUs) : 10.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.11

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1635	1.0	5.43	15.98	87	34.9	7.19	250	59.64	
1640	2.0	5.41	15.72	87	24.4	7.17	259	59.64	
1645	3.0	5.41	15.57	87	14.0	7.18	264	59.64	
1650	4.0	5.40	15.40	88	10.5	7.14	267	59.64	
1655	5.0	5.38	15.31	86	11.0	7.02	271	59.64	
1700	6.0	5.37	15.26	86	10.7	7.04	272	59.64	> 2 system volumes
1705	7.0	5.37	15.19	86	10.8	7.07	274	59.64	
1710	8.0	5.36	15.16	86	10.4	7.00	276	59.64	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-14-150
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):60.44
Final Water Level (feet TOIC):60.44
Casing Type: PVC **Steel** (circle one)
Personnel: B. Kroon

Sample ID: W-14-150-SP13
Purge Start Time: 1220
Sample Time:1425
Final Turbidity (NTUs) : 0.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.24

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1225	1.25	6.25	16.27	4430	132	4.36	198	60.44	
1230	2.5	6.27	16.16	4360	138	3.89	190	60.45	
1235	3.75	6.27	16.15	4370	119	3.09	182	60.44	
1240	5.0	6.27	16.04	4410	93.9	2.79	180	60.45	
1245	6.25	6.27	16.06	4410	71.4	2.64	176	60.45	> 2 system volumes
1250	7.5	6.27	16.09	4410	47.1	2.51	170	60.45	
1255	8.75	6.47	16.07	4420	27.4	2.32	159	60.44	
1300	10.0	6.30	16.06	4410	23.4	2.69	154	60.45	
1310	12.5	6.27	16.01	4420	11.9	2.35	145	60.44	
1315	13.75	6.26	16.08	4410	11.0	2.30	141	60.45	
1320	15.0	6.23	15.93	4400	5.5	2.21	137	60.45	
1325	16.25	6.26	16.00	4400	3.9	2.93	137	60.44	
1330	17.5	6.29	15.89	4410	2.8	2.26	136	60.44	
1335	18.75	6.24	15.91	4390	2.4	2.09	136	60.45	
1345	21.25	6.23	15.93	4390	1.5	1.99	138	60.44	
1400	25.0	6.24	15.83	4390	1.0	1.99	137	60.44	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1405	26.25	6.23	15.76	4390	1.0	1.96	137	60.44	
1410	27.5	6.23	15.77	4390	0.4	1.90	137	60.43	
1415	28.75	6.23	15.82	4390	0.0	1.87	136	60.43	
1420	30.0	6.23	15.80	4390	0.3	1.85	138	60.44	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-16-148
Sample Date: 4/15/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 148
Screen Interval (feet TOIC):138-148
Initial Water Level (Feet TOIC):60.91
Final Water Level (feet TOIC):60.91
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-16-148-SP13
Purge Start Time: 1005
Sample Time:1055
Final Turbidity (NTUs) : 34.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.14

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1010	1.1	4.07	12.53	204	290	8.33	370	60.91	
1015	2.2	5.38	13.71	182	105	7.79	310	60.91	
1020	3.3	5.48	13.94	193	85.2	7.74	295	60.91	
1025	4.4	5.53	13.99	204	65.2	7.66	269	60.91	
1030	5.5	5.55	14.05	211	55.6	7.54	243	60.91	
1035	6.6	5.55	14.14	212	46.0	7.46	235	60.91	> 2 system volumes
1040	7.7	5.55	14.18	216	36.9	7.37	232	60.91	
1045	8.8	5.55	14.20	217	35.5	7.31	230	60.91	
1050	9.9	5.56	14.33	218	34.1	7.21	229	60.91	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-17-130
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):60.72
Final Water Level (feet TOIC):60.72
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl & J. Lacanlale

Sample ID: W-17-130-SP13 & MS/MSD
Purge Start Time: 1600
Sample Time:1710
Final Turbidity (NTUs) : 36.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 260
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.65

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1610	1.3	5.71	15.89	100	113	4.31	204	60.72	
1615	2.6	6.06	15.34	99	95.7	3.52	202	60.72	
1620	3.9	6.09	15.02	98	65.7	3.57	205	60.72	
1625	5.2	6.04	15.05	96	52.1	4.02	204	60.72	
1630	6.5	5.99	14.95	95	50.5	3.91	209	60.72	> 2 system volumes
1635	7.8	5.93	14.73	94	49.3	4.18	215	60.72	
1640	9.1	5.90	14.72	93	48.7	4.41	221	60.72	
1645	10.4	5.86	14.58	93	46.6	4.51	228	60.72	
1650	11.7	5.85	14.58	92	43.4	4.74	232	60.72	
1655	13.0	5.83	14.56	92	35.8	4.79	239	60.72	
1700	14.3	5.82	14.52	91	34.7	4.90	243	60.72	
1705	15.6	5.79	14.48	91	36.4	4.97	248	60.72	
									MS/MSD collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-18-150
Sample Date: 4/18/2013
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):53.48
Final Water Level (feet TOIC):57.31
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-18-150-SP13
Purge Start Time: 1300
Sample Time:1515
Final Turbidity (NTUs) : 39.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 120/100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1305	0.6	6.48	14.91	155	68.5	8.51	98	55.89	
1310	1.2	6.60	14.55	143	69.5	8.27	79	56.35	
1315	1.8	6.65	14.61	140	52.2	8.13	72	56.47	
1320	2.4	6.65	14.93	139	41.2	7.79	53	56.73	
1325	3.0	6.67	15.01	139	38.7	7.66	50	56.80	
1330	3.6	6.67	15.64	139	38.1	7.57	46	56.83	
1335	4.2	6.68	15.08	138	36.5	7.44	41	56.90	
1340	4.8	6.68	15.10	137	35.7	7.28	38	56.91	
1345	5.4	6.69	15.07	137	35.2	6.97	34	56.91	
1350	---	---	---	---	---	---	---	---	Needed to fix pump, lost pressure
1440	6.5	6.61	14.37	169	55.0	8.48	26	56.70	Flow rate increased to 200 ml/min
1445	7.5	6.57	14.28	186	47.4	8.31	23	56.70	
1450	8.5	6.52	14.36	206	42.5	7.96	15	56.87	
1455	9.5	6.52	14.28	219	39.5	7.89	14	57.03	> 2 system volumes
1500	10.5	6.52	14.22	221	40.1	7.68	12	57.21	
1505	11.5	6.52	14.32	221	39.8	7.44	11	57.31	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-19-110
Sample Date: 4/12/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):55.66
Final Water Level (feet TOIC):55.66
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-19-110-SP13
Purge Start Time: 950
Sample Time:1100
Final Turbidity (NTUs) : 28.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 160
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
955	0.8	5.83	11.28	146	72.4	6.25	224	55.66	
1000	1.6	5.75	11.21	150	69.2	5.60	232	55.66	
1005	2.4	5.68	11.12	152	67.8	5.17	242	55.66	
1010	3.2	5.64	10.99	156	58.1	4.86	243	55.66	
1015	4.0	5.60	11.07	158	50.4	5.08	238	55.66	
1020	4.8	5.58	12.20	163	38.6	5.29	231	55.66	
1025	5.6	5.58	12.51	164	38.3	5.19	229	55.66	> 2 system volumes
1030	6.4	5.57	12.59	165	31.4	4.96	230	55.66	
1035	7.2	5.57	12.43	167	30.1	4.64	234	55.66	
1040	8.0	5.57	12.38	167	28.8	4.57	236	55.66	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-19-150
Sample Date: 4/12/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):55.30
Final Water Level (feet TOIC):55.30
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-19-150-SP13
Purge Start Time: 1005
Sample Time:1120
Final Turbidity (NTUs) : 6.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 140
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.62

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1010	0.7	5.90	11.07	203	25.9	6.80	254	55.30	
1015	1.4	6.00	11.47	210	37.4	6.27	243	55.30	
1020	2.1	6.03	11.62	211	36.4	5.87	239	55.30	
1025	2.8	6.03	11.63	214	38.3	5.62	237	55.30	
1030	3.5	6.03	11.87	219	36.7	5.62	235	55.30	
1035	4.2	6.00	12.01	236	29.5	4.89	234	55.30	
1040	4.9	5.95	11.85	261	26.6	4.52	235	55.30	
1045	5.6	5.92	11.89	290	23.3	4.08	235	55.30	
1050	6.3	5.86	11.97	330	17.3	3.64	236	55.30	
1055	7.0	5.79	12.13	379	11.1	3.17	238	55.30	> 2 system volumes
1100	7.7	5.76	12.23	398	8.5	2.90	239	55.30	
1105	8.4	5.71	12.39	424	6.8	2.76	244	55.30	
1110	9.1	5.69	12.29	430	6.1	2.79	246	55.30	
1115	9.8	5.68	12.35	436	6.1	2.65	248	55.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20-120
Sample Date: 4/12/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):56.75
Final Water Level (feet TOIC):56.75
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: W-20-120-SP13
Purge Start Time: 950
Sample Time:1130
Final Turbidity (NTUs) : 38.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 230
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.23

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1000	2.3	5.84	10.30	3700	1000	6.43	262	56.75	
1010	4.6	5.82	10.78	3990	245	5.47	267	56.75	
1020	6.9	5.79	10.80	4210	197	5.01	265	56.75	> 2 system volumes
1030	9.2	5.79	10.89	4390	210	4.66	263	56.75	
1040	11.5	5.77	10.83	4490	181	4.49	262	56.75	
1050	13.8	5.78	10.95	4600	159	4.43	261	56.75	
1100	16.1	5.79	10.98	4700	129	4.44	257	56.75	
1110	18.4	5.73	11.01	4690	56.2	4.22	256	56.75	
1115	19.55	5.72	11.16	4720	41.5	4.07	256	56.75	
1120	20.7	5.72	11.11	4730	40.1	4.12	255	56.75	
1125	21.85	5.72	11.13	4730	38.6	4.12	255	56.75	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20-160
Sample Date: 4/12/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC):150-160
Initial Water Level (Feet TOIC):56.99
Final Water Level (feet TOIC):57.01
Casing Type: **PVC** Steel (circle one)
Personnel: B. Kroon & A. Zarnadze

Sample ID: W-20-160-SP13
Purge Start Time: 940
Sample Time:1240
Final Turbidity (NTUs) : 3.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.75

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1100	1.0	6.06	11.02	767	28.2	3.03	252	56.99	
1115	3.25	6.02	11.26	764	19.1	2.39	240	56.99	
1125	4.75	6.02	11.19	760	16.2	2.19	236	57.02	> 2 system volumes
1140	7.0	6.34	10.48	753	13.4	3.97	234	57.01	
1210	11.5	6.17	9.80	758	8.0	1.7	234	57.01	
1220	13.0	6.15	9.80	756	6.3	1.74	234	57.01	
1225	13.75	6.19	10.01	761	5.0	1.63	232	57.01	
1230	14.5	6.16	10.09	761	4.5	1.57	232	57.01	
1235	15.25	6.15	10.04	760	3.9	1.52	229	57.01	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-22-95
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC):85-95
Initial Water Level (Feet TOIC):60.67
Final Water Level (feet TOIC):60.67
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-22-95-SP13
Purge Start Time: 925
Sample Time:1032
Final Turbidity (NTUs) : 27.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.44

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
942	2.55	5.69	15.26	279	45.2	6.56	237	60.67	
947	3.30	5.67	15.40	282	49.4	6.44	243	60.67	
952	4.05	5.67	15.44	285	49.1	6.33	244	60.67	
957	4.80	5.66	15.50	288	46.3	6.28	247	60.67	
1002	5.55	5.65	15.51	290	44.7	6.22	248	60.67	
1007	6.30	5.65	15.54	292	37.5	6.15	250	60.67	
1012	7.05	5.65	15.52	295	33.6	6.14	252	60.67	> 2 system volumes
1017	7.80	5.63	15.54	300	30.3	6.20	253	60.67	
1022	8.55	5.64	15.49	302	29.3	6.49	253	60.67	
1027	9.30	5.63	15.53	303	27.7	6.43	249	60.67	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-23-110
Sample Date: 4/15/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):56.01
Final Water Level (feet TOIC):56.01
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl & A. Zarnadze

Sample ID: W-23-110-SP13
Purge Start Time: 1230
Sample Time:1800
Final Turbidity (NTUs) : 57.2 (filtered sample)
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 470/290
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1230	0	6.16	16.54	413	1000	7.64	-12	56.03	
1240	4.7	6.24	15.47	411	1000	6.84	-4	56.02	
1250	7.6	6.33	15.37	416	1000	6.46	-6	56.01	> 2 system volumes
1300	10.5	6.34	15.47	416	1000	6.30	-8	56.01	
1310	13.4	6.28	14.95	420	1000	4.95	-21	56.01	
1320	16.3	6.39	15.39	421	708	4.16	-7	56.01	
1330	19.2	6.45	15.41	422	548	3.82	-18	56.01	
1340	22.1	6.44	15.41	421	499	3.49	-22	56.01	
1350	25.0	6.52	15.39	429	336	3.12	-33	56.01	
1400	27.9	6.54	15.36	429	274	3.07	-20	56.01	
1410	30.8	6.54	15.32	430	244	2.91	-45	56.01	
1420	33.7	6.56	15.32	431	211	2.92	-48	56.01	
1430	36.6	6.56	15.29	431	192	3.02	-50	56.01	
1440	39.5	6.57	15.23	432	166	3.58	-52	56.01	
1450	42.4	6.58	15.16	432	147	3.17	-55	56.01	
1500	45.3	6.59	15.11	432	135	3.08	-57	56.01	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1510	48.2	6.58	15.11	433	131	3.73	-59	56.01	
1520	51.1	6.59	15.05	433	110	3.24	-61	56.01	
1530	54.0	6.57	14.86	434	100	3.48	-47	56.01	
1540	56.9	6.63	14.90	438	92	3.39	-66	56.01	
1550	59.8	6.63	14.91	438	88	3.32	-67	56.01	
1610	65.6	6.63	14.91	438	75	3.28	-69	56.01	
1620	68.5	6.64	14.85	440	211	3.40	-68	56.01	
1630	71.4	6.63	14.88	440	120	3.35	-67	56.01	
1640	74.3	6.64	14.85	439	110	3.52	-67	56.01	
1650	77.2	6.63	14.86	440	108	3.51	-67	56.01	
1700	80.1	6.63	14.68	438	86.0	3.28	-71	56.01	
1710	83.0	6.62	14.65	437	75.0	3.29	-70	56.01	
1720	85.9	6.63	14.59	436	68.0	3.32	-72	56.01	
1730	88.8	6.62	14.59	436	63.5	3.22	-72	56.01	
1740	91.7	6.62	14.56	436	57.1	3.29	-73	56.01	
1750	94.6	6.62	14.56	436	57.2	3.29	-73	56.01	
									Filtered Sample

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-24-260
Sample Date: 4/16/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 260
Screen Interval (feet TOIC):250-260
Initial Water Level (Feet TOIC):55.90
Final Water Level (feet TOIC):55.86
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl & A. Zarnadze

Sample ID: W-24-260-SP13
Purge Start Time: 1607
Sample Time:1720
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 17.17

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1608	0	6.63	16.63	427	0.0	4.23	9	55.86	
1613	1.25	6.25	16.49	430	0.0	2.98	67	55.86	
1618	2.5	6.12	16.44	436	0.0	2.90	79	55.86	
1623	3.75	6.00	16.29	432	0.0	2.26	156	55.86	
1628	5.0	5.85	16.06	434	0.0	2.10	178	55.86	
1633	6.25	5.78	15.95	435	0.0	1.94	196	55.86	
1638	7.5	5.71	15.80	439	0.0	1.77	219	55.86	
1643	8.75	5.67	15.76	441	0.0	1.74	224	55.86	
1648	10.0	5.66	15.71	445	0.0	1.61	232	55.86	
1653	11.25	5.65	15.65	451	0.0	1.48	240	55.86	
1658	12.5	5.66	15.62	452	0.0	1.40	246	55.86	
1703	13.75	5.64	15.59	452	0.0	1.38	250	55.86	
1708	15.0	5.64	15.59	453	0.0	1.36	252	55.86	
1713	16.25	5.63	15.55	453	0.0	1.36	253	55.86	
1718	17.5	5.63	15.54	453	0.0	1.36	254	55.86	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-25-150
Sample Date: 4/16/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):54.00
Final Water Level (feet TOIC):55.60
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl & A. Zarnadze

Sample ID: W-25-150-SP13
Purge Start Time: 1225
Sample Time:1420
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 230
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1225	0	7.55	17.84	390	5.4	3.67	206	54.32	
1235	2.3	7.61	16.84	370	0.5	1.87	176	55.57	
1245	4.6	7.68	16.92	365	1.1	1.73	144	55.60	
1255	6.9	8.74	16.53	345	1.7	1.41	89	55.60	> 2 system volumes
1305	9.2	9.48	16.71	321	3.2	2.02	42	55.60	
1315	11.5	10.01	16.47	305	1.7	1.44	-12	55.60	
1325	13.8	10.27	16.18	301	1.3	1.32	-34	55.60	
1335	16.1	10.44	16.45	300	0.0	1.45	-48	55.60	
1345	18.4	10.67	16.25	300	0.0	1.35	-57	55.60	
1355	20.7	10.68	16.23	300	0.0	1.39	-62	55.60	
1405	23.0	10.69	16.22	300	0.0	1.40	-62	55.60	
1415	25.3	10.70	16.24	300	0.0	1.41	-67	55.60	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-25-188
Sample Date: 4/18/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 188
Screen Interval (feet TOIC):178-188
Initial Water Level (Feet TOIC):54.30
Final Water Level (feet TOIC):54.30
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: W-25-188-SP13
Purge Start Time: 1515
Sample Time:1745
Final Turbidity (NTUs) : 44.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1515	0	5.81	14.43	373	419	7.81	156	54.30	
1525	2.0	5.77	14.23	370	392	6.21	155	54.30	
1535	4.0	5.24	14.14	368	509	4.27	148	54.30	
1545	6.0	5.24	14.10	366	419	3.25	150	54.30	> 2 system volumes
155	8.0	5.74	13.97	365	289	2.67	155	54.30	
1605	10.0	5.75	13.68	366	194	2.54	146	54.30	
1615	12.0	5.73	13.69	365	165	2.11	141	54.30	
1625	14.0	5.74	13.65	364	139	1.96	127	54.30	
1635	16.0	5.72	13.62	364	110	2.04	118	54.30	
1645	18.0	5.74	13.62	363	88.2	1.71	114	54.30	
1655	20.0	5.72	13.63	363	78.1	1.63	108	54.30	
1705	22.0	5.74	13.57	362	68.2	1.64	108	54.30	
1715	24.0	5.74	13.49	363	60.0	1.53	104	54.30	
1725	26.0	5.73	13.31	362	52.8	1.54	101	54.30	
1735	28.0	5.73	13.20	363	48.1	1.59	101	54.30	
1740	29.0	5.73	13.20	363	44.2	1.57	101	54.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1745	30.0	5.73	13.20	364	44.2	1.57	100	54.30	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-26-270
Sample Date: 4/16/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 270
Screen Interval (feet TOIC):260-270
Initial Water Level (Feet TOIC):43.40
Final Water Level (feet TOIC):43.40
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-26-270-SP13
Purge Start Time: 1315
Sample Time:1445
Final Turbidity (NTUs) : 19.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.23

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1320	2.0	5.44	16.67	185	0.0	5.97	206	43.40	
1325	4.0	5.76	16.35	247	0.0	5.49	189	43.40	
1330	6.0	5.77	16.19	259	0.0	5.08	188	43.40	
1335	8.0	5.77	16.15	262	0.0	4.94	189	43.40	
1340	10.0	5.77	16.01	263	0.0	4.73	191	43.40	
1345	12.0	5.77	15.91	263	0.0	4.73	192	43.40	
1350	14.0	5.77	15.96	263	1.2	4.64	194	43.40	Change battery
1400	16.0	5.77	15.77	264	4.5	4.82	194	43.40	
1405	18.0	5.77	15.98	263	9.0	4.71	198	43.40	
1410	20.0	5.76	15.67	264	16.0	4.77	199	43.40	> 2 system volumes
1415	22.0	5.75	15.61	264	24.5	4.71	203	43.40	
1425	24.0	5.77	15.61	263	25.0	4.73	201	43.40	Cleaned flow cell
1430	26.0	5.76	15.55	264	20.8	4.65	211	43.40	
1435	28.0	5.77	15.51	264	20.0	4.46	214	43.40	
1440	30.0	5.77	15.44	264	19.6	4.49	217	43.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-240
Sample Date: 4/16/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):48.22
Final Water Level (feet TOIC):48.22
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-27-240-SP13
Purge Start Time: 915
Sample Time:1015
Final Turbidity (NTUs) : 4.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 15.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
920	1.5	7.67	16.35	289	57.3	8.31	-147	48.22	
925	3.0	6.79	16.35	329	19.2	7.67	-83	48.22	
930	4.5	6.61	16.40	330	36.9	7.30	-68	48.22	
935	6.0	6.56	16.44	332	17.9	6.84	-61	48.22	
940	7.5	6.55	16.42	332	14.0	6.71	-59	48.22	
945	9.0	6.54	16.32	332	10.1	6.46	-56	48.22	
950	10.5	6.53	16.44	332	10.9	6.17	-55	48.22	
955	12.0	6.53	16.44	332	6.0	5.92	-54	48.22	
1000	13.5	6.52	16.48	331	5.1	5.66	-53	48.22	
1005	15.0	6.52	16.59	331	5.1	5.44	-52	48.22	
1010	16.5	6.51	16.62	331	4.9	5.31	-51	48.22	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-285
Sample Date: 4/16/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):47.73
Final Water Level (feet TOIC):47.73
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-27-285-SP13
Purge Start Time: 920
Sample Time:1015
Final Turbidity (NTUs) : 7.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.38

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
925	2.0	5.58	16.11	97	7.9	4.75	217	47.73	
930	4.0	5.96	16.06	166	5.3	4.55	204	47.73	
935	6.0	6.02	16.06	187	5.5	4.32	200	47.73	
940	8.0	5.95	16.09	204	3.2	4.11	201	47.73	
945	10.0	5.84	16.06	257	4.7	3.41	209	47.73	
950	12.0	5.76	16.00	300	4.2	2.77	217	47.73	
955	14.0	5.71	15.99	328	5.7	2.33	226	47.73	
1000	16.0	5.68	16.00	338	7.7	2.10	231	47.73	
1005	18.0	5.69	16.01	332	7.3	2.12	232	47.73	
1010	20.0	5.68	16.04	342	7.9	1.95	236	47.73	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-30-285
Sample Date: 4/16/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):46.86
Final Water Level (feet TOIC):46.86
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-30-285-SP13
Purge Start Time: 1320
Sample Time:1435
Final Turbidity (NTUs) : 29.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.41

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1325	1.5	5.84	16.67	123	5.9	4.06	136	46.86	
1330	3.0	5.88	16.42	123	3.2	3.60	146	46.86	
1335	4.5	5.89	16.33	123	6.3	3.41	156	46.86	
1340	6.0	5.90	16.25	123	12.4	3.28	168	46.86	
1345	7.5	5.89	16.19	123	15.3	3.27	179	46.86	
1350	9.0	5.89	16.29	123	14.1	3.19	186	46.86	
1355	10.5	5.90	16.16	123	18.6	3.22	195	46.86	
1400	12.0	5.90	16.24	122	20.1	3.15	198	46.86	
1405	13.5	5.91	16.28	122	21.9	3.04	201	46.86	
1410	15.0	5.90	16.27	122	24.5	3.08	204	46.86	
1415	16.5	5.89	16.17	121	25.5	3.13	208	46.86	
1420	18.0	5.90	16.12	122	27.6	3.01	211	46.86	
1425	19.5	5.90	16.25	122	30.3	3.12	213	46.86	> 2 system volumes
1430	21.0	5.91	16.18	121	29.7	3.03	214	46.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-31-95
Sample Date: 4/15/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC):85-95
Initial Water Level (Feet TOIC):60.32
Final Water Level (feet TOIC):60.32
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: W-31-95-SP13 & MS/MSD
Purge Start Time: 935
Sample Time:1035
Final Turbidity (NTUs) : 2.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.15

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
945	1.0	6.24	13.36	597	27.5	6.95	211	60.32	
950	2.0	5.90	13.53	769	8.3	6.43	193	60.32	
955	3.0	5.87	13.61	819	6.0	6.35	195	60.32	
1000	4.0	5.86	13.66	887	4.3	6.35	202	60.32	
1005	5.0	5.86	13.68	933	4.5	6.36	205	60.32	> 2 system volumes
1010	6.0	5.85	13.73	990	2.7	6.13	210	60.32	
1015	7.0	5.84	13.82	1030	2.2	6.14	212	60.32	
1020	8.0	5.84	13.81	1050	2.3	6.14	214	60.32	
1025	9.0	5.83	13.95	1060	2.2	6.12	217	60.32	
									MS/MSD collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-32-110
Sample Date: 4/11/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):60.27
Final Water Level (feet TOIC):60.27
Casing Type: **PVC** Steel (circle one)
Personnel: B. Kroon

Sample ID: W-32-110-SP13
Purge Start Time: 1740
Sample Time:2045
Final Turbidity (NTUs) : 47.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1755	1.6	5.98	15.47	1010	878	7.94	251	60.27	
1800	5.6	5.98	15.38	1050	398	6.87	248	60.27	> 2 system volumes
1810	9.6	6.01	15.34	1060	301	6.39	243	60.27	
1820	13.6	6.04	15.35	1070	230	6.16	239	60.27	
1830	17.6	6.02	15.34	1070	197	6.08	239	60.27	
1840	21.6	6.05	15.23	1010	479	6.05	241	60.27	
1850	23.0	6.05	14.89	980	520	5.94	255	60.27	
1900	25.0	6.00	14.03	960	490	5.98	259	60.27	
1910	28.0	6.03	15.14	990	327	5.83	262	60.27	Flow rate dropped and readjusted
1920	32.0	6.01	15.06	1030	131	5.87	241	60.27	to 400 ml/min
1930	36.0	6.03	15.06	1060	112	6.05	241	60.27	
1940	40.0	6.06	14.97	1070	91.4	5.86	241	60.27	
1950	44.0	6.05	15.07	1070	77.7	5.79	243	60.27	
2000	48.0	6.07	14.98	1070	71.9	5.76	243	60.27	
2010	52.0	6.06	14.99	1070	72.1	5.74	243	60.27	
2020	56.0	6.08	14.91	1070	59.2	5.72	242	60.27	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
2030	60.0	6.09	14.98	1070	49.8	5.73	243	60.27	
2035	62.0	6.11	14.96	1070	48.9	5.72	243	60.27	
2040	64.0	6.11	14.95	1070	47.9	5.74	243	60.27	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-36-390
Sample Date: 4/17/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 390
Screen Interval (feet TOIC):380-390
Initial Water Level (Feet TOIC):45.65
Final Water Level (feet TOIC):45.65
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-36-390-SP13
Purge Start Time: 1405
Sample Time:1545
Final Turbidity (NTUs) : 5.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 27.42

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1410	1.5	6.15	16.92	675	0.0	3.75	213	45.65	
1415	3.0	6.21	17.09	688	1.1	3.33	211	45.65	
1420	4.5	6.15	16.92	695	4.2	3.02	221	45.65	
1425	6.0	6.04	16.73	700	7.8	2.84	232	45.65	
1430	7.5	6.04	16.64	703	33.6	2.27	235	45.65	
1435	9.0	6.17	16.71	708	26.9	1.89	229	45.65	
1440	10.5	6.21	16.65	708	25.3	1.72	227	45.65	
1445	12.0	6.25	16.62	709	18.9	1.58	226	45.65	
1450	13.5	6.26	16.54	708	18.1	1.57	225	45.65	
1455	15.0	6.26	16.54	707	18.0	1.50	225	45.65	
1500	16.5	6.26	16.50	704	19.5	1.45	225	45.65	
1505	18.0	6.23	16.50	699	13.1	1.42	227	45.65	
1510	19.5	6.22	16.27	697	12.3	1.45	228	45.65	
1515	21.0	6.20	16.35	691	8.9	1.40	233	45.65	
1520	22.5	6.19	16.29	690	8.5	1.44	235	45.65	
1525	24.0	6.18	16.27	688	7.3	1.42	237	45.65	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1530	25.5	6.16	16.32	686	6.1	1.42	240	45.65	
1535	27.0	6.14	16.33	684	6.0	1.45	242	45.65	
1540	28.5	6.15	16.31	684	5.9	1.42	244	45.65	> 2 system volumes

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-36-448
Sample Date: 4/17/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 488
Screen Interval (feet TOIC):478-488
Initial Water Level (Feet TOIC):45.81
Final Water Level (feet TOIC):45.81
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-36-488-SP13
Purge Start Time: 1505
Sample Time:1750
Final Turbidity (NTUs) : 44.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 31.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1520	3.0	7.35	14.90	546	35.4	7.64	160	45.81	
1525	4.0	7.36	15.16	549	36.3	7.30	159	45.81	
1530	5.0	7.30	15.94	556	22.2	6.82	157	45.81	
1535	6.0	7.25	15.97	571	20.9	6.67	157	45.81	
1540	7.0	7.20	16.07	602	18.5	6.49	156	45.81	
1545	8.0	7.15	16.11	644	17.0	6.21	155	45.81	
1550	9.0	7.10	16.20	663	19.8	5.90	152	45.81	
1555	10.0	7.06	16.27	659	21.7	5.58	149	45.81	
1600	11.0	7.00	16.17	642	26.0	5.26	146	45.81	
1605	12.0	6.95	16.24	622	25.1	4.97	144	45.81	
1610	13.0	6.90	16.28	607	23.4	4.73	144	45.81	
1615	14.0	6.86	16.30	593	22.6	4.44	144	45.81	
1620	15.0	6.79	16.27	572	22.4	4.31	145	45.81	
1625	16.0	6.74	16.25	554	21.5	4.16	146	45.81	
1630	17.0	6.70	16.25	542	22.4	4.06	147	45.81	
1635	18.0	6.64	16.16	525	19.6	3.93	149	45.81	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1640	19.0	6.60	16.10	513	22.4	3.82	150	45.81	
1645	20.0	6.58	16.09	509	24.1	3.79	150	45.81	
1650	21.0	6.55	16.15	503	22.8	3.73	153	45.81	
1655	22.0	6.51	16.06	489	24.7	3.68	156	45.81	
1700	23.0	6.49	16.04	483	27.5	3.66	157	45.81	
1705	24.0	6.40	16.07	480	26.7	3.65	157	45.81	
1710	25.0	6.45	16.08	473	29.9	3.61	156	45.81	
1715	26.0	6.44	15.99	469	33.2	3.61	162	45.81	
1720	27.0	6.43	15.85	466	36.1	3.61	164	45.81	
1725	28.0	6.42	15.83	463	39.7	3.62	165	45.81	
1730	29.0	6.40	15.67	460	41.6	3.61	167	45.81	
1735	30.0	6.39	15.65	457	43.6	3.61	169	45.81	
1740	31.0	6.38	15.67	453	43.9	3.61	170	45.81	
1745	32.0	6.37	15.65	451	44.3	3.62	172	45.81	> 2 system volumes
									There was unknown bubbles and
									vapor discharging

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-37-325
Sample Date: 4/22/2013
Sampling Device: Bladder Pump (Well Wizard)
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC):295-325
Initial Water Level (Feet TOIC):49.95
Final Water Level (feet TOIC):50.14
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-37-325-SP13 & DUP
Purge Start Time: 1225
Sample Time:1410
Final Turbidity (NTUs) : 40.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 22.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1235	4.0	5.27	15.68	370	255	1.58	349	49.95	
1240	6.25	5.27	15.66	367	221	1.46	340	50.05	
1245	8.5	5.27	15.66	364	189	1.23	316	50.14	
1250	10.75	5.26	15.63	363	265	1.05	302	50.14	
1255	13.0	5.26	15.56	363	173	0.99	300	50.14	
1300	15.25	5.26	15.53	362	130	0.88	299	50.14	
1305	17.5	5.29	15.59	362	216	0.83	297	50.14	
1310	19.75	5.27	15.54	362	231	0.78	297	50.14	
1315	22.0	5.29	15.56	363	148	0.75	298	50.14	
1320	24.25	5.29	15.50	363	143	0.73	298	50.14	> 2 system volumes
1325	26.5	5.29	15.52	361	142	0.69	298	50.14	
1330	28.75	5.29	15.54	358	103	0.66	298	50.14	
1335	31.0	5.30	15.51	356	59.8	0.64	297	50.14	
1340	33.25	5.29	15.49	353	47.8	0.62	297	50.14	
1345	35.5	5.31	15.48	349	42.3	0.60	298	50.14	
1350	37.75	5.32	15.47	348	43.1	0.58	297	50.14	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1355	40.0	5.32	15.50	347	40.1	0.57	299	50.14	
									Duplicate Sample Collected
									MW-810-SP13

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-37-385
Sample Date: 4/22/2013
Sampling Device: Bladder Pump (Marshalk)
Well Depth (feet TOIC): 385
Screen Interval (feet TOIC):355-385
Initial Water Level (Feet TOIC):50.13
Final Water Level (feet TOIC):50.13
Casing Type: PVC **Steel** (circle one)
Personnel: N. Diehl

Sample ID: W-37-385-SP13 & DUP & MS/MSD
Purge Start Time: 1220
Sample Time:1400
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500/450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 27.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1235	7.5	5.56	15.72	266	113	3.71	244	50.13	
1240	9.75	5.55	15.64	265	68.6	3.42	244	50.13	
1245	12.0	5.53	15.65	262	37.4	3.33	245	50.13	
1250	14.25	5.53	15.65	247	23.1	3.55	246	50.13	
1255	16.5	5.52	15.56	224	12.2	3.99	249	50.13	
1300	18.75	5.50	15.55	212	6.9	4.34	252	50.13	
1305	21.0	5.51	15.58	195	4.5	4.72	255	50.13	
1310	23.25	5.52	15.55	182	2.6	5.00	259	50.13	
1315	25.5	5.51	15.58	176	1.4	5.23	258	50.13	
1320	27.75	5.52	15.53	168	0.0	5.51	263	50.13	> 2 system volumes
1325	30.0	5.53	15.52	162	0.0	5.56	265	50.13	
1330	32.25	5.54	15.54	156	0.0	5.71	265	50.13	
1335	34.5	5.53	15.51	152	0.0	5.82	266	50.13	
1340	36.75	5.52	15.48	148	0.0	5.83	271	50.13	
1345	39.0	5.54	15.47	144	0.0	5.97	272	50.13	
1350	41.25	5.54	15.44	142	0.0	6.07	275	50.13	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1355	43.50	5.55	15.46	140	0.0	6.12	272	50.13	
									MS/MSD collected
									Duplicate Sample Collected
									MW-805-SP13

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-3
Sample Date: 8/21/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):58-78
Initial Water Level (Feet TOIC):62.08
Final Water Level (feet TOIC):62.08
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: W-3-SU13
Purge Start Time: 10:40
Sample Time:11:35
Final Turbidity (NTUs) : 25.8
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 3.45

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:45	1.0	5.40	22.44	210	226	8.29	234	62.08	
10:50	2.0	5.62	20.42	158	226	7.31	256	62.08	
10:55	3.0	5.59	20.19	153	224	7.26	255	62.08	
11:00	4.0	5.59	19.94	146	155	7.25	253	62.08	> 2 system volumes
11:05	5.0	5.58	19.92	144	92.1	7.27	247	62.08	
11:10	6.0	5.61	19.82	143	49.8	7.36	246	62.08	
11:15	7.0	5.56	20.03	141	34.9	7.20	243	62.08	
11:20	8.0	5.55	19.92	141	27.8	7.18	241	62.08	
11:25	9.0	5.58	20.06	140	26.6	7.00	237	62.08	
11:30	10.0	5.53	20.04	140	25.8	7.16	236	62.08	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-4
Sample Date: 8/28/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):58-78
Initial Water Level (Feet TOIC):61.80
Final Water Level (feet TOIC):61.80
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-4-SU13
Purge Start Time: 14:00
Sample Time:14:45
Final Turbidity (NTUs) : 7.8
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium and CSIA
2x Pump System Volume (liters): 3.45

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:05	1.0	6.02	25.22	300	11.4	7.64	262	61.80	
14:10	2.0	5.97	23.88	296	10.7	7.98	254	61.80	
14:15	3.0	5.96	23.36	294	9.6	7.69	252	61.80	
14:20	4.0	5.97	23.32	295	8.3	7.68	249	61.80	> 2 system volumes
14:25	5.0	5.94	23.13	296	8.0	7.58	250	61.80	
14:30	6.0	5.93	23.04	296	7.8	7.58	250	61.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-8
Sample Date: 8/28/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):62.00
Final Water Level (feet TOIC):62.00
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-8-SU13 & DUP
Purge Start Time: 16:10
Sample Time:17:00
Final Turbidity (NTUs) : 2.2
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 320
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 5.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:15	1.6	5.97	20.42	325	3.3	6.50	249	62.00	
16:20	3.2	5.57	18.76	428	2.5	5.29	264	62.00	
16:25	4.8	5.59	19.82	451	2.4	3.97	272	62.00	
16:30	6.4	5.46	21.03	457	2.7	4.22	286	62.00	> 2 system volumes
16:35	8.0	5.24	18.83	461	2.3	4.42	298	62.00	
16:40	9.6	5.31	18.73	453	2.2	4.44	296	62.00	
16:45	11.2	5.34	18.56	452	2.2	4.47	298	62.00	
									Duplicate Sample Collected
									MW-610-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-9
Sample Date: 8/23/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 82
Screen Interval (feet TOIC):72-82
Initial Water Level (Feet TOIC):62.57
Final Water Level (feet TOIC):62.57
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale & A. Zarnadze

Sample ID: MW-9-SU13
Purge Start Time: 9:40
Sample Time:10:45
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 3.58

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:45	1.0	4.88	21.02	95	0.0	7.89	219	62.57	
9:50	2.0	5.24	19.91	67	0.0	7.04	225	62.57	
9:55	3.0	5.28	19.56	53	0.0	6.87	236	62.57	
10:00	4.0	5.28	19.38	49	0.0	6.83	246	62.57	> 2 system volumes
10:05	5.0	5.23	19.30	47	0.0	6.75	256	62.57	
10:10	6.0	5.24	19.28	46	0.0	6.60	263	62.57	
10:15	7.0	5.22	19.27	45	0.0	6.67	268	62.57	
10:20	8.0	5.22	19.22	44	0.0	6.63	275	62.57	
10:25	9.0	5.16	19.16	44	0.0	6.50	279	62.57	
10:30	10.0	5.18	19.14	44	0.0	6.46	281	62.57	
10:35	11.0	5.17	19.21	43	0.0	6.41	283	62.57	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-10
Sample Date: 8/23/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):62.47
Final Water Level (feet TOIC):62.48
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-10-SU13 & MS/MSD
Purge Start Time: 9:55
Sample Time:10:35
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 5.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:00	1.1	6.09	18.85	362	0.0	6.99	203	62.48	
10:05	2.2	6.10	18.81	362	0.9	7.01	204	62.48	
10:10	3.3	6.06	18.67	361	0.0	7.18	203	62.48	
10:15	4.4	6.04	18.54	358	0.0	7.07	196	62.48	
10:20	5.5	6.06	18.55	356	0.0	6.92	190	62.48	> 2 system volumes
10:25	6.6	6.02	18.45	354	0.0	7.02	184	62.48	
10:30	7.7	6.04	18.47	353	0.0	6.98	183	62.48	
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-11
Sample Date: 8/28/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 81
Screen Interval (feet TOIC):71-81
Initial Water Level (Feet TOIC):62.81
Final Water Level (feet TOIC):62.96
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-11-SU13
Purge Start Time: 15:50
Sample Time:17:30
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 340/180
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium and CSIA
2x Pump System Volume (liters): 3.56

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:55	1.7	5.89	18.05	85	3.5	10.48	242	62.96	
16:10	5.1	5.88	17.15	85	1.0	9.73	293	62.96	> 2 system volumes
16:15	6.0	5.81	17.19	88	0.6	9.47	305	62.96	Decreased flow rate to 180ml/min
16:20	6.9	5.75	18.85	89	0.0	8.64	309	62.96	
16:25	7.8	5.83	20.00	90	7.0	7.48	307	62.96	
16:30	8.7	5.83	20.67	92	3.9	6.75	307	62.96	
16:35	9.6	5.94	20.80	93	1.0	6.68	302	62.96	
16:40	10.5	5.91	21.05	95	0.0	6.45	305	62.96	
16:45	11.4	5.86	21.23	96	0.0	6.48	308	62.96	
16:50	12.3	5.86	21.30	96	0.0	6.61	309	62.96	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-12
Sample Date: 8/28/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):63.47
Final Water Level (feet TOIC):63.50
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MW-12-SU13
Purge Start Time: 14:45
Sample Time:16:50
Final Turbidity (NTUs) : 9.7
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium, Isotopic Uranium, and CSIA
2x Pump System Volume (liters): 5.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:55	3.0	6.84	16.63	517	13.6	6.46	187	63.50	
15:05	6.0	6.45	16.61	522	12.7	6.23	191	63.50	> 2 system volumes
15:10	7.75	6.32	16.52	525	11.6	6.19	196	63.50	
15:15	9.5	6.29	16.55	527	11.2	6.16	197	63.50	
15:20	11.25	6.27	16.54	529	11.0	6.08	199	63.50	
15:25	13.0	6.25	16.49	531	10.5	5.99	198	63.50	
15:30	14.75	6.26	16.51	533	10.2	5.96	201	63.50	
15:35	16.5	6.25	16.53	534	9.9	5.81	200	63.50	
15:40	18.25	6.25	16.51	533	9.7	5.80	201	63.50	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-13D
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 300
Screen Interval (feet TOIC):290-300
Initial Water Level (Feet TOIC):65.92
Final Water Level (feet TOIC):65.92
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-13D-SU13
Purge Start Time: 11:00
Sample Time:12:10
Final Turbidity (NTUs) : 0.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 440
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 19.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:10	4.4	5.65	16.49	147	0.0	3.91	251	65.92	
11:20	8.8	5.25	16.27	147	0.0	3.55	240	65.92	
11:30	13.2	5.49	16.11	140	0.0	6.05	270	65.92	
11:40	17.6	5.47	15.91	144	0.3	6.20	275	65.92	
11:50	22.0	5.42	15.88	146	0.4	6.15	269	65.92	> 2 system volumes
11:55	24.2	5.42	15.89	147	0.5	6.14	272	65.92	
12:00	26.4	5.41	15.93	148	0.7	6.24	274	65.92	
12:05	28.6	5.40	15.88	149	0.5	6.20	274	65.92	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-13S
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):65.70
Final Water Level (feet TOIC):65.71
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-13S-SU13
Purge Start Time: 16:43
Sample Time:17:21
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 380
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:44	0.38	5.57	17.94	3130	0.0	10.51	253	65.71	
16:49	2.28	5.34	16.85	3120	0.0	8.77	270	65.71	
16:54	4.18	5.34	16.77	3110	0.0	8.53	274	65.71	> 2 system volumes
16:59	6.08	5.31	16.70	3110	0.0	8.50	280	65.71	
17:04	7.98	5.31	16.50	3070	0.2	8.21	293	65.71	
17:09	9.88	5.30	16.50	3070	0.0	8.08	295	65.71	
17:14	11.78	5.30	16.50	3070	0.0	8.08	299	65.71	
17:19	13.68	5.30	16.50	3070	0.0	8.07	300	65.71	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14D
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 304
Screen Interval (feet TOIC):294-304
Initial Water Level (Feet TOIC):64.70
Final Water Level (feet TOIC):65.12
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-14D-SU13
Purge Start Time: 14:45
Sample Time:16:33
Final Turbidity (NTUs) : 8.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.55

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:52	2.45	6.09	14.94	360	0.0	1.39	214	65.16	
14:57	4.2	6.27	14.49	354	0.0	0.88	207	65.16	
15:02	5.95	6.34	14.30	359	33.4	0.76	199	65.13	
15:07	7.7	6.38	14.12	465	800	0.63	194	65.13	
15:12	9.45	6.57	14.02	591	551	0.65	186	65.13	
15:17	11.2	6.74	13.99	570	192	1.11	177	65.12	
15:22	12.95	6.77	13.93	499	80.6	2.20	169	65.12	
15:27	14.7	6.75	13.76	451	44.6	2.96	166	65.12	
15:32	16.45	6.62	13.81	420	27.9	3.56	168	65.12	
15:37	18.2	6.52	13.73	397	20.0	3.90	170	65.12	
15:42	19.95	6.34	13.67	373	15.7	4.25	176	65.12	
15:47	21.7	6.23	13.57	361	12.8	4.43	182	65.12	> 2 system volumes
15:52	23.45	6.15	13.66	353	10.6	4.46	185	65.12	
15:57	25.2	6.08	13.59	344	9.6	4.69	190	65.12	
16:02	26.95	6.05	13.52	338	8.8	4.79	193	65.12	
16:07	28.7	6.05	13.56	339	41.0	4.86	194	65.12	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14DD
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC):365-375
Initial Water Level (Feet TOIC):64.93
Final Water Level (feet TOIC):64.93
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-15DD-SU13
Purge Start Time: 11:58
Sample Time:13:12
Final Turbidity (NTUs) : 1.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 425
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174) Ferrous Iron
2x Pump System Volume (liters): 25.93

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:02	1.7	5.64	17.54	252	0.0	7.27	221	64.97	
12:07	3.825	5.64	15.46	255	0.0	6.47	227	64.97	
12:12	5.95	5.63	15.22	255	2.3	6.26	226	64.97	
12:17	8.075	5.64	15.03	257	1.7	6.27	226	64.97	
12:22	10.2	5.64	14.90	247	1.6	6.27	225	64.97	
12:27	12.325	5.70	14.79	235	3.2	6.36	223	64.97	
12:32	14.45	5.69	14.71	231	2.5	6.31	224	64.97	
12:37	16.575	5.70	14.62	231	2.2	6.56	224	64.97	
12:42	18.7	5.72	14.60	231	2.2	6.48	224	64.97	
12:47	20.825	5.64	14.49	232	1.9	6.54	226	64.97	
12:52	22.95	5.64	14.49	233	1.7	6.57	226	64.97	
12:57	25.075	5.63	14.42	234	1.8	6.61	228	64.97	
13:02	27.2	5.61	14.35	235	1.7	6.65	229	64.97	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14S
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.85
Final Water Level (feet TOIC):64.86
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-14S-SU13
Purge Start Time: 14:48
Sample Time:15:38
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:49	0.35	5.59	17.11	2950	1.3	12.87	233	64.89	
14:54	2.1	5.57	16.27	3420	0.0	10.24	250	64.86	
14:59	3.85	5.56	16.19	3440	0.0	10.11	253	64.86	> 2 system volumes
15:04	5.6	5.56	16.16	3444	0.0	9.83	258	64.86	
15:09	7.35	5.56	16.13	3445	0.0	9.67	262	64.86	
15:14	9.1	5.58	15.89	3446	0.0	9.51	267	64.86	
15:19	10.85	5.58	15.91	3447	0.0	8.11	271	64.86	
15:24	12.6	5.58	15.97	3447	0.0	8.03	271	64.86	
15:29	14.35	5.59	15.86	3448	0.0	8.04	273	64.86	
15:34	16.1	5.59	15.90	3449	0.0	8.02	274	64.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15D
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):64.70
Final Water Level (feet TOIC):64.70
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-15D-SU13
Purge Start Time: 8:41
Sample Time:10:05
Final Turbidity (NTUs) : 1.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:42	0.3	7.53	17.91	744	0.0	9.41	218	64.70	
8:47	1.8	6.81	16.97	720	0.0	6.62	223	64.70	
8:52	3.3	6.10	16.65	814	0.0	6.27	225	64.70	
8:57	4.8	6.06	16.69	820	0.0	6.26	223	64.70	
9:02	6.3	5.95	16.51	705	10.0	6.28	229	64.70	
9:07	7.8	5.78	16.52	532	9.6	6.37	229	64.70	
9:12	9.3	5.77	16.68	521	8.4	6.25	230	64.70	
9:17	10.8	5.71	16.48	475	6.8	6.33	231	64.70	
9:22	12.3	5.66	16.46	426	4.2	6.36	233	64.70	
9:27	13.8	5.61	16.46	384	2.5	6.34	235	64.70	
9:32	15.3	5.61	16.49	383	2.8	6.39	235	64.70	
9:37	16.8	5.59	16.46	369	1.8	6.29	236	64.70	
9:42	18.3	5.59	16.51	363	1.9	6.39	236	64.70	
9:47	19.8	5.57	16.54	353	1.5	6.39	236	64.70	
9:52	21.3	5.56	16.66	343	1.1	6.39	222	64.70	> 2 system volumes
9:57	22.8	5.56	16.67	342	1.0	6.39	224	64.70	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15DD
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC):65.36
Final Water Level (feet TOIC):65.36
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-15DD-SU13 & DUP
Purge Start Time: 8:41
Sample Time:10:16
Final Turbidity (NTUs) : 1.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174) Ferrous Iron
2x Pump System Volume (liters): 25.53

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:45	1.8	8.06	18.01	147	0.0	8.25	231	65.36	
8:50	4.05	7.17	17.12	134	0.1	9.10	242	65.36	
9:10	13.05	6.20	19.28	121	1.6	6.23	223	65.36	Horiba batteries were replaced
9:15	15.3	5.96	19.00	120	1.6	5.72	224	65.36	
9:20	17.55	5.88	18.68	113	1.8	5.48	221	65.36	
9:25	19.8	5.81	18.65	112	2.0	5.42	218	65.36	
9:30	22.05	5.73	18.57	109	2.1	5.24	219	65.36	
9:35	24.3	---	---	---	---	---	---	65.36	Missed reading
9:40	26.55	5.68	19.04	108	1.6	5.12	219	65.36	> 2 system volumes
9:45	28.8	5.64	18.73	108	1.2	5.14	220	65.36	
9:50	31.05	5.65	18.74	108	1.3	5.06	220	65.36	
9:55	33.3	5.63	18.80	107	1.2	5.13	224	65.36	
10:00	35.55	5.62	18.84	107	1.2	5.15	224	65.36	
									Duplicate Sample Collected
									MW-607-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15S
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.72
Final Water Level (feet TOIC):64.72
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-15S-SU13 & MS/MSD
Purge Start Time: 11:28
Sample Time:12:11
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:29	0.4	5.71	16.81	1250	20.5	8.27	242	64.72	
11:34	2.4	5.64	16.45	1240	9.0	8.24	243	64.72	
11:39	4.4	5.69	16.13	1210	0.9	8.37	245	64.72	> 2 system volumes
11:44	6.4	5.69	16.27	1200	0.8	8.32	245	64.72	
11:49	8.4	5.69	16.21	1119	1.0	8.25	248	64.72	
11:54	10.4	5.70	16.21	1118	1.0	8.12	249	64.72	
11:59	12.4	5.71	16.21	1117	1.0	8.19	253	64.72	
12:04	14.4	5.71	16.21	1116	1.0	8.17	253	64.72	
12:09	16.4	5.72	16.21	1117	1.0	8.16	253	64.72	
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-16D
Sample Date: 8/13/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):64.90
Final Water Level (feet TOIC):64.90
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-16D-SU13
Purge Start Time: 15:15
Sample Time:16:10
Final Turbidity (NTUs) : 45.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.73

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:25	5.0	7.59	15.59	200	1.1	7.32	273	64.90	
15:30	7.5	7.54	15.55	199	2.7	6.98	272	64.90	
15:35	10.0	7.44	15.40	201	186	6.80	289	64.90	
15:40	12.5	7.38	15.32	204	76.7	6.60	289	64.90	
15:45	15.0	7.33	15.32	204	74.4	6.71	280	64.90	
15:50	17.5	7.32	15.25	203	70.8	6.85	283	64.90	
15:55	20.0	7.30	15.25	202	50.4	6.99	284	64.90	> 2 system volumes
16:00	22.5	7.28	15.26	201	49.2	7.02	286	64.90	
16:05	25.0	7.26	15.20	201	45.9	7.00	289	64.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-16S
Sample Date: 8/13/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):65.41
Final Water Level (feet TOIC):65.41
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-16S-SU13
Purge Start Time: 16:40
Sample Time:17:20
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:45	2.5	7.03	15.65	147	0.0	8.02	268	65.41	
16:50	5.0	7.04	15.75	146	0.0	7.90	266	65.41	> 2 system volumes
16:55	7.5	7.06	15.84	144	0.4	7.67	267	65.41	
17:00	10.0	7.07	15.60	145	1.7	7.89	250	65.41	
17:05	12.5	7.07	15.60	145	0.9	7.74	247	65.41	
17:10	15.0	7.09	15.50	146	0.8	7.82	247	65.41	
17:15	17.5	7.09	15.52	146	0.0	7.70	247	65.41	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-17S
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):64.99
Final Water Level (feet TOIC):64.99
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-17S-SU13 & DUP
Purge Start Time: 11:10
Sample Time:11:45
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.23

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:15	1.0	5.89	18.93	118	0.0	5.67	82	64.99	
11:20	2.0	5.87	17.86	103	0.0	4.85	68	64.99	
11:25	3.0	5.80	17.42	101	0.0	4.79	67	64.99	
11:30	4.0	5.86	17.38	101	0.0	4.76	73	64.99	> 2 system volumes
11:35	5.0	5.87	17.34	101	0.0	4.60	73	64.99	
11:40	6.0	5.87	17.19	103	0.0	4.65	76	64.99	
									Duplicate Sample Collected
									MW-608-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-18I
Sample Date: 8/16/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 128
Screen Interval (feet TOIC):118-128
Initial Water Level (Feet TOIC):64.77
Final Water Level (feet TOIC):64.78
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-18I-SU13
Purge Start Time: 9:05
Sample Time:9:59
Final Turbidity (NTUs) : 1.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 7.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:06	0.4	7.02	15.88	691	7.1	7.85	242	64.78	
9:11	2.4	6.13	15.61	886	12.9	8.75	253	64.78	
9:16	4.4	5.72	15.49	942	1.1	8.93	265	64.78	
9:21	6.4	5.41	15.30	951	3.0	8.70	278	64.78	
9:26	8.4	5.37	15.28	951	2.4	8.69	286	64.78	> 2 system volumes
9:31	10.4	5.37	15.29	952	2.7	8.71	287	64.78	
9:36	12.4	5.36	15.29	953	2.5	8.68	297	64.78	
9:41	14.4	5.35	15.29	954	2.0	8.54	302	64.78	
9:46	16.4	5.36	15.29	956	1.5	8.53	303	64.78	
9:51	18.4	5.35	15.30	956	1.5	8.52	304	64.78	
9:56	20.4	5.36	15.30	956	1.5	8.53	306	64.78	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-18S
Sample Date: 8/16/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC):62-72
Initial Water Level (Feet TOIC):64.73
Final Water Level (feet TOIC):64.73
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-18S-SU13
Purge Start Time: 9:01
Sample Time:9:42
Final Turbidity (NTUs) : 8.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) Isotopic Uranium
2x Pump System Volume (liters): 2.18

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:08	2.45	7.59	14.72	940	15.3	7.39	231	64.73	> 2 system volumes
9:13	4.2	7.43	14.47	940	6.9	7.12	224	64.73	
9:18	5.95	7.37	14.40	943	8.5	7.27	217	64.73	
9:23	7.7	7.37	14.36	945	8.4	7.10	212	64.73	
9:28	9.45	7.36	14.35	947	8.7	7.06	209	64.73	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-19D
Sample Date: 8/14/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 306
Screen Interval (feet TOIC):296-306
Initial Water Level (Feet TOIC):63.77
Final Water Level (feet TOIC):63.77
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-19D-SU13
Purge Start Time: 14:20
Sample Time:15:35
Final Turbidity (NTUs) : 25.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.74

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:26	2.4	7.29	19.00	227	0.0	5.20	171	63.77	
14:31	4.4	6.41	18.27	219	0.0	4.23	191	63.77	
14:36	6.4	6.02	18.15	217	0.0	4.16	198	63.77	
14:41	8.4	5.76	18.28	217	2.1	4.10	204	63.77	
14:46	10.4	5.66	17.36	213	403	4.81	214	63.77	
14:51	12.4	5.60	17.21	613	192	5.24	214	63.77	
14:56	14.4	5.61	17.20	692	74.0	5.47	212	63.77	
15:01	16.4	5.65	17.21	736	36.9	5.31	212	63.77	
15:06	18.4	5.63	17.29	771	19.8	5.33	211	63.77	
15:11	20.4	5.63	17.36	788	30.2	5.29	210	63.77	
15:16	22.4	5.62	17.33	806	27.1	5.19	213	63.77	> 2 system volumes
15:21	24.4	5.65	17.48	818	26.7	5.17	215	63.77	
15:26	26.4	5.64	17.19	825	25.3	5.19	218	63.77	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-19S
Sample Date: 8/14/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.79
Final Water Level (feet TOIC):63.80
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-19S-SU13
Purge Start Time: 14:21
Sample Time:15:10
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.64

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:23	1.0	6.07	17.69	64	3.2	10.16	230	63.79	
14:28	3.5	6.16	17.82	64	2.8	11.47	228	63.80	
14:33	6.0	5.90	17.45	63	0.0	9.17	237	63.80	> 2 system volumes
14:38	8.5	5.88	17.43	63	0.0	8.82	241	63.80	
14:43	11.0	5.84	17.46	63	0.0	8.73	244	63.80	
14:48	13.5	5.84	17.18	63	0.0	8.60	248	63.80	
14:53	16.0	5.85	17.21	63	0.0	8.46	250	63.80	
14:58	18.5	5.84	17.27	63	0.0	8.46	252	63.80	
15:03	21.0	5.84	17.29	63	0.0	8.48	254	63.80	
15:08	23.5	5.84	17.29	63	0.0	8.48	255	63.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20D
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):64.58
Final Water Level (feet TOIC):64.59
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-20D-SU13
Purge Start Time: 15:43
Sample Time:17:12
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 320/450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:51	2.56	6.82	17.58	111	0.0	7.65	175	64.59	
15:56	4.16	6.57	16.67	111	0.0	6.77	187	64.59	Increased flow rate to 450ml/min
16:01	6.41	6.42	16.25	111	0.0	6.79	195	64.59	
16:06	8.66	5.93	15.80	116	0.0	7.71	218	64.59	
16:11	10.91	5.88	15.99	218	0.0	7.73	220	64.59	
16:16	13.16	5.83	15.81	220	0.0	7.79	219	64.59	
16:21	15.41	5.82	15.60	220	0.0	7.92	230	64.59	
16:26	17.66	5.83	15.60	222	0.0	7.92	235	64.59	
16:31	19.91	5.84	15.58	223	0.0	7.92	241	64.59	
16:36	22.16	5.84	15.58	223	0.0	7.92	242	64.59	> 2 system volumes
16:41	24.41	5.84	15.52	224	0.0	7.99	244	64.59	
16:46	26.66	5.86	15.41	224	0.0	8.05	250	64.59	
16:51	28.91	5.86	15.41	224	0.0	8.04	251	64.59	
16:56	31.16	5.86	15.29	226	0.0	8.31	258	64.59	
17:02	33.41	5.87	15.29	225	0.0	8.33	256	64.59	
17:07	35.66	5.87	15.29	225	0.0	8.33	257	64.59	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20I
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):64.72
Final Water Level (feet TOIC):64.72
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-20I-SU13
Purge Start Time: 14:15
Sample Time:15:07
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.87

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:19	1.8	6.61	17.01	564	0.0	4.60	178	64.72	
14:24	4.05	5.98	16.81	172	0.5	7.11	207	64.72	
14:29	6.3	5.96	16.54	190	0.0	7.53	220	64.72	
14:34	8.55	5.99	16.50	189	0.0	7.56	228	64.72	
14:39	10.8	5.99	16.56	190	0.0	7.64	228	64.72	> 2 system volumes
14:44	13.05	6.02	16.98	180	0.0	7.70	234	64.72	
14:49	15.3	6.02	16.98	180	0.0	7.71	235	64.72	
14:54	17.55	6.03	16.99	180	0.0	7.72	237	64.72	
14:59	19.8	6.03	16.99	180	0.0	7.72	238	64.72	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20S
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.61
Final Water Level (feet TOIC):64.61
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-20S-SU13
Purge Start Time: 15:35
Sample Time:16:15
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) and Isotopic Uranium
2x Pump System Volume (liters): 3.62

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:41	2.7	6.76	16.45	1030	9.0	7.04	160	64.65	
15:46	4.95	6.89	15.52	1020	13.2	6.51	159	64.65	> 2 system volumes
15:51	7.2	6.93	15.25	1030	4.9	6.33	159	64.65	
15:56	9.45	6.97	15.20	1040	1.7	6.22	158	64.65	
16:01	11.7	6.99	15.23	1040	0.0	6.07	156	64.65	
16:06	13.95	7.00	15.13	1040	0.0	6.06	156	64.65	
16:11	16.2	7.01	15.16	1040	0.0	5.99	155	64.65	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21D
Sample Date: 8/14/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC):300-310
Initial Water Level (Feet TOIC):63.84
Final Water Level (feet TOIC):63.84
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-21D-SU13
Purge Start Time: 8:35
Sample Time:9:38
Final Turbidity (NTUs) : 0.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:43	2.5	6.70	14.92	272	0.0	2.25	228	63.84	
8:48	5.0	6.37	14.70	263	0.0	2.29	229	63.84	
8:53	7.5	6.18	14.63	261	1.6	1.73	228	63.84	
8:58	10.0	6.00	14.47	271	6.4	3.13	228	63.84	
9:03	12.5	5.91	14.41	309	1.8	5.15	236	63.84	
9:08	15.0	5.84	14.42	314	1.0	5.21	238	63.84	
9:13	17.5	5.87	14.44	322	0.8	5.35	241	63.84	
9:18	20.0	5.86	14.45	323	0.9	5.36	242	63.84	
9:23	22.5	5.83	14.45	323	0.8	5.33	243	63.84	> 2 system volumes
9:28	25.0	5.83	14.45	323	0.8	5.37	244	63.84	
9:33	27.5	5.82	14.48	323	0.8	5.36	246	63.84	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21I
Sample Date: 8/13/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 180
Screen Interval (feet TOIC):170-180
Initial Water Level (Feet TOIC):63.91
Final Water Level (feet TOIC):63.91
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-21I-SU13 & MS/MSD
Purge Start Time: 17:15
Sample Time:18:18
Final Turbidity (NTUs) : 9.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 260/400
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.18

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:20	1.3	6.21	16.23	729	0.0	4.13	280	63.91	
17:25	2.6	5.60	15.08	775	105	5.94	301	63.91	
17:30	4.0	5.42	15.06	1010	18.8	7.24	316	63.91	
17:35	6.0	5.36	14.96	1060	12.9	7.23	322	63.91	
17:40	8.0	5.33	15.01	1090	12.7	6.92	329	63.91	
17:45	10.0	5.33	14.97	1010	12.5	6.67	330	63.91	
17:50	12.0	5.31	14.95	1010	12.8	6.97	333	63.91	> 2 system volumes
17:55	14.0	5.30	14.95	1110	11.5	6.91	335	63.91	
18:00	16.0	5.31	14.91	1120	10.1	6.86	338	63.91	
18:05	18.0	5.30	14.81	1120	9.8	6.98	340	63.91	
18:10	20.0	5.29	14.83	1130	9.2	7.12	343	63.91	
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21S
Sample Date: 8/14/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.66
Final Water Level (feet TOIC):63.66
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-21S-SU13
Purge Start Time: 8:35
Sample Time:9:32
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.65

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:42	2.0	6.87	16.70	115	33.6	7.65	230	63.66	
8:47	3.4	6.24	16.36	113	9.9	7.19	231	63.66	
8:52	4.8	6.24	16.30	112	9.7	7.12	229	63.66	> 2 system volumes
8:57	6.2	6.17	16.40	111	6.6	7.27	222	63.66	
9:02	7.6	6.15	16.33	110	4.2	6.91	222	63.66	
9:07	9.0	6.10	16.25	110	3.2	7.22	225	63.66	
9:12	10.4	6.12	16.30	110	1.6	7.10	223	63.66	
9:17	11.8	6.12	16.29	110	1.0	7.14	224	63.66	
9:22	13.2	6.12	16.29	110	1.0	7.14	223	63.66	
9:27	14.6	6.12	16.25	110	1.0	7.14	223	63.66	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22D
Sample Date: 8/14/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 315
Screen Interval (feet TOIC):205-315
Initial Water Level (Feet TOIC):66.21
Final Water Level (feet TOIC):65.95
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-22D-SU13
Purge Start Time: 10:42
Sample Time:12:30
Final Turbidity (NTUs) : 44.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 420
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.43

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:45	1.0	6.26	14.69	3310	7.0	3.44	204	66.21	
10:50	3.1	6.90	14.78	3300	4.4	1.49	173	66.21	
10:55	5.2	7.35	14.41	3250	5.1	0.70	147	66.21	
11:00	7.3	7.63	14.24	3230	634	0.99	124	66.21	
11:05	9.4	7.62	14.20	3240	800	1.09	124	66.21	
11:10	11.5	7.53	14.28	3250	1000	1.47	132	66.21	
11:15	13.6	7.39	14.30	3270	1000	2.30	143	66.21	
11:20	15.7	7.31	14.46	3270	370	2.35	148	66.21	
11:25	17.8	7.22	14.37	3270	800	2.37	151	66.21	
11:30	19.9	7.14	14.39	3270	535	2.38	152	66.21	
11:35	22.0	7.14	14.29	3300	410	2.57	154	66.21	> 2 system volumes
11:40	24.1	7.12	14.28	3300	284	2.27	153	66.21	
11:45	26.2	7.10	14.29	3300	210	2.34	152	66.21	
11:50	28.3	7.14	15.37	3120	136	2.27	159	66.03	
11:55	30.4	7.11	14.22	3280	99.6	2.57	143	66.03	
12:00	32.5	7.10	14.22	3280	81.0	2.48	139	66.03	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:05	34.6	7.09	14.20	3280	77.2	2.39	136	66.03	
12:10	36.7	7.09	14.22	3270	58.0	2.38	133	66.00	
12:15	38.8	7.08	14.22	3280	48.6	2.30	131	66.00	
12:20	40.9	7.09	14.22	3270	47.1	2.35	129	65.98	
12:25	43.0	7.10	14.23	3270	44.3	2.34	128	65.95	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22I
Sample Date: 8/14/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):65.00
Final Water Level (feet TOIC):65.01
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-22I-SU13
Purge Start Time: 10:44
Sample Time:11:40
Final Turbidity (NTUs) : 0.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.86

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:48	1.6	6.29	15.66	672	0.0	5.47	241	65.01	
10:53	3.6	5.80	15.34	742	13.9	6.56	252	65.01	
10:58	5.6	5.74	15.33	764	1.1	7.87	256	65.01	
11:03	7.6	5.74	15.22	764	0.0	7.70	259	65.01	
11:08	9.6	5.72	15.20	762	0.1	7.26	265	65.01	> 2 system volumes
11:13	11.6	5.71	15.20	763	1.5	7.26	271	65.01	
11:18	13.6	5.71	15.20	764	1.4	7.41	276	65.01	
11:23	15.6	5.72	15.20	762	1.0	7.21	278	65.01	
11:28	17.6	5.71	15.20	763	0.9	7.21	279	65.01	
11:33	19.6	5.71	15.20	762	0.9	7.22	280	65.01	
11:38	21.6	5.71	15.20	762	0.9	7.22	280	65.01	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22S
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):64.88
Final Water Level (feet TOIC):64.89
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-22S-SU13&DUP
Purge Start Time: 11:02
Sample Time:12:16
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500/350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) and CSIA
2x Pump System Volume (liters): 3.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:04	1.0	6.44	16.62	627	31.4	8.80	207	64.89	
11:09	3.5	6.45	16.42	625	0.0	7.73	207	64.89	
11:14	6.0	6.42	16.40	624	0.0	7.30	208	64.89	Decreased flow rate to 350ml/min
11:19	7.75	6.44	16.03	626	0.0	7.02	207	64.89	> 2 system volumes
11:24	9.5	6.46	16.03	627	0.0	7.00	207	64.89	
11:29	11.25	6.46	16.04	626	0.0	6.96	206	64.89	
11:34	13.0	6.47	16.03	626	0.0	6.97	206	64.89	
11:39	14.75	6.47	16.04	626	0.0	6.97	205	64.89	
11:44	16.5	6.48	16.03	626	0.0	6.98	204	64.89	
									Duplicate Sample Collected
									MW-601-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23D
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC):330-340
Initial Water Level (Feet TOIC):63.12
Final Water Level (feet TOIC):63.19
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-23D-SU13
Purge Start Time: 9:30
Sample Time:11:00
Final Turbidity (NTUs) : 0.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 23.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:40	3.0	6.09	15.81	146	0.5	0.94	295	63.21	
9:50	6.0	6.09	15.70	145	0.3	0.85	285	63.19	
10:00	9.0	6.03	15.69	150	14.1	1.49	258	63.22	
10:10	12.0	5.96	15.85	158	0.3	2.30	212	63.21	
10:20	15.0	5.94	16.04	153	0.0	2.33	199	63.23	
10:30	18.0	5.97	16.33	154	0.2	2.22	180	63.18	
10:35	19.5	5.98	16.20	155	0.5	2.24	176	63.23	
10:40	21.0	5.97	16.22	155	0.2	2.25	173	63.24	
10:45	22.5	5.98	16.31	155	0.2	2.22	171	63.19	
10:50	24.0	5.98	16.40	155	0.3	2.24	169	63.19	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23I
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 180
Screen Interval (feet TOIC):170-180
Initial Water Level (Feet TOIC):62.54
Final Water Level (feet TOIC):62.54
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-23I-SU13
Purge Start Time: 15:40
Sample Time:16:30
Final Turbidity (NTUs) : 2.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 440
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 10.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:50	4.4	5.72	16.87	739	1.2	9.48	253	62.54	
16:00	8.8	5.65	16.62	735	0.8	0.66	256	62.54	
16:05	11.0	5.64	16.49	736	1.8	0.59	255	62.54	> 2 system volumes
16:10	13.2	5.64	16.51	736	2.0	0.55	244	62.54	
16:15	15.4	5.63	16.43	736	2.6	0.50	242	62.54	
16:20	17.6	5.60	16.39	734	2.6	0.48	241	62.54	
16:25	19.8	5.63	16.33	733	2.7	0.50	243	62.54	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23S
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):62.91
Final Water Level (feet TOIC):62.95
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-23S-SU13
Purge Start Time: 8:15
Sample Time:8:55
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 4.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:25	2.0	5.39	16.67	77	0.0	9.72	263	62.93	
8:30	3.0	5.38	16.52	76	0.0	9.15	259	62.95	
8:35	4.0	5.38	16.51	75	0.0	8.72	255	62.94	
8:40	5.0	5.48	16.36	76	0.0	8.87	251	62.95	> 2 system volumes
8:45	6.0	5.50	16.15	75	0.0	8.96	256	62.95	
8:50	7.0	5.52	16.08	75	0.0	8.94	252	62.95	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-24DD
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 370
Screen Interval (feet TOIC):360-370
Initial Water Level (Feet TOIC):67.03
Final Water Level (feet TOIC):67.03
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-24DD-SU13
Purge Start Time: 8:27
Sample Time:9:38
Final Turbidity (NTUs) : 21.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 25.47

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:31	2.0	7.25	15.36	561	0.0	3.79	218	67.03	
8:34	3.5	6.64	14.86	560	0.0	9.87	219	67.03	
8:39	6.0	6.01	14.70	554	0.4	9.55	218	67.03	
8:44	8.5	5.69	14.69	555	4.9	9.41	219	67.03	
8:49	11.0	5.60	14.59	446	3.0	9.35	216	67.03	
8:54	13.5	5.54	14.75	265	39.8	9.09	214	67.03	
8:59	16.0	5.50	14.77	204	45.2	8.95	214	67.03	
9:04	18.5	5.46	14.82	204	26.1	8.85	215	67.03	
9:09	21.0	5.40	14.70	201	28.2	8.85	216	67.03	
9:14	23.5	5.39	15.10	196	25.0	8.64	215	67.03	
9:19	26.0	5.37	15.16	193	29.5	8.51	216	67.03	> 2 system volumes
9:24	28.5	5.38	15.42	191	23.5	8.35	218	67.03	
9:29	31.0	5.38	15.50	190	22.0	8.35	217	67.03	
9:34	33.5	5.36	15.43	190	21.9	8.35	217	67.03	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-24S
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):63.08
Final Water Level (feet TOIC):63.09
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-24S-SU13
Purge Start Time: 8:31
Sample Time:9:25
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) & Isotopic Uranium
2x Pump System Volume (liters): 3.67

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:35	1.0	7.35	17.49	1240	0.0	12.0	217	63.09	
8:40	3.2	6.64	16.95	1200	0.0	9.61	218	63.09	
8:45	5.4	6.42	17.20	1200	0.0	8.78	217	63.09	> 2 system volumes
8:50	7.6	6.29	17.12	1200	0.0	8.57	217	63.09	
8:55	9.8	6.26	16.95	1210	0.0	8.56	221	63.09	
9:00	11.0	6.24	16.83	1210	0.0	8.34	226	63.09	
9:05	13.2	6.22	17.03	1200	0.0	8.40	227	63.09	
9:10	15.4	6.23	17.16	1200	0.0	8.39	229	63.09	
9:15	17.6	6.23	17.14	1200	0.0	8.38	230	63.09	
9:20	19.8	6.23	17.15	1200	0.0	8.39	231	63.09	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25D
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 350
Screen Interval (feet TOIC):340-350
Initial Water Level (Feet TOIC):63.32
Final Water Level (feet TOIC):63.32
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-25D-SU13
Purge Start Time: 16:35
Sample Time:17:45
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 23.71

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:40	2.25	8.31	20.73	768	0.0	8.11	174	63.32	
16:45	4.45	6.89	17.38	773	0.0	1.71	103	63.32	
16:50	6.75	6.62	17.18	771	0.0	1.68	105	63.32	
16:55	9.0	6.27	16.95	771	2.5	1.51	131	63.32	
17:00	11.25	5.97	16.97	769	0.0	1.44	146	63.32	
17:05	13.5	5.74	16.94	772	11.2	2.09	160	63.32	
17:10	15.75	5.61	16.77	788	4.1	3.64	172	63.32	
17:15	18.0	5.57	16.71	788	1.3	4.62	179	63.32	
17:20	20.25	5.56	16.87	782	0.0	5.03	185	63.32	
17:25	22.5	5.51	16.63	774	0.0	5.24	192	63.32	
17:30	24.75	5.51	16.65	771	0.0	5.38	194	63.32	> 2 system volumes
17:35	27.0	5.48	16.61	767	0.0	5.49	197	63.32	
17:40	29.25	5.50	16.72	764	0.0	5.54	198	63.32	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25I
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):62.90
Final Water Level (feet TOIC):62.95
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-25I-SU13
Purge Start Time: 16:50
Sample Time:18:00
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 15.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:00	2.8	8.13	17.74	743	0.0	3.21	195	62.95	
17:10	5.6	6.36	17.53	772	0.0	6.39	236	62.95	
17:20	8.4	5.68	17.40	753	0.0	6.95	259	62.95	
17:30	11.2	5.49	17.17	735	0.0	7.11	275	62.95	
17:40	14.0	5.41	17.10	727	0.0	7.30	285	62.95	
17:45	15.4	5.40	17.05	725	0.0	7.42	289	62.95	> 2 system volumes
17:50	16.8	5.41	17.02	724	0.0	7.78	290	62.95	
17:55	18.2	5.41	17.04	724	0.0	7.65	292	62.95	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25S
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 115
Screen Interval (feet TOIC):105-115
Initial Water Level (Feet TOIC):62.88
Final Water Level (feet TOIC):62.88
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-25S-SU13
Purge Start Time: 17:15
Sample Time:17:50
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 7.58

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:20	2.0	5.21	17.01	581	0.0	9.53	202	62.88	
17:25	4.0	5.23	16.64	581	0.0	9.39	206	62.88	
17:30	6.0	5.15	16.60	573	0.0	9.12	209	62.88	
17:35	8.0	5.14	16.53	567	0.0	8.88	212	62.88	> 2 system volumes
17:40	10.0	5.16	16.44	559	0.0	8.93	215	62.88	
17:45	12.0	5.16	16.41	558	0.0	8.93	219	62.88	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-26D
Sample Date: 8/14/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 276
Screen Interval (feet TOIC):266-276
Initial Water Level (Feet TOIC):62.88
Final Water Level (feet TOIC):62.88
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-26D-SU13
Purge Start Time: 16:34
Sample Time:17:35
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:42	4.0	5.81	16.25	2230	0.0	4.56	222	62.88	
16:47	6.5	5.76	15.99	2210	0.0	4.79	223	62.88	
16:52	9.0	5.69	15.64	2310	17.2	6.01	242	62.88	
16:57	11.5	5.65	15.56	2320	15.0	6.05	242	62.88	
17:02	14.0	5.64	15.50	2340	0.3	6.09	245	62.88	
17:07	16.5	5.64	15.49	2330	0.0	6.09	248	62.88	
17:12	19.0	5.64	15.47	2320	0.0	6.15	250	62.88	> 2 system volumes
17:17	21.5	5.64	15.40	2320	0.0	6.20	254	62.88	
17:22	24.0	5.63	15.33	2330	0.0	6.16	252	62.88	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-26S
Sample Date: 8/14/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):62.56
Final Water Level (feet TOIC):62.57
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-26S-SU13 & DUP
Purge Start Time: 16:35
Sample Time:17:35
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.91

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:39	1.6	5.82	17.94	356	0.0	4.38	241	62.57	
16:44	3.6	5.37	17.26	383	0.0	3.61	266	62.57	
16:49	5.6	5.31	16.94	385	0.0	3.44	286	62.57	
16:54	7.6	5.36	16.89	386	0.0	3.39	287	62.57	> 2 system volumes
16:59	9.6	5.31	16.83	388	0.0	3.23	292	62.57	
17:04	11.6	5.31	16.73	389	0.0	3.25	293	62.57	
17:09	13.6	5.29	16.67	392	0.0	3.09	301	62.57	
17:14	15.6	5.31	16.56	392	0.0	3.10	305	62.57	
17:19	17.6	5.31	16.55	392	0.0	3.00	306	62.57	
17:24	19.6	5.32	16.55	392	0.0	3.00	307	62.57	
									Duplicate Sample Collected
									MW-605-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27D
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):62.50
Final Water Level (feet TOIC):62.72
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-27D-SU13 & MS/MSD
Purge Start Time: 14:50
Sample Time:16:15
Final Turbidity (NTUs) : 5.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:00	3.0	4.87	17.03	263	0.4	2.91	361	62.67	
15:10	6.0	4.86	16.82	274	9.0	2.65	386	62.69	
15:20	9.0	4.86	16.87	264	19.7	2.83	391	62.70	
15:30	12.0	4.79	16.64	265	2.3	3.41	398	62.69	
15:40	15.0	4.76	16.38	266	1.0	3.60	406	62.65	
15:45	16.5	4.76	16.51	266	1.6	3.63	408	62.64	
15:50	18.0	4.75	16.98	265	0.6	2.74	407	62.56	
15:55	19.5	4.75	17.39	266	4.5	3.68	407	62.67	> 2 system volumes
16:00	21.0	4.76	16.56	267	5.2	3.67	409	62.63	
16:05	22.5	4.75	16.32	267	5.5	3.61	412	62.70	
16:10	24.0	4.77	16.36	268	5.7	3.58	414	62.72	
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27DD
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC):365-375
Initial Water Level (Feet TOIC):63.13
Final Water Level (feet TOIC):63.11
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-27DD-SU13
Purge Start Time: 13:00
Sample Time:14:20
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300/400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 25.62

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:10	3.0	5.04	16.27	192	0.0	4.70	233	63.18	
13:20	7.0	5.22	15.43	192	0.0	6.97	243	63.17	Increased flow rate to 400ml/min
13:30	11.0	5.25	15.15	190	68.7	7.44	262	63.23	
13:40	15.0	5.23	15.02	191	8.4	7.58	277	63.11	
13:50	19.0	5.22	14.98	191	0.8	7.65	287	63.12	
14:00	23.0	5.23	14.86	191	2.0	7.61	290	63.21	
14:05	25.0	5.22	14.93	191	0.0	7.35	292	63.12	
14:10	27.0	5.24	14.90	191	0.0	7.66	294	63.11	> 2 system volumes
14:15	29.0	5.25	14.94	191	0.0	7.50	297	63.11	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27S
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 88
Screen Interval (feet TOIC):78-88
Initial Water Level (Feet TOIC):62.65
Final Water Level (feet TOIC):62.68
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-27S-SU13
Purge Start Time: 17:10
Sample Time:17:50
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:20	2.0	5.86	16.90	89	0.0	10.46	301	62.67	
17:25	3.0	5.86	16.76	89	0.0	10.35	301	62.68	
17:30	4.0	5.87	16.54	89	0.0	10.02	300	62.66	> 2 system volumes
17:35	5.0	5.87	16.47	89	0.0	10.40	301	62.68	
17:40	6.0	5.89	16.35	88	0.0	10.19	298	62.67	
17:45	7.0	5.89	16.21	88	0.0	10.31	298	62.68	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28D
Sample Date: 8/21/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 287
Screen Interval (feet TOIC):277-287
Initial Water Level (Feet TOIC):68.08
Final Water Level (feet TOIC):68.09
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-28D-SU13
Purge Start Time: 9:17
Sample Time:11:32
Final Turbidity (NTUs) : 43.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500/350
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.14

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:24	3.5	7.83	15.41	2090	1.6	1.26	165	68.11	
9:34	8.5	8.99	14.72	2100	26.0	0.55	126	68.11	
9:44	13.5	8.19	14.80	2120	97.2	3.26	103	68.11	
9:49	16.0	7.77	14.80	2110	103	3.37	115	68.11	
9:54	18.5	7.52	14.83	2090	135	3.41	122	68.11	
9:59	21.0	7.26	14.83	2080	115	3.45	133	68.11	> 2 system volumes
10:04	22.75	7.09	15.00	2100	105	3.36	139	68.11	Decreased flow rate to 350ml/min
10:09	24.5	7.00	15.03	2100	125	3.46	144	68.11	
10:14	26.25	6.92	14.98	2100	130	3.33	147	68.11	
10:24	39.75	6.86	15.58	2080	115	3.43	158	68.11	
10:34	33.25	6.80	15.99	2080	105	3.42	158	68.11	
10:44	36.75	6.79	16.13	2090	87.3	3.42	158	68.11	
10:54	40.25	6.77	16.27	2080	84.1	3.36	160	68.11	
11:04	43.75	6.79	15.32	2090	67.3	3.43	161	68.11	
11:14	47.25	6.76	15.32	2090	55.1	3.41	162	68.11	
11:19	49.0	6.76	15.28	2090	47.0	3.45	163	68.11	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:24	50.75	6.77	15.26	2090	46.5	3.43	162	68.11	
11:29	52.5	6.78	15.28	2090	43.3	3.42	163	68.11	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28I
Sample Date: 8/21/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 159
Screen Interval (feet TOIC):149-159
Initial Water Level (Feet TOIC):68.11
Final Water Level (feet TOIC):68.12
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-28I-SU13 & DUP
Purge Start Time: 9:25
Sample Time:10:30
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 9.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:30	2.5	7.65	18.03	1700	3.1	2.58	215	68.12	
9:35	5.0	7.36	16.12	1790	0.0	7.19	229	68.12	
9:45	10.0	6.45	15.94	1800	0.0	8.17	180	68.12	> 2 system volumes
9:55	15.0	6.28	15.76	1800	0.0	8.10	178	68.12	
10:05	20.0	6.26	15.72	1790	0.0	8.09	178	68.12	
10:15	22.5	6.25	15.73	1790	0.0	8.04	179	68.12	
10:20	25.0	6.25	15.72	1790	0.0	8.00	179	68.12	
10:25	27.5	6.26	15.72	1790	0.0	7.99	179	68.12	
									Duplicate Sample Collected
									MW-609-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28S
Sample Date: 8/21/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):65.45
Final Water Level (feet TOIC):65.46
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-28S-SU13
Purge Start Time: 11:06
Sample Time:11:58
Final Turbidity (NTUs) : 1.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:07	0.3	7.04	24.33	346	0.3	10.02	181	65.45	
11:08	0.6	6.09	18.13	203	1.3	7.16	190	65.46	
11:13	2.1	5.85	17.64	190	1.9	6.95	194	65.46	
11:18	3.6	5.70	17.26	189	2.6	6.81	197	65.46	
11:23	5.1	5.59	17.15	197	0.8	6.41	207	65.46	> 2 system volumes
11:28	6.6	5.59	17.07	198	3.1	6.28	211	65.46	
11:34	8.4	5.59	17.09	198	3.9	6.10	216	65.46	
11:39	9.9	5.60	17.04	197	3.1	6.14	222	65.46	
11:44	11.4	5.61	17.00	198	1.2	6.01	226	65.46	
11:49	12.9	5.60	17.01	197	1.2	6.06	227	65.46	
11:54	14.4	5.60	17.01	197	1.2	6.01	228	65.46	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-29S
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 76
Screen Interval (feet TOIC):66-86
Initial Water Level (Feet TOIC):63.19
Final Water Level (feet TOIC):63.21
Casing Type: **PVC** Steel (circle one)
Personnel: N. Walton

Sample ID: MW-29S-SU13
Purge Start Time: 9:30
Sample Time:10:20
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 390
Purge Rate d/sampling (ml/min): 190
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) CSIA
2x Pump System Volume (liters): 3.33

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:35	1.95	6.50	16.65	347	3.5	6.15	226	63.21	
9:40	3.9	6.50	16.31	351	2.6	6.14	231	63.21	> 2 system volumes
9:45	5.85	6.48	16.25	352	3.3	5.95	235	63.21	
9:50	7.8	6.47	16.15	352	2.7	5.99	237	63.21	
9:55	9.75	6.47	16.14	352	1.1	6.03	240	63.21	
10:00	11.7	6.48	16.06	351	0.2	5.90	242	63.21	
10:05	13.65	6.48	16.05	351	0.0	5.93	242	63.21	
10:10	15.6	6.48	16.05	351	0.0	5.84	243	63.21	
10:15	17.55	6.47	16.06	351	0.0	5.85	243	63.21	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30D
Sample Date: 8/28/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC):330-340
Initial Water Level (Feet TOIC):62.85
Final Water Level (feet TOIC):62.96
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-30D-SU13
Purge Start Time: 11:10
Sample Time:12:30
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 23.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:20	4.0	5.78	16.52	1000	0.0	1.80	214	62.96	
11:30	8.0	5.72	16.35	992	0.0	2.36	222	63.10	
11:40	12.0	5.67	16.09	998	0.0	3.67	233	63.30	
11:50	16.0	5.66	16.12	990	0.0	4.13	241	62.95	
12:00	20.0	5.64	15.81	982	0.0	4.23	237	62.96	
12:05	22.0	5.65	15.77	980	0.0	4.28	232	62.93	
12:10	24.0	5.65	15.98	977	0.0	4.33	226	62.96	> 2 system volumes
12:15	26.0	5.66	16.05	975	0.0	4.36	220	62.97	
12:20	28.0	5.66	15.95	975	0.0	4.37	214	62.98	
12:25	30.0	5.66	15.77	972	0.0	4.38	210	62.96	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30I
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):62.10
Final Water Level (feet TOIC):62.12
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-30I-SU13
Purge Start Time: 13:15
Sample Time:14:15
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 15.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:25	3.0	5.50	17.75	670	0.0	3.25	219	62.11	
13:35	6.0	5.67	17.82	673	0.0	2.56	207	62.12	
13:45	9.0	5.75	17.08	670	0.0	6.52	207	62.15	
13:50	10.5	5.83	17.03	670	0.0	6.63	206	62.14	
13:55	12.0	5.79	16.91	673	0.0	6.89	209	62.12	
14:00	13.5	5.78	16.81	674	0.0	6.97	211	62.13	
14:05	15.0	5.80	16.84	674	0.0	6.99	214	62.12	
14:10	16.5	5.80	16.81	673	0.0	7.05	216	62.12	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30S
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC):90-100
Initial Water Level (Feet TOIC):61.88
Final Water Level (feet TOIC):61.90
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-30S-SU13
Purge Start Time: 16:45
Sample Time:17:35
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300/150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:00	4.5	5.04	16.68	150	0.0	9.69	287	61.90	> 2 system volumes
17:05	6.0	4.87	17.15	147	0.0	9.54	300	61.89	
17:10	7.5	4.96	17.61	144	0.0	8.77	298	61.89	
17:15	8.25	4.93	18.09	146	0.0	8.73	305	61.88	Decreased flow rate to 150ml/min
17:20	9.0	4.86	18.12	148	0.0	8.58	312	61.89	
17:25	9.75	4.85	18.19	148	0.0	8.53	315	61.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-31D
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 330
Screen Interval (feet TOIC):320-330
Initial Water Level (Feet TOIC):62.68
Final Water Level (feet TOIC):62.72
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-31D-SU13
Purge Start Time: 8:50
Sample Time:10:45
Final Turbidity (NTUs) : 26.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300/400/200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 22.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:00	3.0	6.76	16.62	185	2.3	0.76	214	62.75	
9:10	6.0	7.03	16.37	176	5.8	0.61	195	62.77	
9:20	9.0	6.89	15.99	152	32.5	0.90	203	62.77	
9:30	12.0	5.92	16.15	173	800	2.75	212	62.71	
9:40	16.0	5.77	15.47	171	200	3.11	220	62.75	Increased flow rate to 400ml/min
9:50	20.0	5.78	15.37	168	89.0	3.20	222	62.78	
10:00	24.0	5.77	15.28	167	51.2	3.30	224	62.79	> 2 system volumes
10:05	26.0	5.77	15.24	167	48.7	3.25	225	62.75	
10:10	28.0	5.80	15.29	167	51.9	3.37	225	62.73	
10:15	30.0	5.77	15.26	167	41.3	3.25	226	62.78	
10:20	32.0	5.78	15.27	167	35.9	3.22	226	62.73	
10:25	34.0	5.78	15.26	167	31.4	3.21	228	62.75	
10:30	35.0	5.77	15.97	167	26.9	3.23	228	62.72	Decreased flow rate to 200ml/min
10:35	36.0	5.76	16.26	167	26.4	3.23	229	62.78	
10:40	37.0	5.76	16.40	167	26.0	3.21	229	62.72	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-31I
Sample Date: 8/23/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC):180-190
Initial Water Level (Feet TOIC):61.94
Final Water Level (feet TOIC):61.94
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-31I-SU13
Purge Start Time: 9:34
Sample Time:10:24
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.02

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:38	1.4	7.88	16.75	404	0.0	1.52	204	61.94	
9:43	3.15	7.90	16.00	399	0.0	0.57	168	61.94	
9:48	4.9	7.24	15.82	509	1.6	3.49	166	61.94	
9:53	6.65	6.48	15.60	516	1.5	4.92	176	61.94	
9:58	8.4	6.17	15.60	510	1.0	5.25	182	61.94	
10:03	10.15	6.03	15.60	510	0.4	5.45	187	61.94	
10:08	11.9	5.91	15.60	509	0.0	5.68	192	61.94	
10:13	13.65	5.86	15.58	508	0.1	5.84	199	61.94	> 2 system volumes
10:18	15.4	5.87	15.56	509	0.0	5.89	199	61.94	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-32D
Sample Date: 8/28/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 305
Screen Interval (feet TOIC):295-305
Initial Water Level (Feet TOIC):62.18
Final Water Level (feet TOIC):62.21
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-32D-SU13
Purge Start Time: 12:50
Sample Time:15:20
Final Turbidity (NTUs) : 31.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 440/220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 20.35

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:00	4.4	5.06	18.36	1810	5.1	1.75	404	62.21	
13:10	8.8	5.12	17.27	1810	4.3	2.28	233	62.21	
13:20	13.2	4.99	17.07	1820	207	3.97	338	62.21	
13:30	18.6	5.00	17.09	1810	165	4.32	368	62.21	
13:40	23.0	4.90	17.17	1830	112	4.32	394	62.21	> 2 system volumes
13:45	25.2	4.90	17.15	1830	108	4.32	394	62.21	
13:50	27.4	4.90	17.17	1830	94.8	4.33	396	62.21	
14:00	31.8	4.96	16.93	1820	79.8	4.34	401	62.21	
14:05	33.0	4.96	16.84	1820	74.2	4.35	405	62.21	
14:10	34.1	4.96	17.38	1820	77.8	4.33	406	62.21	Decreased flow rate to 220ml/min
14:20	36.2	4.98	17.45	1820	64.2	4.36	407	62.21	
14:30	38.4	4.97	17.48	1820	63.2	4.32	410	62.21	
14:40	40.6	4.96	17.49	1820	63.7	4.27	412	62.21	
14:50	42.8	4.96	17.36	1820	62.2	4.26	412	62.21	
15:00	45.0	5.00	17.28	1820	48.2	4.26	410	62.21	
15:05	46.1	4.99	17.28	1820	33.6	4.26	411	62.21	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:10	47.2	4.97	17.30	1820	34.1	4.24	413	62.21	
15:15	48.3	4.96	17.33	1820	31.9	4.24	413	62.21	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-33D
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 300
Screen Interval (feet TOIC):290-300
Initial Water Level (Feet TOIC):57.18
Final Water Level (feet TOIC):57.30
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-33D-SU13
Purge Start Time: 10:20
Sample Time:12:30
Final Turbidity (NTUs) : 39.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:21	0.2	5.82	17.38	520	12.0	0.79	240	57.21	
10:26	1.2	5.82	17.40	509	14.2	0.78	240	57.30	
10:31	2.2	5.80	17.39	510	12.3	0.74	228	57.30	
10:36	3.2	5.80	17.38	511	11.3	0.74	214	57.30	
10:41	4.2	5.92	17.55	513	12.3	0.67	215	57.30	
10:45	5.0	5.92	17.66	515	12.7	0.72	190	57.30	
10:55	7.0	5.87	17.69	515	17.4	0.67	192	57.30	
11:05	9.0	5.80	17.93	562	278	0.65	194	57.30	
11:15	11.0	5.83	17.92	626	360	0.59	194	57.30	
11:25	13.0	5.87	17.00	689	172	0.90	194	57.30	
11:35	15.0	5.82	16.69	678	88.2	0.68	200	57.30	
11:45	17.0	5.81	16.64	671	51.1	0.74	203	57.30	
11:55	19.0	5.77	16.67	658	33.1	0.91	206	57.30	
12:05	21.0	5.76	16.67	637	41.6	1.05	210	57.30	> 2 system volumes
12:10	22.0	5.78	16.67	627	38.0	1.56	195	57.30	
12:15	23.0	5.75	16.68	625	37.1	1.35	202	57.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:20	24.0	5.74	16.65	624	39.1	1.30	205	57.30	
12:25	25.0	5.74	16.64	624	39.4	1.30	208	57.30	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-33S
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):56.62
Final Water Level (feet TOIC):56.62
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-33S-SU13
Purge Start Time: 9:37
Sample Time:10:14
Final Turbidity (NTUs) : 3.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174), Isotopic Uranium
2x Pump System Volume (liters): 3.73

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:41	1.2	4.35	15.24	86	14.0	9.31	293	56.65	
9:46	2.7	4.02	15.39	83	9.6	9.02	319	56.65	
9:51	4.2	3.92	15.52	84	5.5	8.62	343	56.65	> 2 system volumes
9:56	5.7	3.91	15.56	84	3.3	8.77	343	56.65	
10:01	7.2	3.99	15.67	84	3.5	8.71	348	56.65	
10:06	8.7	3.96	15.82	84	3.2	8.49	353	56.65	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-34D
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC):270-280
Initial Water Level (Feet TOIC):57.55
Final Water Level (feet TOIC):57.96
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-34D-SU13
Purge Start Time: 13:29
Sample Time:15:45
Final Turbidity (NTUs) : 48.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:31	0.6	6.25	18.03	264	113	3.00	236	57.78	
13:42	3.9	6.19	17.24	262	6.3	2.28	231	57.96	
13:47	5.4	6.04	16.76	262	50.3	2.37	231	57.96	
13:52	6.9	6.05	16.71	261	87.5	2.83	231	57.96	
13:57	8.4	6.05	16.73	260	91.2	2.95	230	57.96	
14:02	9.9	6.05	16.74	261	127	3.10	230	57.96	
14:07	11.4	6.06	16.74	262	270	4.91	227	57.96	
14:12	12.9	6.06	16.74	262	256	4.97	227	57.96	
14:17	14.4	6.06	16.73	264	273	5.18	227	57.96	
14:22	15.9	6.10	17.00	264	261	5.47	232	57.96	
14:27	17.4	6.07	16.79	264	192	5.64	233	57.96	
14:32	18.9	6.06	16.79	264	198	5.65	234	57.96	
14:37	20.4	6.06	16.96	264	157	5.42	238	57.96	> 2 system volumes
14:42	21.9	6.06	16.72	264	122	5.51	240	57.96	
14:47	23.4	6.07	16.58	264	120	5.36	242	57.96	
14:52	24.9	6.13	17.05	262	87.2	6.37	235	57.96	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:57	26.4	6.11	16.76	263	90.9	6.24	238	57.96	
15:02	27.9	6.08	16.30	264	73.1	6.21	242	57.96	
15:07	29.4	6.07	16.30	264	75.2	6.16	242	57.96	
15:12	30.9	6.09	16.29	264	62.6	6.11	244	57.96	
15:17	32.4	6.07	16.50	264	47.9	6.08	246	57.96	
15:22	33.9	6.07	16.51	264	51.2	6.09	246	57.96	
15:27	35.4	6.08	16.30	264	50.6	6.06	246	57.96	
15:32	36.9	6.08	16.31	264	48.2	6.06	247	57.96	
15:37	38.4	6.08	16.30	264	48.3	6.06	247	57.96	
15:42	39.9	6.08	16.31	264	48.0	6.04	247	57.96	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-34S
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):57.67
Final Water Level (feet TOIC):57.67
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-34S-SU13
Purge Start Time: 13:30
Sample Time:14:10
Final Turbidity (NTUs) : 2.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 425
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.69

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:35	2.125	5.18	15.98	53	0.0	10.89	236	57.67	
13:40	4.25	5.08	15.41	51	0.0	9.98	242	57.67	> 2 system volumes
13:45	6.375	5.08	15.25	51	0.0	9.52	243	57.67	
13:50	8.5	5.13	15.22	52	2.2	9.45	242	57.67	
13:55	10.625	5.26	15.15	53	2.0	9.31	236	57.67	
14:00	12.75	5.24	15.11	53	2.1	9.21	236	57.67	
14:05	14.875	5.28	14.93	54	2.2	9.25	239	57.67	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-39S
Sample Date: 8/16/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 86
Screen Interval (feet TOIC):76-86
Initial Water Level (Feet TOIC):62.03
Final Water Level (feet TOIC):62.03
Casing Type: **PVC** Steel (circle one)
Personnel: N. Pargamos

Sample ID: MW-39S-SU13
Purge Start Time: 12:50
Sample Time:13:30
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.75

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:00	2.0	5.58	19.82	238	0.0	6.83	239	62.02	
13:05	3.0	5.56	19.51	246	0.0	6.87	242	62.00	
13:10	4.0	5.57	19.41	248	0.0	6.54	245	62.02	> 2 system volumes
13:15	5.0	5.57	19.32	247	0.0	6.49	247	62.01	
13:20	6.0	5.57	19.36	246	0.0	6.52	248	62.03	
13:25	7.0	5.57	19.65	245	0.0	6.22	248	62.03	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-41S
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 76
Screen Interval (feet TOIC):66-76
Initial Water Level (Feet TOIC):64.36
Final Water Level (feet TOIC):64.36
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-41S-SU13
Purge Start Time: 13:55
Sample Time:14:30
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) and Isotopic Uranium
2x Pump System Volume (liters): 3.48

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:02	3.5	6.36	15.67	375	0.0	7.40	162	64.36	
14:07	6.0	6.27	15.50	386	0.0	7.02	171	64.36	> 2 system volumes
14:12	8.5	6.28	15.39	389	0.0	6.80	175	64.36	
14:17	11.0	6.28	15.17	386	0.0	6.75	176	64.36	
14:22	13.5	6.29	15.33	389	0.0	6.78	178	64.36	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-42I
Sample Date: 8/16/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):64.57
Final Water Level (feet TOIC):64.57
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-42I-SU13
Purge Start Time: 11:23
Sample Time:12:13
Final Turbidity (NTUs) : 8.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) Isotopic Uranium
2x Pump System Volume (liters): 8.89

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:26	1.2	7.38	20.40	755	0.0	6.04	141	64.57	
11:31	3.2	7.17	18.01	446	9.9	4.65	153	64.57	
11:36	5.2	6.82	17.05	287	9.3	5.68	161	64.57	
11:41	7.2	6.54	16.54	250	12.6	5.94	170	64.57	
11:46	9.2	6.37	16.25	234	12.3	6.18	176	64.57	> 2 system volumes
11:51	11.2	6.25	16.15	238	11.4	6.44	181	64.57	
11:56	13.2	6.15	15.98	234	9.3	6.43	189	64.57	
12:01	15.2	6.13	15.90	230	9.4	6.45	191	64.57	
12:06	17.2	6.10	15.90	231	8.9	6.49	190	64.57	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-43S
Sample Date: 8/15/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 73
Screen Interval (feet TOIC):63-73
Initial Water Level (Feet TOIC):64.80
Final Water Level (feet TOIC):64.80
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-43S-SU13
Purge Start Time: 10:56
Sample Time:11:35
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 425
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) and Isotopic Uranium
2x Pump System Volume (liters): 3.34

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:02	2.55	6.33	15.02	621	0.0	7.50	194	64.80	
11:07	4.675	6.49	14.77	625	0.0	7.32	189	64.80	> 2 system volumes
11:12	6.8	6.52	14.65	627	0.0	7.36	189	64.80	
11:17	8.925	6.58	14.56	638	0.0	7.34	190	64.80	
11:22	11.05	6.59	14.47	634	0.0	7.35	189	64.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-44S
Sample Date: 8/16/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):63.48
Final Water Level (feet TOIC):63.49
Casing Type: **PVC** Steel (circle one)
Personnel: L. Roedl

Sample ID: MW-44S-SU13 & DUP
Purge Start Time: 11:29
Sample Time:12:13
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) Isotopic Uranium
2x Pump System Volume (liters): 3.46

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:33	2.0	6.62	17.37	321	0.0	9.82	224	63.49	
11:38	4.5	6.62	16.85	300	0.0	8.64	223	63.49	
11:43	7.0	6.64	16.59	300	0.0	8.41	221	63.49	
11:48	9.5	6.66	16.59	301	0.0	8.40	218	63.49	
11:53	12.0	6.68	16.58	301	0.0	8.41	215	63.49	> 2 system volumes
11:58	14.5	6.72	16.58	303	0.0	8.40	213	63.49	
12:03	17.0	6.73	16.57	304	0.0	8.21	212	63.49	
12:08	19.5	6.74	16.57	304	0.0	8.35	210	63.49	
									Duplicate Sample Collected
									MW-606-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-49S
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):64.65
Final Water Level (feet TOIC):64.67
Casing Type: **PVC** Steel (circle one)
Personnel: N. Pargamos

Sample ID: MW-49S-SU13
Purge Start Time: 15:30
Sample Time:17:00
Final Turbidity (NTUs) : 3.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200/150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.49

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:40	2.0	5.18	17.90	100	0.0	7.71	257	64.67	
15:45	3.0	5.06	17.53	88	0.0	7.82	262	64.66	
15:50	4.0	4.98	17.24	90	1.5	8.07	269	64.67	
15:55	5.0	4.92	18.20	91	2.8	6.94	274	64.68	
16:00	5.75	4.97	19.02	93	4.6	6.80	274	64.67	Decreased flow rate to 150ml/min
16:05	6.5	5.11	18.68	101	4.5	7.06	269	64.67	> 2 system volumes
16:10	7.25	5.13	18.80	105	4.3	6.94	270	64.67	
16:15	8.0	5.16	18.81	114	4.6	6.88	270	64.68	
16:20	8.75	5.19	18.93	118	4.4	7.01	271	64.68	
16:25	9.5	5.20	18.95	119	4.6	6.98	271	64.67	
16:30	10.25	5.21	19.05	125	4.8	7.00	272	64.67	
16:35	11.0	5.22	19.01	128	4.9	6.94	273	64.67	
16:40	11.75	5.24	18.76	137	3.4	6.85	276	64.68	
16:45	12.5	5.24	18.72	139	3.7	6.85	277	64.67	
16:50	13.25	5.21	18.76	140	3.6	6.90	279	64.67	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-50I
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):62.45
Final Water Level (feet TOIC):62.52
Casing Type: **PVC** Steel (circle one)
Personnel: N. Walton

Sample ID: MW-50I-SU13
Purge Start Time: 15:15
Sample Time:16:50
Final Turbidity (NTUs) : 1.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 410
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 7.07

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:20	2.05	5.58	17.01	378	70.1	5.25	268	62.52	
15:25	4.1	5.51	16.74	363	14.6	6.14	269	62.52	
15:30	6.15	5.51	16.62	362	8.2	6.24	270	62.52	
15:35	8.2	5.51	16.60	362	5.9	6.31	272	62.52	> 2 system volumes
15:40	10.25	5.52	16.54	362	4.8	6.13	274	62.52	
15:45	12.3	5.52	16.56	362	4.2	6.08	276	62.52	
15:50	14.35	5.54	16.57	362	3.7	6.02	276	62.52	
15:55	16.4	5.57	16.52	361	3.3	5.73	276	62.52	
16:00	18.45	5.60	16.47	361	3.0	5.56	274	62.52	
16:05	20.5	5.63	16.42	360	2.3	5.49	275	62.52	
16:10	22.55	5.63	16.42	359	1.9	5.27	273	62.52	
16:15	24.6	5.64	16.38	359	1.7	5.40	274	62.52	
16:20	28.65	5.64	16.38	358	1.7	5.37	273	62.52	
16:25	30.7	5.64	16.28	359	1.2	5.40	274	62.52	
16:30	32.75	5.64	16.25	359	1.1	5.44	275	62.52	
16:35	34.8	5.59	16.25	358	1.0	5.44	274	62.52	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:40	36.85	5.62	16.24	358	1.0	5.44	276	62.52	
16:45	38.9	5.63	16.24	358	1.0	5.44	276	62.52	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-51I
Sample Date: 8/19/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 140
Screen Interval (feet TOIC):130-140
Initial Water Level (Feet TOIC):61.42
Final Water Level (feet TOIC):61.46
Casing Type: **PVC** Steel (circle one)
Personnel: N. Walton

Sample ID: MW-51I-SU13
Purge Start Time: 12:20
Sample Time:14:20
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 370
Purge Rate d/sampling (ml/min): 210
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) Ferrous Iron
2x Pump System Volume (liters): 7.87

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:25	1.85	5.78	17.22	516	0.0	4.71	232	61.46	
12:30	3.7	5.74	17.02	514	0.0	4.33	236	61.46	
12:35	5.55	5.73	17.00	514	0.0	4.50	238	61.46	
12:40	7.4	5.73	17.01	516	0.0	4.51	240	61.46	
12:45	9.25	5.73	16.95	519	0.0	4.49	241	61.46	> 2 system volumes
12:50	11.1	5.70	16.93	522	0.0	4.40	244	61.46	
12:55	12.95	5.68	16.88	524	0.0	4.37	247	61.46	
13:00	14.8	5.68	16.89	525	0.0	4.34	249	61.46	
13:05	16.65	5.68	16.90	526	0.0	4.30	250	61.46	
13:10	18.5	5.69	16.95	526	0.0	4.40	250	61.46	
13:15	20.35	5.69	16.96	526	0.0	4.38	251	61.46	
13:20	22.2	5.68	16.65	535	0.7	4.79	255	61.46	
13:25	24.05	5.68	16.61	536	0.9	4.59	255	61.46	
13:30	25.9	5.49	16.55	538	0.0	4.72	268	61.46	
13:35	27.75	5.61	16.40	537	0.0	4.93	267	61.46	
13:40	29.6	5.67	16.40	536	0.0	4.75	265	61.46	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:45	31.45	5.66	16.23	535	0.0	4.71	267	61.46	
13:50	33.3	5.66	16.27	533	0.0	4.68	268	61.46	
13:55	35.15	---	---	---	---	---	---	61.46	Horiba was leaking so took apart
14:00	37.0	---	---	---	---	---	---	61.46	and reassemble
14:05	38.85	5.69	16.26	541	0.0	4.70	258	61.46	
14:10	40.7	5.63	16.31	538	0.0	4.83	262	61.46	
14:15	42.55	5.61	16.27	539	0.0	4.57	267	61.46	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-52D
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):59.29
Final Water Level (feet TOIC):58.58
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon & L. Roedl

Sample ID: MW-52D-SU13
Purge Start Time: 16:08
Sample Time:18:09
Final Turbidity (NTUs) : 25.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.34

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:12	1.0	5.34	14.67	180	9.0	2.95	246	59.29	
16:17	2.5	5.32	14.61	180	16.6	1.31	245	59.08	
16:22	4.0	5.27	15.29	246	20.2	1.03	245	58.91	
16:27	5.5	5.29	15.18	243	31.0	1.05	243	58.87	
16:32	7.0	5.29	15.17	208	63.1	1.01	243	58.87	
16:37	8.5	5.24	14.96	210	57.5	0.98	245	58.87	
16:42	10.0	5.22	14.85	215	76.5	1.00	246	58.87	
16:47	11.5	5.23	14.93	209	134	1.02	247	58.87	
16:52	13.0	5.25	14.92	205	240	1.00	244	58.87	
16:57	14.5	5.27	14.91	202	245	0.99	280	58.87	
17:02	16.0	5.31	16.37	191	243	1.35	284	58.87	
17:07	17.5	5.32	15.83	193	183	1.07	243	58.87	
17:12	19.0	5.36	15.79	193	128	1.06	243	58.87	
17:17	20.5	5.32	15.59	194	96.2	1.06	245	58.87	> 2 system volumes
17:22	22.0	5.33	15.20	195	65.8	1.03	244	58.87	
17:27	23.5	5.32	15.21	195	51.7	1.02	245	58.87	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:32	25.0	5.34	15.12	196	42.2	0.99	244	58.87	
17:37	26.5	5.38	15.12	196	28.6	0.99	242	58.87	
17:42	28.0	5.36	15.04	196	32.4	1.01	244	58.87	
17:47	29.5	5.36	14.99	196	32.2	0.99	243	58.87	
17:52	31.0	5.40	14.98	196	24.1	0.99	244	58.87	
17:57	32.5	5.35	14.43	199	24.5	1.01	246	58.87	
18:02	34.0	5.37	14.35	199	24.8	1.03	244	58.87	
18:07	35.5	5.38	14.35	200	25.1	1.00	245	58.87	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-53S
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC):70-80
Initial Water Level (Feet TOIC):58.06
Final Water Level (feet TOIC):58.06
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-53S-SU13
Purge Start Time: 11:08
Sample Time:12:06
Final Turbidity (NTUs) : 2.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs , Ni, CSIA
Total Uranium (ASTM-D5174), Isotopic Ur, Ferrous Fe
2x Pump System Volume (liters): 3.86

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:16	2.4	4.07	14.54	85	0.0	8.91	303	58.06	
11:21	3.9	4.51	15.36	89	2.3	7.23	288	58.06	> 2 system volumes
11:26	5.4	4.66	15.32	91	0.9	7.38	284	58.06	
11:31	6.9	4.89	15.22	98	2.4	7.34	276	58.06	
11:36	8.4	5.04	15.21	102	2.4	7.43	267	58.06	
11:41	9.9	5.10	15.23	105	2.4	7.47	265	58.06	
11:51	12.9	5.12	15.28	106	2.6	7.43	260	58.06	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-55S
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 95.5
Screen Interval (feet TOIC):85.5-95.5
Initial Water Level (Feet TOIC):57.26
Final Water Level (feet TOIC):57.26
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon & L. Roedl

Sample ID: MW-55S-SU13
Purge Start Time: 8:37
Sample Time:9:10
Final Turbidity (NTUs) : 5.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.48

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:41	2.0	6.87	14.61	539	0.0	8.04	220	57.26	
8:46	4.5	6.75	14.26	403	1.3	7.83	216	57.26	
8:51	7.0	6.57	14.06	394	4.4	7.72	215	57.26	> 2 system volumes
8:56	9.5	6.51	14.06	386	5.5	7.49	213	57.26	
9:01	12.0	6.50	14.04	379	5.1	7.59	210	57.26	
9:06	14.5	6.50	14.09	382	5.0	7.66	207	57.26	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-201-220
Sample Date: 8/28/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 220
Screen Interval (feet TOIC):210-220
Initial Water Level (Feet TOIC):63.00
Final Water Level (feet TOIC):63.01
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-201-220-SU13
Purge Start Time: 13:35
Sample Time:14:40
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 13.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:45	3.0	5.55	17.57	430	0.0	8.75	225	63.01	
13:55	6.0	5.74	17.04	438	0.0	9.20	233	63.00	
14:05	9.0	5.60	16.44	429	0.0	9.47	249	63.00	
14:10	10.5	5.59	16.38	428	0.0	9.49	254	63.00	
14:15	12.0	5.55	16.39	428	0.0	9.46	260	63.00	
14:20	13.5	5.53	16.44	426	0.0	9.41	267	63.02	
14:25	15.0	5.51	16.42	425	0.0	9.39	272	63.01	> 2 system volumes
14:30	16.5	5.50	16.32	425	0.0	9.34	277	63.01	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-220
Sample Date: 8/22/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 220
Screen Interval (feet TOIC):210-220
Initial Water Level (Feet TOIC):56.24
Final Water Level (feet TOIC):56.24
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-202-220-SU13
Purge Start Time: 16:00
Sample Time:17:10
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 14.13

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:10	3.0	5.94	15.80	199	0.0	7.68	238	56.24	
16:20	6.0	5.82	15.39	201	0.0	6.96	254	56.24	
16:30	9.0	5.71	15.36	197	0.0	6.45	271	56.24	
16:40	12.0	5.61	15.39	193	0.0	6.42	290	56.24	
16:50	15.0	5.57	15.16	191	0.0	6.47	306	56.24	> 2 system volumes
16:55	16.5	5.56	15.21	189	0.0	6.45	301	56.24	
17:00	18.0	5.54	15.14	189	0.0	6.48	305	56.24	
17:05	19.5	5.52	15.22	188	0.0	6.40	309	56.24	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-380
Sample Date: 8/22/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):56.87
Final Water Level (feet TOIC):56.87
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-202-380-SU13
Purge Start Time: 13:40
Sample Time:15:15
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 360
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and CSIA
2x Pump System Volume (liters): 26.24

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:50	3.6	6.06	15.67	312	0.0	5.51	165	56.87	
14:10	10.8	5.78	15.25	312	0.0	6.12	222	56.87	
14:30	18.0	5.79	15.15	308	0.0	6.14	247	56.87	
14:50	25.2	5.76	15.04	307	0.0	6.14	262	56.87	
14:55	27.0	5.76	15.04	306	0.0	6.17	268	56.87	> 2 system volumes
15:00	28.8	5.75	15.00	306	0.0	6.13	271	56.87	
15:05	30.6	5.72	15.05	306	0.0	6.18	270	56.87	
15:10	32.4	5.73	15.01	305	0.0	6.16	271	56.87	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-495
Sample Date: 8/28/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 495
Screen Interval (feet TOIC):485-495
Initial Water Level (Feet TOIC):57.64
Final Water Level (feet TOIC):58.02
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MW-202-495-SU13
Purge Start Time: 11:25
Sample Time:13:15
Final Turbidity (NTUs) : 8.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 38.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:35	4.5	11.41	15.60	366	1.1	8.51	111	58.02	
11:45	9.0	11.78	15.34	617	7.2	7.65	98	58.02	
11:55	13.5	12.34	15.23	935	7.2	6.61	69	58.02	
12:05	18.0	11.93	15.35	480	7.5	3.21	40	58.02	
12:15	22.5	11.83	15.61	435	6.6	3.16	32	58.02	
12:25	27.0	11.57	15.04	378	7.4	3.08	25	58.02	
12:35	31.5	11.36	15.11	368	7.4	3.48	27	58.02	
12:45	36.0	11.40	15.03	360	7.7	3.32	22	58.02	
12:55	40.5	11.37	14.96	357	7.4	3.29	26	58.02	> 2 system volumes
13:00	42.75	11.35	14.89	355	7.6	3.27	33	58.02	
13:05	45.0	11.34	14.83	353	7.8	3.29	34	58.02	
13:10	47.25	11.35	14.81	352	8.0	3.31	32	58.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-160
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC):150-160
Initial Water Level (Feet TOIC):60.01
Final Water Level (feet TOIC):60.06
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MW-203-160-SU13
Purge Start Time: 10:45
Sample Time:11:50
Final Turbidity (NTUs) : 26.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400/300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 9.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:50	2.0	6.61	17.99	266	11.0	3.07	223	60.04	
10:55	4.0	6.48	17.89	266	13.3	2.96	229	60.04	
11:00	6.0	6.13	17.91	264	29.3	2.97	250	60.04	
11:05	8.0	5.87	18.09	261	41.0	3.07	263	60.04	
11:10	9.5	5.74	18.30	261	42.5	3.10	268	60.03	Decreased flow rate to 300ml/min
11:15	11.0	5.67	18.36	262	40.9	3.09	273	60.03	> 2 system volumes
11:20	12.5	5.65	18.38	261	37.7	3.08	275	60.03	
11:25	14.0	5.61	18.44	261	31.5	2.97	279	60.03	
11:30	15.5	5.50	18.42	260	26.7	2.89	282	60.03	
11:35	17.0	5.49	18.48	259	26.5	2.83	285	60.03	
11:40	18.5	5.48	18.41	259	26.5	2.81	287	60.06	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-360
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 360
Screen Interval (feet TOIC):350-360
Initial Water Level (Feet TOIC):60.87
Final Water Level (feet TOIC):60.94
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MW-203-360-SU13
Purge Start Time: 8:25
Sample Time:10:10
Final Turbidity (NTUs) : 29.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium and CSIA
2x Pump System Volume (liters): 24.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:20	22.0	11.48	15.53	570	37.0	3.96	38	60.94	
9:25	24.0	11.42	15.47	557	36.1	4.15	38	60.94	
9:30	26.0	11.29	15.53	508	33.9	4.15	42	60.94	> 2 system volumes
9:35	28.0	11.22	15.53	501	31.2	4.30	42	60.94	
9:40	30.0	11.14	15.48	495	29.9	4.22	46	60.94	
9:45	32.0	11.11	15.46	493	29.6	4.31	48	60.94	
9:50	34.0	11.12	15.43	492	30.1	4.33	47	60.94	
9:55	36.0	11.13	15.46	490	29.1	4.35	50	60.94	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-440
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 440
Screen Interval (feet TOIC):430-440
Initial Water Level (Feet TOIC):60.40
Final Water Level (feet TOIC):60.40
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-203-440-SU13
Purge Start Time: 8:10
Sample Time:9:50
Final Turbidity (NTUs) : 0.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 30.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:20	4.0	8.76	16.26	201	0.0	1.59	96	60.40	
8:30	8.0	7.45	15.99	201	6.1	2.38	105	60.40	
8:40	12.0	6.15	15.85	215	5.7	4.95	157	60.40	
8:50	16.0	6.17	15.85	210	2.5	5.60	194	60.40	
9:00	20.0	6.03	15.81	207	1.9	5.89	200	60.40	
9:10	24.0	5.98	15.86	206	1.6	5.91	211	60.40	
9:20	28.0	5.86	15.82	203	1.3	5.92	206	60.40	
9:30	32.0	5.85	15.82	202	1.1	5.99	209	60.40	> 2 system volumes
9:35	34.0	5.85	15.80	202	0.8	6.02	211	60.40	
9:40	36.0	5.83	15.76	201	0.9	6.04	212	60.40	
9:45	38.0	5.81	15.74	200	0.8	6.03	212	60.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-204-320
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):61.47
Final Water Level (feet TOIC):61.52
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-204-320-SU13
Purge Start Time: 13:40
Sample Time:15:00
Final Turbidity (NTUs) : 4.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 21.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:45	2.0	11.04	17.76	1040	23.0	2.86	36	61.52	
13:50	4.0	11.36	17.66	1090	26.0	2.36	1	61.52	
14:00	6.0	12.36	17.54	2010	15.5	2.49	59	61.52	
14:10	10.0	12.36	17.81	1970	8.8	2.45	-65	61.52	
14:35	20.0	12.13	18.02	1540	5.0	3.66	-49	61.52	
14:45	24.0	12.04	18.14	1470	4.0	3.90	-45	61.52	> 2 system volumes
14:50	26.0	12.01	18.23	1440	4.4	4.09	-42	61.52	
14:55	28.0	11.98	18.14	1430	4.0	4.21	-41	61.52	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-204-470
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):61.82
Final Water Level (feet TOIC):61.82
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-204-470-SU13
Purge Start Time: 13:40
Sample Time:15:45
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 32.86

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:45	2.0	11.56	18.00	743	2.2	1.56	-206	61.82	
13:50	4.0	11.58	17.50	721	1.9	1.08	-202	61.82	
13:55	6.0	11.58	17.15	673	1.1	0.82	-179	61.82	
14:00	8.0	11.55	17.10	720	7.1	0.73	-149	61.82	
14:30	20.0	11.88	17.05	1430	1.0	2.68	-75	61.82	
15:00	32.0	11.58	16.70	943	0.0	4.32	-41	61.82	
15:05	34.0	11.52	16.63	897	0.0	4.33	-36	61.82	> 2 system volumes
15:10	36.0	11.54	16.64	841	0.0	4.38	-34	61.82	
15:15	38.0	11.50	16.67	795	0.0	4.58	-30	61.82	
15:20	40.0	11.46	16.61	766	0.0	4.64	-32	61.82	
15:25	42.0	11.48	16.60	721	0.0	4.70	-30	61.82	
15:30	44.0	11.48	16.58	709	0.0	4.75	-29	61.82	
15:35	46.0	11.47	16.64	701	0.0	4.78	-30	61.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-205-285
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):64.05
Final Water Level (feet TOIC):66.27
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MW-205-285-SU13
Purge Start Time: 13:00
Sample Time:16:55
Final Turbidity (NTUs) : 46.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 450/250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
2x Pump System Volume (liters): 18.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:10	4.5	11.98	16.72	2740	23.5	11.10	-10	67.50	
13:20	9.0	12.36	16.46	2760	10.9	10.56	-85	68.17	
13:25	11.25	12.37	16.61	2680	9.4	3.13	-91	68.22	
13:30	12.5	12.31	17.30	2560	8.0	4.90	-97	67.08	Decreased flow rate to 250ml/min
13:35	13.75	12.32	16.97	2560	8.7	3.46	-96	66.88	
13:40	15.0	12.29	16.97	2550	10.0	3.37	-100	66.76	
13:50	17.5	12.23	17.07	2460	30.1	3.23	-105	66.48	
13:55	18.75	12.25	17.08	2510	141	3.28	-104	66.42	> 2 system volumes
14:05	21.25	12.14	17.01	2210	229	2.75	-113	66.46	
14:15	23.75	12.06	16.89	2120	231	2.68	-113	67.08	
14:25	26.25	11.98	16.55	2020	233	6.61	-119	67.19	
14:35	28.75	11.85	17.14	2000	151	6.86	-116	66.22	
14:40	30.0	11.81	17.78	2020	183	6.60	-115	66.27	
14:50	32.5	11.80	17.38	2060	190	2.19	-114	66.29	
14:55	33.75	11.80	17.22	2060	166	2.36	-112	66.29	
15:00	35.0	11.82	17.08	2180	235	2.36	-109	66.27	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:05	36.25	11.82	17.10	2190	249	2.39	-100	66.27	
15:15	38.75	11.72	16.83	2080	187	2.29	-106	66.27	
15:25	41.24	11.70	16.96	2050	170	2.24	-106	66.27	
15:30	42.5	11.65	16.98	2040	150	2.28	-106	66.27	
15:40	45.0	11.56	16.84	2020	114	2.25	-106	66.27	
15:50	47.5	11.54	16.80	2010	115	2.25	-106	66.27	
16:00	50.0	11.45	16.90	1910	177	2.71	-99	66.27	
16:10	52.5	11.46	16.82	1900	105	2.59	-102	66.27	
16:20	55.0	11.43	16.72	1890	81.2	2.51	-105	66.27	
16:25	56.25	11.41	16.64	1870	66.1	2.66	-106	66.27	
16:30	57.5	11.41	16.59	1870	58.5	2.59	-107	66.27	
16:35	58.75	11.40	16.57	1870	52.1	2.57	-108	66.27	
16:40	60.0	11.39	16.51	1870	48.6	2.61	-106	66.27	
16:45	61.25	11.40	16.49	1870	48.5	2.59	-107	66.27	
16:50	62.5	11.41	16.51	1860	46.4	2.57	-107	66.27	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-205-470
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):64.42
Final Water Level (feet TOIC):64.67
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-205-470-SU13
Purge Start Time: 12:45
Sample Time:14:25
Final Turbidity (NTUs) : 3.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 440
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 32.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:55	4.4	9.51	17.40	207	0.0	3.29	114	64.67	
13:05	8.8	9.43	16.76	206	0.0	1.69	122	64.67	
13:15	13.2	10.74	16.49	365	3.0	2.02	17	64.67	
13:25	17.6	10.39	16.35	263	4.5	3.46	54	64.67	
13:35	22.0	10.15	16.17	225	4.0	3.94	71	64.67	
13:45	26.4	9.75	16.08	209	3.6	4.18	74	64.67	
13:55	30.8	9.76	16.25	204	3.5	4.44	84	64.67	
14:00	33.0	9.70	16.25	203	3.1	4.51	83	64.67	> 2 system volumes
14:05	35.2	9.66	16.25	204	3.3	4.61	85	64.67	
14:10	37.4	9.57	16.20	203	3.1	4.74	90	64.67	
14:15	39.6	9.58	16.22	204	3.0	4.65	92	64.67	
14:20	41.8	9.58	16.18	205	3.0	4.70	91	64.67	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-206-320
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):63.40
Final Water Level (feet TOIC):63.44
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-206-320-SU13
Purge Start Time: 14:35
Sample Time:16:00
Final Turbidity (NTUs) : 0.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 21.43

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:40	1.75	9.61	18.54	578	0.0	2.17	-168	63.44	
14:45	3.5	9.13	18.24	580	9.6	2.34	-79	63.44	
15:15	14.0	5.91	17.81	612	0.0	3.18	162	63.44	
15:35	20.0	5.27	17.99	621	0.0	3.36	204	63.44	
15:45	23.5	5.18	17.91	621	0.3	3.44	220	63.44	> 2 system volumes
15:50	25.25	5.17	17.94	622	0.1	3.47	222	63.44	
15:55	27.0	5.16	17.93	621	0.2	3.25	226	63.44	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-206-470
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):63.53
Final Water Level (feet TOIC):63.53
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-206-470-SU13
Purge Start Time: 14:40
Sample Time:16:30
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 32.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:55	5.0	7.91	17.30	741	6.4	3.73	126	63.53	Had to adjust flow rate.
15:00	7.0	7.84	16.85	733	4.2	4.32	125	63.53	
15:05	9.0	7.64	17.42	598	2.0	4.30	114	63.53	
15:30	19.0	6.61	16.97	501	0.0	4.81	101	63.53	
16:00	31.0	6.30	16.86	561	0.0	4.69	137	63.53	
16:05	33.0	6.29	16.70	575	0.0	5.30	134	63.53	> 2 system volumes
16:10	35.0	6.26	16.65	584	0.0	5.32	135	63.53	
16:15	37.0	6.20	16.54	590	0.0	5.31	142	63.53	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-170
Sample Date: 8/23/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC):160-170
Initial Water Level (Feet TOIC):56.59
Final Water Level (feet TOIC):57.28
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MW-207-170-SU13
Purge Start Time: 14:25
Sample Time:15:35
Final Turbidity (NTUs) : 1.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) and CSIA
2x Pump System Volume (liters): 10.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:40	4.5	4.91	16.72	204	8.2	4.22	273	57.28	
14:50	7.5	4.97	16.51	203	5.5	3.76	292	57.28	
15:00	10.5	4.95	16.44	202	2.8	3.50	292	57.28	> 2 system volumes
15:05	12.0	4.93	16.35	201	2.4	3.43	291	57.28	
15:10	13.5	4.92	16.29	201	2.1	3.44	294	57.28	
15:15	15.0	4.92	16.25	201	1.4	3.37	297	57.28	
15:20	16.5	4.93	16.27	200	1.4	3.25	298	57.28	
15:25	18.0	4.93	16.28	200	1.3	3.23	298	57.28	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-250
Sample Date: 8/23/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 250
Screen Interval (feet TOIC):240-250
Initial Water Level (Feet TOIC):57.00
Final Water Level (feet TOIC):57.00
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-207-250-SU13
Purge Start Time: 11:45
Sample Time:12:40
Final Turbidity (NTUs) : 0.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 16.38

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:55	5.0	5.42	16.59	290	36.0	5.28	194	57.00	
12:05	10.0	5.19	16.19	293	2.4	7.04	254	57.00	
12:15	15.0	5.18	16.12	292	1.9	7.05	286	57.00	
12:20	17.5	5.18	15.85	291	1.4	7.00	296	57.00	> 2 system volumes
12:25	20.0	5.17	15.90	291	0.9	7.02	290	57.00	
12:30	22.5	5.19	15.87	290	0.7	7.03	295	57.00	
12:35	25.0	5.18	15.82	290	0.7	7.07	296	57.00	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-320
Sample Date: 8/23/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):57.16
Final Water Level (feet TOIC):57.26
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-207-320-SU13 & DUP
Purge Start Time: 9:10
Sample Time:11:25
Final Turbidity (NTUs) : 2.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.68

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:20	4.0	9.82	16.62	298	0.0	1.87	-22	57.26	
9:30	8.0	6.26	16.19	402	18.3	1.22	-17	57.26	
9:40	12.0	5.85	16.13	408	12.1	2.41	49	57.26	
9:50	16.0	5.59	16.00	387	6.4	3.13	70	57.26	
10:00	20.0	5.64	16.00	377	4.8	3.55	95	57.26	
10:05	22.0	5.59	16.00	370	3.3	3.67	110	57.26	> 2 system volumes
10:10	24.0	5.57	15.93	366	2.7	3.75	111	57.26	
10:15	26.0	5.53	15.84	366	2.6	3.80	128	57.26	
10:20	28.0	5.51	15.91	365	2.5	3.87	125	57.26	
10:25	30.0	5.50	15.88	364	2.4	3.85	130	57.26	
10:30	---	---	---	---	---	---	---	57.26	MP50 lost power – Called for new
10:45	32.0	5.53	15.94	361	2.3	4.70	140	57.26	
10:50	34.0	---	---	---	---	---	---	57.26	MP50 lost power – Called for new
11:05	36.0	5.51	16.01	366	2.1	4.50	141	57.26	
11:10	38.0	5.51	15.75	369	2.0	4.07	133	57.26	
11:15	40.0	5.50	15.58	369	1.9	4.07	134	57.26	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:20	42.0	5.49	15.55	368	2.0	4.08	130	57.26	
									Duplicate Sample Collected
									MW-613-SU13

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-208-350
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 350
Screen Interval (feet TOIC):340-350
Initial Water Level (Feet TOIC):55.86
Final Water Level (feet TOIC):55.86
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-208-350-SU13
Purge Start Time: 9:20
Sample Time:11:30
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA
2x Pump System Volume (liters): 24.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:25	1.4	7.31	18.02	1720	0.0	2.80	220	55.86	
9:30	2.8	7.38	17.69	1710	0.0	1.97	190	55.86	
9:35	4.2	7.50	17.53	1690	0.0	1.25	87	55.86	
10:00	9.8	5.93	17.31	1670	1.8	0.65	94	55.86	
10:30	18.2	5.77	17.70	1670	0.0	0.49	139	55.86	
10:55	25.2	5.76	18.48	1670	0.0	0.42	151	55.86	> 2 system volumes
11:00	26.6	5.75	18.66	1660	0.0	0.44	153	55.86	
11:05	28.0	5.75	18.82	1670	0.0	0.44	155	55.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-208-540
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):310-320
Initial Water Level (Feet TOIC):63.40
Final Water Level (feet TOIC):63.44
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-208-540-SU13 & DUP
Purge Start Time: 9:35
Sample Time:11:25
Final Turbidity (NTUs) : 13.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 38.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:40	2.5	12.16	16.18	845	0.0	3.10	7	56.62	
9:45	5.0	12.12	16.13	836	0.9	3.16	-53	56.65	
9:50	7.5	12.10	16.07	805	87.5	3.24	-59	56.65	
10:15	20.0	12.41	16.01	1090	14.5	9.00	-34	56.65	
10:35	30.0	12.13	15.95	760	8.7	8.43	-18	56.65	> 2 system volumes
10:45	35.0	12.06	16.04	701	11.3	8.65	-15	56.65	
10:50	37.5	12.00	16.13	665	10.9	10.02	88	56.65	
10:55	40.0	11.74	16.15	625	10.9	10.39	13	56.65	
11:00	42.5	11.89	16.20	587	11.0	11.46	-2	56.65	
11:05	45.0	11.85	16.51	568	2.0	11.10	-3	56.65	
11:10	46.0	11.88	17.08	536	13.5	10.95	-3	56.65	Decreased flow rate to 200ml/min
11:15	47.0	11.78	17.22	531	13.6	10.92	-3	56.65	
11:20	48.0	11.95	17.18	521	13.6	11.02	-2	56.65	
									Duplicate Sample Collected
									MW-614-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-209-380
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):40.53
Final Water Level (feet TOIC):40.54
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MW-209-380-SU13
Purge Start Time: 8:45
Sample Time:10:30
Final Turbidity (NTUs) : 28.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500/300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and CSIA
2x Pump System Volume (liters): 26.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:55	5.0	12.09	14.37	1310	123	7.38	-1	40.56	
9:05	10.0	12.09	14.33	1150	108	6.90	-17	40.56	
9:15	15.0	11.78	14.18	718	80.2	5.49	-36	40.56	
9:25	20.0	11.43	14.20	586	75.3	5.16	-30	40.56	
9:35	25.0	10.62	14.21	526	66.5	4.70	-2	40.56	
9:45	30.0	10.32	14.23	530	63.0	4.49	10	40.56	> 2 system volumes
9:55	33.0	10.08	14.78	534	47.7	4.24	19	40.54	Decreased flow rate to 300ml/min
10:00	34.5	9.99	14.75	536	42.3	4.16	21	40.54	
10:05	36.0	9.98	14.73	539	31.5	4.10	21	40.54	
10:10	37.5	10.02	14.82	541	29.2	4.06	19	40.54	
10:15	39.0	10.01	14.87	542	28.5	3.99	20	40.54	
10:20	40.5	10.00	14.88	542	28.7	3.95	18	40.54	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-209-530
Sample Date: 8/26/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 530
Screen Interval (feet TOIC):520-530
Initial Water Level (Feet TOIC):41.10
Final Water Level (feet TOIC):41.28
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: MW-209-530-SU13 & MS/MSD
Purge Start Time: 18:40
Sample Time:10:25
Final Turbidity (NTUs) : 5.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 460
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 18.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:50	4.6	8.96	15.14	227	0.9	2.42	229	41.28	
9:00	9.2	10.50	14.86	362	9.3	2.63	142	41.28	
9:10	13.8	11.80	14.71	1340	10.1	3.33	-33	41.28	
9:20	18.4	11.25	14.72	692	7.7	4.91	-52	41.28	
9:30	23.0	11.18	14.74	467	8.1	5.43	-29	41.28	> 2 system volumes
9:40	27.6	10.72	14.64	352	6.9	6.04	-21	41.28	
9:50	32.2	10.52	14.60	309	6.1	6.17	-9	41.28	
10:00	36.8	10.39	14.58	281	5.4	6.21	14	41.28	
10:05	39.1	10.40	14.55	271	5.7	6.37	12	41.28	
10:10	41.4	10.42	14.56	264	5.7	6.32	14	41.28	
10:15	43.7	10.44	14.61	268	5.8	6.32	15	41.28	
10:20	46.0	10.42	14.59	263	5.7	6.34	14	41.28	
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-280
Sample Date: 8/23/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC):270-280
Initial Water Level (Feet TOIC):47.01
Final Water Level (feet TOIC):47.00
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & N. Parganos

Sample ID: MW-210-280-SU13
Purge Start Time: 11:00
Sample Time:12:05
Final Turbidity (NTUs) : 1.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 19.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:10	5.0	4.88	14.84	289	0.3	1.38	269	47.02	
11:20	10.0	4.84	14.76	315	1.4	1.26	270	47.02	
11:30	15.0	4.82	14.78	308	0.7	2.16	276	47.05	
11:35	17.5	4.81	14.79	306	1.3	2.08	273	47.09	
11:40	20.0	4.79	14.80	306	1.2	2.00	277	47.02	> 2 system volumes
11:45	22.5	4.82	14.86	306	1.0	1.93	275	47.01	
11:50	25.0	4.83	14.90	305	1.0	1.76	269	47.02	
11:55	27.5	4.82	14.99	306	1.1	1.65	269	47.00	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-380
Sample Date: 8/23/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC):370-380
Initial Water Level (Feet TOIC):46.97
Final Water Level (feet TOIC):47.02
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & N. Parganos

Sample ID: MW-210-380-SU13
Purge Start Time: 9:25
Sample Time:10:40
Final Turbidity (NTUs) : 1.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and CSIA
2x Pump System Volume (liters): 26.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:40	7.5	6.00	14.41	910	25.7	2.19	201	46.98	
9:50	12.5	5.75	14.40	918	4.2	2.21	203	47.02	
10:00	17.5	5.57	14.37	919	1.6	2.23	211	47.07	
10:10	22.5	5.47	14.36	922	1.4	2.26	218	47.05	
10:15	25.0	5.43	14.35	919	1.2	2.45	223	47.04	
10:20	27.5	5.44	14.36	918	1.3	2.46	228	47.04	> 2 system volumes
10:25	30.0	5.45	14.35	918	1.5	2.45	234	47.03	
10:30	32.5	5.42	14.37	918	1.2	2.46	237	47.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-470
Sample Date: 8/23/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):460-470
Initial Water Level (Feet TOIC):47.21
Final Water Level (feet TOIC):47.22
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & N. Parganos

Sample ID: MW-210-470-SU13
Purge Start Time: 9:30
Sample Time:12:20
Final Turbidity (NTUs) : 4.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400/200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)

2x Pump System Volume (liters): 33.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:40	4.0	11.22	14.36	618	0.0	2.61	162	47.91	
9:50	8.0	11.17	14.26	776	48.9	2.04	149	47.87	
10:00	12.0	12.14	14.23	153	8.5	5.26	92	47.87	
10:10	16.0	12.15	14.20	142	14.5	1.87	77	47.81	
10:20	20.0	12.06	14.22	127	17.1	2.33	64	47.87	
10:30	24.0	12.03	14.26	114	17.5	2.60	47	47.73	
10:40	28.0	11.95	14.24	103	14.8	3.20	34	47.82	
10:50	32.0	11.91	14.29	927	12.6	4.29	20	47.72	
10:55	34.0	11.87	14.34	894	16.2	5.76	13	47.72	> 2 system volumes
11:00	36.0	11.81	14.36	851	15.2	9.41	4	47.79	
11:05	38.0	11.79	14.45	837	15.0	4.36	-1	47.69	
11:10	39.0	11.73	15.74	808	7.3	4.98	-10	47.33	Decreased flow rate to 200ml/min
11:15	40.0	11.71	16.15	811	7.0	4.73	-13	47.32	
11:20	41.0	11.71	16.44	793	10.2	6.79	-23	47.29	
11:25	42.0	11.70	16.55	783	15.1	4.38	-27	47.35	
11:30	43.0	11.72	16.74	769	17.5	4.77	-32	47.31	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:35	44.0	11.70	17.33	762	10.6	4.47	-32	47.32	
11:40	45.0	11.69	17.40	755	6..2	4.33	-32	47.35	
11:45	46.0	11.68	17.41	749	4.8	4.46	-33	47.31	
11:50	47.0	11.67	17.38	741	0.9	4.50	-33	47.32	
11:55	48.0	11.65	17.77	735	1.7	4.32	-34	47.30	
12:00	49.0	11.65	18.04	731	4.7	4.25	-34	47.25	
12:05	50.0	11.64	18.45	724	4.9	4.09	-34	47.25	
12:10	51.0	11.62	18.52	718	4.8	3.97	-34	47.22	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-190
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC):180-190
Initial Water Level (Feet TOIC):51.78
Final Water Level (feet TOIC):51.76
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-211-190-SU13
Purge Start Time: 8:35
Sample Time:9:35
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 320
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 12.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:40	1.6	5.91	17.15	443	1.7	2.66	184	51.76	
8:45	3.2	5.93	17.09	450	0.0	2.53	167	51.76	
9:00	8.0	5.99	17.04	451	0.0	2.43	147	51.76	
9:05	9.6	6.00	17.10	448	0.0	2.32	148	51.76	
9:10	11.2	6.03	17.16	443	0.0	2.24	155	51.76	
9:15	12.8	6.03	17.11	442	0.0	2.28	157	51.76	> 2 system volumes
9:20	14.4	6.01	17.08	440	0.0	2.23	159	51.76	
9:25	16.0	6.02	17.15	437	0.0	2.21	158	51.76	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-250
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 250
Screen Interval (feet TOIC):240-250
Initial Water Level (Feet TOIC):52.02
Final Water Level (feet TOIC):52.02
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-211-250-SU13
Purge Start Time: 10:05
Sample Time:11:15
Final Turbidity (NTUs) : 0.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 16.56

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:10	1.5	6.63	17.40	646	0.0	2.17	-113	52.02	
10:15	3.0	6.40	17.65	648	0.0	2.16	-58	52.02	
10:20	4.445	6.31	17.74	648	10.2	2.34	-14	52.02	
10:25	6.0	6.24	17.87	641	17.3	2.29	23	52.02	
10:55	15.0	6.19	17.49	638	0.4	2.03	89	52.02	
11:00	16.5	6.19	17.53	642	0.2	1.96	94	52.02	
11:05	18.0	6.18	17.35	645	0.2	1.86	98	52.02	> 2 system volumes
11:10	19.5	6.18	17.46	647	0.1	1.80	103	52.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-455
Sample Date: 8/27/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 455
Screen Interval (feet TOIC):445-455
Initial Water Level (Feet TOIC):52.98
Final Water Level (feet TOIC):54.20
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale

Sample ID: MW-211-455-SU13
Purge Start Time: 8:35
Sample Time:11:30
Final Turbidity (NTUs) : 14.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 32.06

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:40	1.7	11.51	17.17	876	2.4	3.73	-236	54.20	
8:45	3.4	11.49	17.01	905	0.0	1.43	-262	54.20	
8:50	5.1	11.50	16.81	916	0.0	1.08	-255	54.20	
9:30	18.7	11.84	16.65	1410	21.7	0.28	-627	54.20	
10:00	28.9	11.73	16.57	1160	18.4	0.23	-409	54.20	
10:05	30.6	11.67	16.54	1130	18.1	0.25	-337	54.20	
10:10	32.3	11.64	16.60	1110	16.6	0.27	-272	54.20	> 2 system volumes
10:15	34.0	11.65	16.70	1060	16.3	0.38	-242	54.20	
10:20	35.7	11.66	16.78	1040	16.4	0.39	-218	54.20	
10:25	37.4	11.64	16.78	1020	15.8	0.48	-207	54.20	
10:30	39.1	11.60	16.79	999	15.1	0.70	-188	54.20	
10:35	40.8	11.61	16.80	990	15.9	0.80	-181	54.20	
10:40	42.5	11.61	16.89	969	18.0	0.97	-172	54.20	
10:45	44.2	11.60	16.92	952	17.5	1.10	-159	54.20	
10:50	45.9	11.58	17.00	937	17.5	1.26	-152	54.20	
10:55	47.6	11.54	17.11	924	23.2	1.60	-140	54.20	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:00	49.3	11.49	16.93	924	16.5	1.66	-133	54.20	
11:05	51.0	11.50	16.99	913	18.0	1.87	-132	54.20	
11:10	52.7	11.51	16.95	897	13.0	1.90	-129	54.20	
11:15	54.4	11.50	16.97	889	13.6	2.06	-127	54.20	
11:20	56.1	11.43	16.95	879	14.0	2.09	-122	54.20	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-212-580
Sample Date: 8/20/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 580
Screen Interval (feet TOIC):570-580
Initial Water Level (Feet TOIC):47.53
Final Water Level (feet TOIC):47.65
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: MW-212-580-SU13 & MS/MSD
Purge Start Time: 15:30
Sample Time:17:20
Final Turbidity (NTUs) : 34.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 460
Purge Rate d/sampling (ml/min): 210
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 41.75

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:40	4.6	7.18	15.92	282	0.0	5.90	154	47.71	
15:50	9.2	7.08	15.88	276	0.0	5.81	152	47.70	
16:00	13.8	6.80	15.75	295	0.0	5.85	173	47.70	
16:30	27.6	6.83	15.62	292	43.2	6.51	173	47.70	
17:00	41.4	6.79	15.64	276	36.7	6.41	186	47.65	
17:05	43.7	6.79	15.67	272	36.7	6.42	183	47.66	> 2 system volumes
17:10	46.0	6.81	15.65	269	34.9	6.62	183	47.65	
17:15	48.3	6.85	15.69	268	34.8	6.70	185	47.65	
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-213-570
Sample Date: 8/28/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 570
Screen Interval (feet TOIC):560-570
Initial Water Level (Feet TOIC):49.61
Final Water Level (feet TOIC):49.63
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MW-213-570-SU13
Purge Start Time: 8:30
Sample Time:10:35
Final Turbidity (NTUs) : 4.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 40.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:35	2.0	6.22	14.98	77	0.0	3.47	237	49.63	
8:45	6.0	5.89	14.72	71	6.5	4.30	231	49.63	
8:55	10.0	5.70	14.83	72	7.6	4.85	235	49.63	
9:05	14.0	5.62	14.83	70	5.3	5.13	239	49.63	
9:15	18.0	5.67	15.01	69	4.7	5.20	242	49.63	
9:25	22.0	5.58	15.26	66	4.4	5.36	245	49.63	
9:35	26.0	5.49	15.41	64	5.0	5.39	248	49.63	
9:45	30.0	5.51	15.50	64	6.1	5.33	252	49.63	
9:55	34.0	5.49	1578	63	6.6	5.32	248	49.63	
10:05	38.0	5.46	15.79	63	6.2	5.37	250	49.63	
10:15	42.0	5.45	15.81	63	5.9	5.35	249	49.63	> 2 system volumes
10:20	44.0	5.51	15.51	62	5.3	5.39	249	49.63	
10:25	46.0	5.49	15.49	62	5.2	5.37	248	49.63	
10:30	48.0	5.50	15.52	61	4.9	5.35	248	49.63	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-214-570
Sample Date: 8/28/2013
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 570
Screen Interval (feet TOIC):560-570
Initial Water Level (Feet TOIC):46.69
Final Water Level (feet TOIC):49.57
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: MW-214-570-SU13
Purge Start Time: 8:30
Sample Time:10:10
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 40.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:45	7.5	5.56	14.22	80	0.0	7.69	202	49.69	
9:00	15.0	5.74	14.04	78	0.0	7.74	207	49.61	
9:15	22.5	5.63	14.06	76	0.0	7.62	199	49.59	
9:30	30.0	5.54	14.17	76	0.0	7.86	203	49.58	
9:40	35.0	5.59	14.11	76	0.0	7.80	207	49.58	
9:45	37.5	5.62	14.15	76	0.0	7.87	214	49.58	
9:50	40.0	5.56	14.19	76	0.0	7.81	215	49.57	
9:55	42.5	5.58	14.24	76	0.0	7.99	219	49.57	> 2 system volumes
10:00	45.0	5.67	14.27	76	0.0	7.86	220	49.55	
10:05	47.5	5.62	14.25	76	0.0	7.91	221	49.57	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-110-355
Sample Date: 8/27/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 355
Screen Interval (feet TOIC):345-355
Initial Water Level (Feet TOIC):46.20
Final Water Level (feet TOIC):49.82
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MWP-110-355-SU13
Purge Start Time: 14:25
Sample Time:15:55
Final Turbidity (NTUs) : 12.5
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 450/300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and CSIA
2x Pump System Volume (liters): 14.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:40	6.75	5.81	16.20	287	9.4	4.01	209	49.30	
14:50	11.25	574	16.01	287	13.6	2.60	227	49.98	
15:00	14.25	5.74	16.52	288	14.1	2.43	237	49.82	Decreased flow rate to 300ml/min
15:10	17.25	5.72	16.50	288	14.3	2.20	243	49.82	> 2 system volumes
15:20	20.25	5.71	16.38	288	13.8	2.08	246	49.82	
15:30	23.25	5.70	16.24	287	12.8	1.96	253	49.82	
15:35	24.75	5.69	16.16	287	11.9	1.88	257	49.82	
15:40	26.25	5.70	16.14	287	12.5	1.88	260	49.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-110-440
Sample Date: 8/20/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 440
Screen Interval (feet TOIC):410-440
Initial Water Level (Feet TOIC):48.06
Final Water Level (feet TOIC):48.06
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MWP-110-440-SU13
Purge Start Time: 13:35
Sample Time:15:10
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 500/300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and CSIA
2x Pump System Volume (liters): 31.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:20	22.5	5.11	14.91	403	0.0	4.62	289	48.08	
14:30	27.5	5.12	14.86	404	0.0	4.83	294	48.08	
14:35	30.0	5.11	15.38	404	0.0	4.77	299	48.07	Decreased flow rate to 300 ml/min
14:40	31.5	5.07	15.44	404	0.0	4.81	301	48.07	> 2 system volumes
14:45	33.0	5.07	15.45	405	0.0	4.92	302	48.07	
14:50	34.5	5.06	15.41	404	0.0	4.95	305	48.07	
14:55	36.0	5.07	15.43	404	0.0	4.95	305	48.07	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-114-170R
Sample Date: 8/21/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC):160-170
Initial Water Level (Feet TOIC):47.50
Final Water Level (feet TOIC):47.51
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka

Sample ID: MWP-114-170R-SU13
Purge Start Time: 14:40
Sample Time:15:55
Final Turbidity (NTUs) : 17.1
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and CSIA
2x Pump System Volume (liters): 7.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:10	6.0	5.81	18.25	542	24.1	1.56	144	47.51	
15:15	7.0	5.84	18.22	539	19.2	1.85	148	47.51	
15:20	8.0	5.83	18.24	545	19.5	1.85	150	47.51	> 2 system volumes
15:25	9.0	5.81	18.26	542	19.6	1.91	155	47.51	
15:30	10.0	5.80	18.23	541	18.7	1.90	159	47.51	
15:35	11.0	5.79	18.22	539	17.2	1.93	166	47.51	
15:40	12.0	5.80	18.24	540	17.7	1.91	170	47.51	
15:45	13.0	5.79	18.26	537	17.1	1.93	174	47.51	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MWP-114-290
Sample Date: 8/21/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC):280-290
Initial Water Level (Feet TOIC):47.88
Final Water Level (feet TOIC):48.05
Casing Type: **PVC** Steel (circle one)
Personnel: J. Lacanlale & R. Sekerka

Sample ID: MWP-114-290-SU13
Purge Start Time: 13:55
Sample Time:15:10
Final Turbidity (NTUs) : 9.6
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 19.75

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:00	2.0	5.52	18.87	360	3.0	3.69	134	48.05	
14:05	4.0	5.43	17.64	351	0.8	2.26	173	48.05	
14:10	6.0	5.30	17.75	347	1.5	1.87	188	48.05	
14:30	14.0	5.11	17.50	334	3.0	0.99	222	48.05	
14:45	20.0	5.07	17.24	332	6.8	0.83	231	48.05	> 2 system volumes
14:50	22.0	5.07	17.21	332	9.0	0.79	235	48.05	
14:55	24.0	5.08	17.13	331	9.8	0.74	236	48.05	
15:00	26.0	5.08	17.04	331	9.6	0.72	238	48.05	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-05
Sample Date: 8/15/2013
Sampling Device: Watera
Well Depth (feet TOIC): 133
Screen Interval (feet TOIC):131-133
Initial Water Level (Feet TOIC):56.33
Final Water Level (feet TOIC):56.34
Casing Type: **PVC** Steel (circle one)
Personnel: T. Lloyd

Sample ID: PW-02-05-SU13
Purge Start Time: 13:30
Sample Time:14:40
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:30	0.1	6.02	23.65	188	0.0	5.30	189	----------	
13:45	3.0	5.69	23.46	141	15.4	7.20	220	----------	
14:00	6.0	5.66	23.86	136	2.0	7.72	236	----------	> 2 volumes
14:15	9.0	5.65	23.95	132	0.0	7.75	249	----------	> 3 volumes
14:20	10.0	5.66	23.96	216	0.0	7.74	250	----------	
14:25	11.0	5.65	23.93	132	0.0	7.76	252	----------	
14:30	12.0	5.66	23.99	133	0.0	7.75	251	----------	
14:35	13.0	5.65	23.87	132	0.0	7.86	251	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-06
Sample Date: 8/15/2013
Sampling Device: Watera
Well Depth (feet TOIC): 148
Screen Interval (feet TOIC):146-148
Initial Water Level (Feet TOIC):56.33
Final Water Level (feet TOIC):56.33
Casing Type: **PVC** Steel (circle one)
Personnel: T. Lloyd

Sample ID: PW-02-06-SU13
Purge Start Time: 9:45
Sample Time:13:05
Final Turbidity (NTUs) : 46.1
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 170
Purge Rate d/sampling (ml/min): 170
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Ferrous Iron
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:45	0.1	6.56	24.25	258	0.0	6.15	194	----------	
10:09	4.18	6.31	22.03	248	103	6.44	206	----------	
10:27	7.24	5.50	22.72	246	105	6.89	226	----------	> 2 volumes
11:10	14.55	5.45	21.53	245	301	7.33	239	----------	> 3 volumes
11:15	15.4	5.45	21.61	245	325	7.30	240	----------	
11:20	16.25	5.46	21.52	245	314	7.38	241	----------	
11:35	18.8	5.47	22.71	245	232	7.03	240	----------	
11:50	23.05	5.46	23.28	245	131	6.99	243	----------	
12:05	25.6	5.45	23.50	245	80.4	7.13	248	----------	
12:20	28.15	5.45	23.94	245	47.7	7.02	255	----------	
12:25	29.0	5.45	23.94	245	46.3	7.05	257	----------	
12:30	29.85	5.44	24.39	245	46.1	7.02	260	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-07
Sample Date: 8/15/2013
Sampling Device: Watera
Well Depth (feet TOIC): 163
Screen Interval (feet TOIC):162.5-163
Initial Water Level (Feet TOIC):56.40
Final Water Level (feet TOIC):56.40
Casing Type: **PVC** Steel (circle one)
Personnel: T. Lloyd

Sample ID: PW-02-07-SU13
Purge Start Time: 9:40
Sample Time:13:45
Final Turbidity (NTUs) : 1000F, Filtered Sample
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:40	0.1	6.25	22.81	254	96.1	6.70	214	----------	
10:08	4.3	5.68	24.07	222	1000F	4.99	205	----------	
10:41	9.25	5.65	25.22	220	1000F	5.28	209	----------	> 2 volumes
11:30	16.6	5.66	25.31	217	1000F	6.15	215	----------	> 3 volumes
11:35	17.35	5.65	25.33	216	1000F	6.13	213	----------	
11:40	18.1	5.66	25.35	217	1000F	6.12	214	----------	
11:55	20.35	5.68	25.68	216	1000F	6.10	215	----------	
12:10	22.6	5.68	25.79	216	1000F	6.13	216	----------	
12:25	24.85	5.65	25.94	219	1000F	6.16	222	----------	
12:40	27.1	5.66	26.26	215	1000F	6.22	223	----------	
12:55	29.35	5.65	26.30	216	1000F	6.24	223	----------	
13:10	31.6	5.64	26.86	229	1000F	6.23	229	----------	
13:25	33.85	5.56	26.39	212	1000F	5.53	238	----------	
13:30	34.6	5.54	26.38	212	1000F	5.54	236	----------	
13:35	35.35	5.52	26.40	211	1000F	5.47	233	----------	
13:40	36.1	5.53	26.41	211	1000F	5.50	235	----------	F=Flashing

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-05
Sample Date: 8/24/2013
Sampling Device: Watera
Well Depth (feet TOIC): 167
Screen Interval (feet TOIC):166-167
Initial Water Level (Feet TOIC):54.75
Final Water Level (feet TOIC):54.75
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: PW-06-05-SU13
Purge Start Time: 13:50
Sample Time:17:00
Final Turbidity (NTUs) : 33.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 180
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
3x Well Volume (liters): 12.76

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:55	0.9	5.56	21.43	287	11.7	3.79	260	----------	
14:00	1.8	5.37	20.76	289	263	4.43	278	----------	
14:10	3.6	5.33	20.57	289	306	4.49	282	----------	
14:30	7.2	5.19	20.23	287	253	4.87	315	----------	
14:50	10.8	5.18	20.51	284	257	4.91	316	----------	
15:00	12.6	5.18	20.75	281	248	4.75	316	----------	
15:30	18.0	5.21	21.59	282	208	5.77	297	----------	> 3 volumes
16:00	23.4	4.86	19.74	283	130	6.71	246	----------	
16:30	28.8	4.87	19.60	281	61.8	6.56	258	----------	
16:35	29.7	4.88	19.56	282	53.0	6.60	260	----------	
16:40	31.6	4.86	19.47	282	42.3	6.59	260	----------	
16:45	33.5	4.87	19.47	283	36.1	6.61	266	----------	
16:50	35.4	4.88	19.43	282	35.0	6.56	266	----------	
16:55	37.3	4.87	19.41	282	33.8	6.53	267	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-06
Sample Date: 8/24/2013
Sampling Device: Watera
Well Depth (feet TOIC): 181
Screen Interval (feet TOIC):180-181
Initial Water Level (Feet TOIC):54.69
Final Water Level (feet TOIC):54.72
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: PW-06-06-SU13
Purge Start Time: 9:10
Sample Time:13:05
Final Turbidity (NTUs) : 29.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
3x Well Volume (liters): 14.36

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:10	1.0	5.79	20.42	274	0.0	2.94	218	----------	
9:20	2.0	5.76	20.07	273	4.5	3.08	217	----------	
9:50	8.0	5.27	18.92	282	437	5.06	264	----------	
10:20	14.0	5.22	19.84	272	265	5.43	288	----------	
10:30	16.0	5.21	19.02	281	209	6.05	294	----------	> 3 volumes
11:00	22.0	5.21	19.82	276	101	5.87	307	----------	
11:30	28.0	5.21	19.79	275	72.5	5.87	314	----------	
11:45	31.0	5.20	19.46	277	58.1	6.11	318	----------	
12:00	34.0	5.20	19.05	279	60.3	5.92	319	----------	
12:45	43.0	5.21	19.31	278	31.2	6.25	325	----------	
12:50	44.0	5.22	19.36	277	30.1	6.02	325	----------	
12:55	45.0	5.22	19.42	277	31.2	5.88	325	----------	
13:00	46.0	5.21	19.58	276	29.0	6.32	323	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-06-07
Sample Date: 8/24/2013
Sampling Device: Watera
Well Depth (feet TOIC): 221.5
Screen Interval (feet TOIC):221-221.5
Initial Water Level (Feet TOIC):55.37
Final Water Level (feet TOIC):55.38
Casing Type: **PVC** Steel (circle one)
Personnel: R. Sekerka & A. Zarnadze

Sample ID: PW-06-07-SU13
Purge Start Time: 9:10
Sample Time:13:20
Final Turbidity (NTUs) : 40.9
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and CSIA
3x Well Volume (liters): 18.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:40	4.5	4.75	16.81	258	240	3.70	181	----------	
10:00	7.5	4.96	16.73	267	188	6.16	193	----------	
10:10	9.0	5.00	16.73	264	173	6.37	199	----------	
10:20	10.5	5.08	16.68	264	143	6.46	205	----------	
10:30	12.0	5.12	16.61	259	148	6.57	207	----------	
10:40	13.5	5.09	16.67	257	131	6.43	212	----------	
10:50	15.0	5.10	16.65	257	124	6.53	215	----------	
11:00	16.5	5.10	16.67	258	121	6.58	222	----------	
11:10	18.0	5.14	16.70	257	106	6.64	224	----------	
11:20	19.5	5.10	16.99	255	113	6.31	230	----------	> 3 volumes
11:30	21.0	5.10	17.20	250	120	6.11	225	----------	
11:40	22.5	5.09	17.58	248	112	6.01	225	----------	
11:50	24.0	5.11	17.98	254	93.6	6.18	228	----------	
12:00	25.5	5.09	18.23	254	86.3	6.27	230	----------	
12:10	27.0	5.10	18.66	257	79.1	6.37	236	----------	
12:20	28.5	5.10	18.81	257	72.5	6.40	237	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:30	30.0	5.11	18.83	257	46.8	6.38	236	----------	
12:40	31.5	5.11	18.84	257	43.9	6.35	234	----------	
12:45	33.0	5.10	18.86	256	42.1	6.37	234	----------	
12:50	34.5	5.11	18.88	257	40.9	6.35	236	----------	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-05
Sample Date: 8/16/2013
Sampling Device: Watera
Well Depth (feet TOIC): 172
Screen Interval (feet TOIC):170-172
Initial Water Level (Feet TOIC):51.51
Final Water Level (feet TOIC):51.52
Casing Type: **PVC** Steel (circle one)
Personnel: T. Lloyd

Sample ID: PW-07-05-SU13 & DUP
Purge Start Time: 9:55
Sample Time:12:55
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 110
Purge Rate d/sampling (ml/min): 110
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:55	0.1	6.07	24.43	221	141	3.93	67	----------	
11:00	7.25	5.38	24.94	284	1.3	4.11	237	----------	
11:50	12.75	5.31	25.11	286	0.0	4.62	260	----------	> 2 volumes
12:40	18.25	5.29	25.93	285	0.0	4.60	269	----------	> 3 volumes
12:45	18.8	5.29	25.80	285	0.0	4.51	270	----------	
12:50	19.35	5.29	25.72	285	0.0	4.54	271	----------	
									Duplicate Sample Collected
									MW-611-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-06
Sample Date: 8/14/2013
Sampling Device: Watera
Well Depth (feet TOIC): 199
Screen Interval (feet TOIC):197-199
Initial Water Level (Feet TOIC):51.97
Final Water Level (feet TOIC):51.83
Casing Type: **PVC** Steel (circle one)
Personnel: T. Lloyd

Sample ID: PW-07-06-SU13
Purge Start Time: 12:40
Sample Time:15:20
Final Turbidity (NTUs) : 3.4
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 115
Purge Rate d/sampling (ml/min): 115
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:40	0.1	5.56	18.60	425	0.0	2.48	56	----------	
13:08	5.6	5.52	17.76	401	0.0	3.15	105	----------	
14:20	11.2	5.46	18.66	391	35.4	8.18	217	----------	> 2 volumes
14:55	15.0	5.44	17.60	391	2.8	8.21	243	----------	
15:00	15.6	5.43	17.65	391	3.5	8.20	244	----------	
15:05	16.2	5.43	17.65	392	3.4	8.20	246	----------	
15:10	16.8	5.43	17.61	392	3.4	8.25	253	----------	> 3 volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-07-07
Sample Date: 8/14/2013
Sampling Device: Watera
Well Depth (feet TOIC): 221
Screen Interval (feet TOIC):220.5-221
Initial Water Level (Feet TOIC):51.92
Final Water Level (feet TOIC):52.13
Casing Type: **PVC** Steel (circle one)
Personnel: T. Lloyd

Sample ID: PW-07-07-SU13
Purge Start Time: 12:30
Sample Time:18:00
Final Turbidity (NTUs) : 49.8
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 80
Purge Rate d/sampling (ml/min): 80
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): N/A

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:30	0.1	6.26	30.03	559	575	5.73	146	----------	
14:00	6.4	5.42	23.41	543	178	5.10	188	----------	
16:00	12.8	5.41	22.19	543	71.9	6.00	229	----------	> 2 volumes
17:20	18.0	5.41	21.76	538	70.1	5.78	250	----------	
17:25	18.4	5.39	21.66	558	61.9	6.04	252	----------	
17:30	18.8	5.41	21.48	549	61.7	5.94	253	----------	
17:35	19.2	5.42	21.45	547	53.2	5.93	254	----------	> 3 volumes
17:40	19.6	5.42	21.36	547	50.3	5.94	255	----------	
17:45	20.0	5.42	21.37	546	49.9	5.94	256	----------	
17:50	20.4	5.41	21.36	548	49.8	5.93	257	----------	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-325
Sample Date: 8/20/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC):285-325
Initial Water Level (Feet TOIC):48.88
Final Water Level (feet TOIC):48.15
Casing Type: PVC **Steel** (circle one)
Personnel: N. Parganos & R. Sekerka

Sample ID: S-1-325-SU13
Purge Start Time: 10:40
Sample Time:16:35
Final Turbidity (NTUs) : 27.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 100/200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Ferrous Iron and CSIA
2x Pump System Volume (liters): 22.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:00	26.0	5.48	26.74	380	800	3.14	139	48.28	> 2 system volumes
14:10	27.0	5.44	27.03	380	800	2.95	146	48.27	
14:20	28.0	5.42	26.10	378	800	3.15	150	48.26	
14:30	29.0	5.39	23.32	375	800	3.56	161	48.26	
14:40	31.0	5.32	23.02	377	475	3.26	174	48.25	Increased flow rate to 200ml/min
15:00	35.0	5.34	22.80	377	265	3.44	172	48.25	
15:15	38.0	5.39	21.64	378	109	3.62	164	48.22	
15:25	41.0	5.40	21.78	380	75.1	3.56	161	48.21	
15:35	43.0	5.43	21.83	379	158	3.58	154	48.18	
15:45	45.0	5.45	21.02	381	37.9	3.48	155	48.21	
15:50	46.0	5.44	21.04	379	38.2	3.53	156	48.18	
15:55	47.0	5.44	20.03	381	29.0	3.51	157	48.17	
16:00	48.0	5.46	19.73	381	33.9	3.55	155	48.16	
16:05	49.0	5.43	20.65	381	38.5	3.50	156	48.15	
16:10	50.0	---	---	---	---	---	---	---	Cleaned flow cell
16:15	51.0	5.42	20.19	381	40.7	3.73	156	48.17	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:20	52.0	5.41	20.60	381	26.1	3.57	159	48.15	
16:25	53.0	5.40	20.70	381	28.6	3.58	160	48.17	
16:30	54.0	5.42	20.51	381	27.5	3.56	159	48.15	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-450
Sample Date: 8/20/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 450
Screen Interval (feet TOIC):410-450
Initial Water Level (Feet TOIC):49.46
Final Water Level (feet TOIC):49.78
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka

Sample ID: S-1-450-SU13
Purge Start Time: 8:40
Sample Time:11:20
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Ferrous Iron and CSIA
2x Pump System Volume (liters): 31.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:35	27.0	4.99	15.68	187	0.0	4.61	235	49.85	
10:40	28.5	4.96	15.69	186	0.0	4.57	236	49.86	
10:45	30.0	4.95	15.75	185	0.0	4.54	239	49.85	
10:50	31.5	4.93	15.78	184	0.0	4.51	242	49.83	
10:55	33.0	4.95	15.82	184	0.0	4.48	244	49.78	> 2 system volumes
11:00	34.5	4.92	15.86	185	0.0	4.48	246	49.78	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-1-75
Sample Date: 8/15/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC):65-75
Initial Water Level (Feet TOIC):58.42
Final Water Level (feet TOIC):58.42
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka

Sample ID: W-1-75-SU13 & DUP
Purge Start Time: 9:25
Sample Time:10:50
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) and CSIA
2x Pump System Volume (liters): 3.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:30	1.25	5.37	16.73	72	0.0	2.11	160	58.63	
9:40	3.75	5.35	16.63	81	0.0	2.24	161	58.63	> 2 system volumes
9:50	6.25	5.40	16.66	89	0.0	2.26	169	58.63	
10:00	8.75	5.43	16.63	94	0.0	2.32	170	58.63	
10:05	10.0	5.43	16.64	96	0.0	2.34	172	58.63	
10:10	11.25	5.44	16.63	98	0.0	2.36	174	58.63	
10:15	12.5	5.45	16.65	100	0.0	2.39	173	58.63	
									Duplicate Sample Collected
									MW-600-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-1-120
Sample Date: 8/14/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):60.40
Final Water Level (feet TOIC):60.40
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & N. Parganos

Sample ID: W-1-120-SU13
Purge Start Time: 15:10
Sample Time:17:20
Final Turbidity (NTUs) : 42.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200/150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) and Ferrous Iron
2x Pump System Volume (liters): 5.10

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:20	2.0	6.28	19.77	229	324	2.66	-46	60.38	
15:25	3.0	6.26	19.99	229	182	1.92	-51	60.40	
15:30	4.0	6.27	20.20	228	184	1.82	-52	60.38	
15:40	5.5	6.28	20.21	228	149	1.83	-53	60.38	Decreased flow rate to 150ml/min
15:50	7.0	6.34	20.54	228	125	1.77	-56	60.38	> 2 system volumes
16:00	8.5	6.41	20.76	228	102	2.28	-60	60.40	
16:10	10.0	6.48	20.08	228	81.4	2.15	-64	60.40	
16:20	11.5	6.44	19.91	228	80.3	2.04	-65	60.38	
16:30	13.0	6.47	21.89	229	66.5	1.85	-68	60.40	
16:40	14.5	6.49	21.87	229	60.7	1.79	-70	60.40	
16:50	16.0	6.50	21.88	229	57.1	1.75	-69	60.38	
17:00	17.5	6.50	21.87	229	46.9	1.74	-69	60.38	
17:10	19.0	6.49	21.88	229	44.1	1.73	-67	60.40	
17:15	19.75	6.49	21.85	228	42.7	1.70	-65	60.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-2-70
Sample Date: 8/28/2013
Sampling Device: Watera
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):60.50
Final Water Level (feet TOIC):60.50
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale

Sample ID: W-2-70-SU13
Purge Start Time: 10:00
Sample Time:11:40
Final Turbidity (NTUs) : 23.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 0.53

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:40	12.0	6.30	21.53	504	134	8.22	272	60.50	> 2 system volumes
10:45	13.5	6.27	21.70	504	131	7.67	269	60.50	
10:50	15.0	6.12	21.86	507	103	7.07	261	60.50	
10:55	16.5	6.02	21.98	504	71.6	6.55	245	60.50	
11:00	18.0	5.99	21.47	501	51.6	6.68	231	60.50	
11:05	19.5	5.98	21.44	497	40.1	6.35	222	60.50	
11:10	21.0	5.99	20.93	496	34.9	6.68	218	60.50	
11:15	22.5	6.15	21.36	488	28.3	6.02	206	60.50	
11:20	24.0	6.14	20.79	485	25.1	6.38	205	60.50	
11:25	25.5	6.15	20.73	482	24.4	6.26	204	60.50	
11:30	27.0	6.15	20.99	481	23.1	6.15	203	60.50	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-3-72
Sample Date: 8/14/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC):62-72
Initial Water Level (Feet TOIC):61.64
Final Water Level (feet TOIC):62.60
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos & R. Sekerka

Sample ID: W-3-72-SU13
Purge Start Time: 9:05
Sample Time:10:40
Final Turbidity (NTUs) : 14.4
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 300/150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.04

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:15	3.0	7.40	16.38	239	6.0	1.37	208	62.47	
9:20	4.5	7.41	16.25	237	4.0	10.75	210	62.67	> 2 system volumes
9:25	6.0	7.45	16.30	233	4.9	10.35	211	62.41	
9:30	7.5	7.46	16.31	232	4.8	10.05	212	62.75	
9:35	9.0	7.47	16.32	229	8.3	9.65	211	62.77	
9:40	10.5	7.47	16.30	227	9.3	9.31	192	62.77	
9:45	12.0	7.46	16.28	227	10.0	8.92	85	62.77	
9:50	13.5	7.43	16.29	226	9.7	8.45	10	62.81	
9:55	15.0	7.43	16.23	225	10.9	8.05	-25	62.85	
10:00	16.5	7.39	17.38	227	8.4	7.16	-63	62.82	Decreased flow rate to 150ml/min
10:05	17.25	7.37	17.65	228	12.5	6.96	-72	62.80	
10:10	18.0	7.37	17.67	229	13.8	6.76	-80	62.81	
10:15	18.75	7.36	17.69	228	14.7	6.45	-86	62.77	
10:20	19.5	7.36	17.75	228	14.5	6.22	-89	62.71	
10:25	20.25	7.34	17.76	227	14.3	5.92	-93	62.68	
10:30	21.0	7.34	17.99	225	13.8	5.58	-94	62.60	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:35	21.75	7.32	17.90	224	14.4	5.42	-95	62.60	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-3-112
Sample Date: 8/13/2013
Sampling Device: Bladder Pump (Marschalk)
Well Depth (feet TOIC): 112
Screen Interval (feet TOIC):102-112
Initial Water Level (Feet TOIC):62.50
Final Water Level (feet TOIC):62.53
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos & R. Sekerka

Sample ID: W-3-112-SU13
Purge Start Time: 17:25
Sample Time:18:45
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 420
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.72

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:37	6.25	6.97	16.05	148	0.0	5.83	54	62.50	> 2 system volumes
17:42	8.35	7.01	15.95	148	0.0	5.30	30	62.51	
17:47	10.45	7.01	15.91	148	0.0	4.50	9	62.52	
17:52	12.55	7.05	15.85	149	0.0	3.85	-8	62.52	
17:57	14.65	7.14	15.81	150	0.0	3.23	-30	62.52	
18:02	16.75	7.15	15.80	152	0.0	2.83	-43	62.52	
18:07	18.85	7.20	15.75	153	0.0	2.35	-50	62.52	
18:12	20.95	7.28	15.69	156	0.0	2.17	-58	62.52	
18:17	23.05	7.33	15.67	156	0.0	1.77	-62	62.52	
18:22	25.15	7.34	15.65	157	0.0	1.55	-66	62.53	
18:27	27.25	7.34	15.66	157	0.0	1.45	-65	62.53	
18:32	29.35	7.36	15.64	157	0.0	1.42	-66	62.53	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-5-78
Sample Date: 8/14/2013
Sampling Device: Bladder Pump (Marschalk)
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC):68-78
Initial Water Level (Feet TOIC):62.28
Final Water Level (feet TOIC):62.48
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: W-5-78-SU13 & DUP
Purge Start Time: 14:45
Sample Time:15:25
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 180
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.44

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:50	0.9	6.03	19.46	227	0.2	11.96	120	62.48	
14:55	1.8	6.11	19.17	227	0.0	9.30	140	62.48	
15:00	2.7	6.16	19.26	227	0.0	8.75	148	62.48	
15:05	3.6	6.20	19.30	227	0.0	8.38	150	62.48	> 2 system volumes
15:10	4.5	6.22	19.02	227	0.0	8.37	153	62.48	
15:15	5.4	6.22	19.00	227	0.0	8.42	156	62.48	
15:20	6.3	6.23	19.01	227	0.0	8.07	158	62.48	
									Duplicate Sample Collected
									MW-604-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-6-79
Sample Date: 8/14/2013
Sampling Device: Bladder Pump (Marschalk)
Well Depth (feet TOIC): 79
Screen Interval (feet TOIC):69-79
Initial Water Level (Feet TOIC):61.71
Final Water Level (feet TOIC):61.71
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: W-6-79-SU13
Purge Start Time: 9:35
Sample Time:10:20
Final Turbidity (NTUs) : 4.7
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.50

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:40	0.75	5.46	19.62	76	39.0	9.97	221	61.71	
9:45	1.5	5.34	19.31	76	10.5	8.22	246	61.71	
9:50	2.25	5.30	19.16	77	8.0	7.64	257	61.71	
9:55	3.0	5.26	19.21	79	6.8	7.40	264	61.71	
10:00	3.75	5.26	19.22	81	5.2	7.41	267	61.71	> 2 system volumes
10:05	4.5	5.26	19.27	82	4.6	7.10	269	61.71	
10:10	5.25	5.28	19.29	83	4.5	7.14	272	61.71	
10:15	6.0	5.27	19.26	83	4.7	7.04	273	61.71	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-8-71
Sample Date: 8/20/2013
Sampling Device: Watera
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC):61-71
Initial Water Level (Feet TOIC):62.18
Final Water Level (feet TOIC):62.18
Casing Type: PVC **Steel** (circle one)
Personnel: B. Hewitt

Sample ID: W-8-71-SU13
Purge Start Time: 14:55
Sample Time:17:25
Final Turbidity (NTUs) : 31.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200/240
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 0.67

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:00	1.0	5.86	21.35	167	113	8.12	173	62.18	> 2 system volumes
15:05	2.0	5.88	21.64	168	126	8.73	178	62.18	
15:10	3.0	5.84	20.48	167	315	8.38	180	62.18	
15:15	4.0	5.81	20.85	168	220	8.27	175	62.18	
15:20	5.0	5.84	18.51	164	180	9.02	171	62.18	
15:25	6.0	5.79	17.33	165	143	9.60	173	62.18	
15:35	8.0	5.73	17.69	165	112	8.25	183	62.18	
15:45	10.0	5.79	16.41	162	114	9.39	186	62.18	
15:55	12.0	5.78	17.88	165	80.3	8.40	193	62.18	
16:05	---	---	---	---	---	---	---	62.18	Horiba clamp broke and stopped
17:00	14.4	5.86	21.43	164	48.3	8.25	175	62.18	Purge. Once restarted, flow was
17:05	15.6	5.86	20.95	163	40.7	8.06	174	62.18	240ml/min
17:10	16.8	5.86	21.08	163	33.1	7.81	175	62.18	
17:15	18.0	5.86	21.08	164	32.7	7.63	176	62.18	
17:20	19.2	5.86	21.13	164	31.8	7.65	177	62.18	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-71
Sample Date: 8/15/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC):61-71
Initial Water Level (Feet TOIC):59.97
Final Water Level (feet TOIC):59.99
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka

Sample ID: W-10-71-SU13
Purge Start Time: 14:25
Sample Time:15:10
Final Turbidity (NTUs) : 14.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:35	2.5	5.22	17.62	269	21.3	3.98	222	60.02	
14:40	3.75	5.22	17.57	266	18.3	3.94	224	60.02	> 2 system volumes
14:45	5.0	5.21	17.60	264	17.7	3.98	227	60.02	
14:50	6.25	5.19	17.59	261	16.0	4.03	230	60.02	
14:55	7.75	5.20	17.60	258	15.8	4.04	231	60.02	
15:00	9.0	5.21	17.57	256	14.3	4.07	233	60.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-120
Sample Date: 8/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):60.66
Final Water Level (feet TOIC):60.65
Casing Type: PVC **Steel** (circle one)
Personnel: A. Zarnadze

Sample ID: W-10-120-SU13 & MS/MSD
Purge Start Time: 10:00
Sample Time:12:55
Final Turbidity (NTUs) : 24.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500/1000
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium
3x Well Volume (liters): 110.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:10	---	---	---	---	---	---	---	---	Increased flow rate to 1000ml/min
11:15	40.0	5.94	18.22	312	0.0	4.52	222	60.65	
11:50	75.0	5.80	18.43	282	0.2	6.61	208	60.65	
12:25	110.0	5.83	18.23	273	0.2	5.09	197	60.65	
12:30	115.0	5.82	18.21	272	0.2	4.57	198	60.65	> 2 system volumes
12:35	120.0	5.82	18.24	271	30.0	4.70	196	60.65	
12:40	125.0	5.82	21.74	277	25.9	4.20	193	60.65	
12:45	130.0	5.82	21.45	276	24.8	4.23	193	60.65	
12:50	135.0	5.84	21.34	276	24.1	4.16	192	60.65	
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-11-70
Sample Date: 8/14/2013
Sampling Device: Bladder Pump (Marschalk)
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):60.43
Final Water Level (feet TOIC):60.45
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: W-11-70-SU13
Purge Start Time: 10:15
Sample Time:11:00
Final Turbidity (NTUs) : 9.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 130
Purge Rate d/sampling (ml/min): 130
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:20	0.65	5.37	21.13	264	20.4	6.88	231	60.44	
10:25	1.3	5.40	21.00	265	15.1	6.31	247	60.44	
10:30	1.95	5.39	20.74	266	11.2	7.05	249	60.44	
10:35	2.6	5.40	20.74	267	9.8	7.28	244	60.45	
10:40	3.25	5.40	20.65	267	10.6	7.09	240	60.45	> 2 system volumes
10:45	3.9	5.40	20.59	267	10.3	6.70	237	60.45	
10:50	4.55	5.40	20.61	267	10.3	6.99	235	60.45	
10:55	5.2	5.42	20.71	267	9.4	6.88	233	60.45	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-12-70
Sample Date: 8/13/2013
Sampling Device: Bladder Pump (Marschalk)
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC):60-70
Initial Water Level (Feet TOIC):59.60
Final Water Level (feet TOIC):59.60
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & A. Zarnadze

Sample ID: W-12-70-SU13 & DUP
Purge Start Time: 16:55
Sample Time:17:50
Final Turbidity (NTUs) : 5.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.24

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:00	1.1	6.15	19.77	83	147	9.05	235	59.60	
17:05	2.2	5.96	17.47	39	112	8.65	268	59.60	
17:10	3.3	5.95	16.84	30	46.1	8.18	297	59.60	> 2 system volumes
17:15	4.4	5.96	16.79	29	28.4	8.17	308	59.60	
17:20	5.5	5.95	16.71	29	17.5	8.08	316	59.60	
17:25	6.6	5.93	16.64	28	9.4	8.03	324	59.60	
17:30	7.7	5.93	16.65	29	7.2	8.40	326	59.60	
17:35	8.8	5.96	16.62	31	5.0	8.18	330	59.60	
17:40	9.9	5.93	16.62	31	5.0	8.12	335	59.60	
17:45	11.0	5.93	16.61	30	5.0	8.08	338	59.60	
									Duplicate Sample Collected
									MW-603-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-12-120
Sample Date: 8/28/2013
Sampling Device: Watera
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):60.14
Final Water Level (feet TOIC):60.14
Casing Type: PVC **Steel** (circle one)
Personnel: A. Zarnadze

Sample ID: W-12-120-SU13
Purge Start Time: 9:30
Sample Time:10:45
Final Turbidity (NTUs) : 14.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 260
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium
2x Pump System Volume (liters): 3.79

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:35	1.3	5.85	21.49	101	31.9	1.82	255	60.14	
9:40	2.26	5.59	21.89	100	54.2	2.08	270	60.14	
9:45	3.9	5.43	21.59	97	48.2	2.16	296	60.14	> 2 system volumes
9:50	5.2	5.40	22.59	96	37.6	2.21	304	60.14	
9:55	6.5	5.38	22.76	95	30.0	2.44	313	60.14	
10:00	7.8	5.33	22.70	94	25.7	2.46	323	60.14	
10:05	9.1	5.30	22.86	93	23.4	2.54	331	60.14	
10:10	10.4	5.25	22.88	93	23.5	2.83	340	60.14	
10:15	11.7	5.34	23.10	93	21.2	275	315	60.14	
10:20	13.0	5.36	23.29	92	17.6	2.59	335	60.14	
10:25	14.3	5.35	23.23	91	16.4	2.60	344	60.14	
10:30	15.6	5.32	23.40	91	14.5	2.70	354	60.14	
10:35	1.9	5.34	23.53	91	14.3	2.72	357	60.14	
10:40	18.2	5.35	23.98	91	14.8	2.72	361	60.14	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-14-150
Sample Date: 8/14/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):60.71
Final Water Level (feet TOIC):60.71
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & N. Parganos

Sample ID: W-14-150-SU13
Purge Start Time: 14:20
Sample Time:15:35
Final Turbidity (NTUs) : 28.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) Total Uranium (ASTM-D5174) and Ferrous Iron
2x Pump System Volume (liters): 6.23

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:40	3.0	6.09	17.46	387	193	2.95	146	60.75	
14:45	3.75	6.07	17.39	390	144	2.07	148	60.75	
14:50	4.5	6.06	17.24	393	130	1.93	151	60.73	
14:55	5.25	6.02	17.20	396	90.3	1.95	155	60.72	
15:00	6.0	5.98	17.40	399	58.1	2.06	160	60.72	
15:05	6.75	5.94	17.46	399	56.0	2.21	165	60.73	> 2 system volumes
15:10	7.5	5.93	17.45	400	40.6	2.33	168	60.73	
15:15	8.25	5.90	17.46	401	31.5	2.38	170	60.72	
15:20	9.0	5.89	17.76	401	31.4	2.46	171	60.73	
15:25	9.75	5.88	17.97	402	28.8	2.54	173	60.71	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-16-148
Sample Date: 8/15/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 148
Screen Interval (feet TOIC):138-148
Initial Water Level (Feet TOIC):61.05
Final Water Level (feet TOIC):61.05
Casing Type: PVC **Steel** (circle one)
Personnel: B. Hewitt

Sample ID: W-16-148-SU13
Purge Start Time: 11:40
Sample Time:13:30
Final Turbidity (NTUs) : 38.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.14

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:50	2.0	5.88	20.38	238	794	7.30	258	61.05	
11:55	3.0	5.51	18.30	234	515	6.27	285	61.05	
12:00	4.0	5.25	17.49	229	335	5.60	311	61.05	
12:05	5.0	5.19	17.44	229	269	5.49	318	61.05	
12:10	6.0	5.11	17.08	228	217	5.34	328	61.05	
12:15	7.0	5.06	17.05	225	195	5.04	331	61.05	> 2 system volumes
12:20	8.0	5.02	17.15	227	154	5.07	336	61.05	
12:25	9.0	5.03	17.00	228	133	4.89	339	61.05	
12:35	11.0	5.03	17.01	232	96.5	4.93	342	61.05	
12:45	13.0	5.09	17.15	232	76.4	4.91	343	61.05	
12:55	15.0	5.11	16.90	235	59.4	5.00	338	61.05	
13:05	17.0	5.35	16.85	235	47.3	5.15	328	61.05	
13:10	18.0	5.40	16.85	236	43.5	5.20	323	61.05	
13:15	19.0	5.48	17.05	234	41.7	4.92	320	61.05	
13:20	20.0	5.52	17.10	235	39.9	5.00	316	61.05	
13:25	21.0	5.54	17.02	236	38.4	4.94	314	61.05	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-17-130
Sample Date: 8/15/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC):120-130
Initial Water Level (Feet TOIC):60.90
Final Water Level (feet TOIC):60.91
Casing Type: PVC **Steel** (circle one)
Personnel: A. Zarnadze

Sample ID: W-17-130-SU13
Purge Start Time: 15:35
Sample Time:17:05
Final Turbidity (NTUs) : 11.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:40	0.75	5.96	21.30	118	157	6.66	116	60.91	
15:45	1.5	5.92	19.90	109	128	5.60	142	60.91	
15:55	3.0	5.93	22.29	112	94.6	4.18	164	60.91	
16:10	5.25	5.91	23.14	113	73.2	4.05	173	60.91	
16:25	7.5	5.98	18.01	104	50.8	5.47	188	60.91	> 2 system volumes
16:30	8.25	5.92	17.20	104	36.2	5.42	196	60.91	
16:35	9.0	5.92	17.20	106	34.1	5.53	193	60.91	
16:40	9.75	5.91	16.96	105	26.2	5.58	188	60.91	
16:45	10.5	5.87	16.88	105	16.0	5.99	187	60.91	
16:50	11.25	5.82	16.80	105	12.9	6.12	190	60.91	
16:55	12.0	5.78	16.91	103	11.8	6.43	195	60.91	
17:00	12.75	5.76	16.90	102	11.9	6.70	199	60.91	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-18-150
Sample Date: 8/21/2013
Sampling Device: Well Wizard
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):55.20
Final Water Level (feet TOIC):55.23
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka

Sample ID: W-18-150-SU13 & DUP
Purge Start Time: 9:50
Sample Time:11:00
Final Turbidity (NTUs) : 38.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and CSIA
2x Pump System Volume (liters): 8.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:10	6.0	6.18	16.58	240	63.6	5.98	14	57.23	
10:20	9.0	6.20	16.36	256	72.2	5.31	8	57.25	
10:30	12.0	6.24	16.20	286	50.1	4.41	-6	57.23	> 2 system volumes
10:35	13.5	6.25	16.33	292	46.1	3.98	-10	57.23	
10:40	15.0	6.28	16.29	296	41.7	3.66	-12	57.23	
10:45	16.5	6.27	16.27	297	39.2	3.49	-13	57.23	
10:50	18.0	6.27	16.25	298	39.1	3.36	-14	57.23	
10:55	19.5	6.28	16.26	299	38.7	3.34	-14	57.23	
									Duplicate Sample Collected
									MW-602-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-19-110
Sample Date: 8/16/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):55.78
Final Water Level (feet TOIC):55.82
Casing Type: PVC **Steel** (circle one)
Personnel: N. Pargamos & R. Sekerka

Sample ID: W-19-110-SU13
Purge Start Time: 9:20
Sample Time:10:35
Final Turbidity (NTUs) : 36.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA
2x Pump System Volume (liters): 4.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:30	2.0	5.45	16.42	156	565	5.88	218	55.79	
9:35	3.0	5.38	16.31	158	319	6.33	223	55.80	
9:40	4.0	5.37	16.22	158	205	6.36	228	55.82	
9:45	5.0	5.37	15.98	158	126	6.71	232	55.83	> 2 system volumes
9:50	6.0	5.37	16.09	159	100	6.67	234	55.81	
9:55	7.0	5.37	16.24	160	82.0	6.58	236	55.82	
10:00	8.0	5.39	16.55	161	64.2	6.67	236	55.84	
10:05	9.0	5.39	16.58	161	53.9	6.71	237	55.83	
10:10	10.0	5.39	16.55	161	49.1	6.75	239	55.81	
10:15	11.0	5.39	16.58	161	45.8	6.74	239	55.82	
10:20	12.0	5.39	16.71	160	39.9	6.61	239	55.80	
10:25	13.0	5.39	16.84	161	38.5	6.71	239	55.82	
10:30	14.0	5.40	16.90	161	36.3	6.63	239	55.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-19-150
Sample Date: 8/16/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):55.82
Final Water Level (feet TOIC):55.82
Casing Type: PVC **Steel** (circle one)
Personnel: N. Pargamos & R. Sekerka

Sample ID: W-19-150-SU13
Purge Start Time: 9:10
Sample Time:10:20
Final Turbidity (NTUs) : 1.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA
2x Pump System Volume (liters): 6.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:25	3.75	5.85	16.40	450	14.8	2.85	237	55.83	
9:30	5.0	5.76	16.43	451	12.4	2.75	238	55.82	
9:35	6.25	5.71	16.53	449	8.6	2.77	239	55.82	
9:40	7.5	5.62	16.46	451	4.3	3.09	245	55.81	> 2 system volumes
9:45	8.75	5.60	16.48	449	4.0	3.07	247	55.82	
9:50	10.0	5.59	16.54	448	2.8	3.06	249	55.81	
9:55	11.25	5.58	16.49	446	2.2	3.14	251	55.82	
10:00	12.5	5.57	16.55	464	1.4	3.21	254	55.82	
10:05	13.75	5.55	16.51	466	1.3	3.18	257	55.81	
10:10	15.0	5.55	16.47	466	1.3	3.16	259	55.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20-120
Sample Date: 8/16/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC):110-120
Initial Water Level (Feet TOIC):56.79
Final Water Level (feet TOIC):56.86
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: W-20-120-SU13
Purge Start Time: 9:15
Sample Time:10:50
Final Turbidity (NTUs) : 46.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 230/110
Purge Rate d/sampling (ml/min): 110
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 5.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:20	1.15	5.82	16.93	256	470	6.27	295	56.86	
9:25	2.3	5.78	17.14	265	284	5.65	288	56.86	
9:55	9.2	5.71	17.65	325	128	4.66	273	56.86	> 2 system volumes
10:15	13.18	5.69	17.80	358	72.3	4.46	272	56.86	
10:20	14.35	5.68	18.02	358	62.1	4.45	272	56.86	Decreased flow rate to 110ml/min
10:25	14.9	5.67	1798	364	52.5	4.38	272	56.86	
10:30	15.45	5.66	18.08	363	50.4	4.33	271	56.86	
10:35	16.0	5.66	18.08	370	47.5	4.34	271	56.86	
10:40	16.55	5.66	18.26	373	49.6	4.30	271	56.86	
10:45	17.1	5.64	18.33	371	46.7	4.22	272	56.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20-160
Sample Date: 8/16/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC):150-160
Initial Water Level (Feet TOIC):57.04
Final Water Level (feet TOIC):57.18
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: W-20-160-SU13
Purge Start Time: 11:50
Sample Time:13:15
Final Turbidity (NTUs) : 18.5
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 240
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA
2x Pump System Volume (liters): 9.55

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:00	2.4	6.23	20.10	323	1000F	6.68	249	57.18	
12:05	3.6	6.05	22.23	332	790	3.69	243	57.18	
12:15	6.0	5.98	22.77	332	212	2.10	240	57.18	
12:25	8.4	5.98	21.95	329	87.1	1.77	242	57.18	
12:35	10.8	5.97	20.89	325	56.4	1.51	246	57.18	> 2 system volumes
12:40	12.0	5.97	20.41	324	44.7	1.44	248	57.18	
12:45	13.2	5.97	20.17	323	38.5	1.37	249	57.18	
12:50	14.4	5.98	20.06	323	34.4	1.31	250	57.18	
12:55	15.6	5.98	19.86	323	26.0	1.24	251	57.18	
13:00	16.8	5.98	19.76	323	20.1	1.20	253	57.18	
13:05	18.0	5.98	19.64	322	19.6	1.17	254	57.18	
13:10	19.2	5.98	19.57	322	18.5	1.15	254	57.18	F=Flashing

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-22-95
Sample Date: 8/14/2013
Sampling Device: Bladder Pump (Marschalk)
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC):85-95
Initial Water Level (Feet TOIC):60.82
Final Water Level (feet TOIC):60.82
Casing Type: PVC **Steel** (circle one)
Personnel: A. Zarnadze

Sample ID: W-22-95-SU13
Purge Start Time: 14:50
Sample Time:17:00
Final Turbidity (NTUs) : 41.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 130
Purge Rate d/sampling (ml/min): 130
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.14

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:55	0.65	5.58	22.31	230	687	7.21	262	60.82	
15:00	1.3	5.57	21.80	226	619	6.41	265	60.82	
15:05	1.95	5.61	21.65	221	488	6.25	268	60.82	
15:10	2.6	5.63	21.33	214	357	6.21	271	60.82	
15:15	3.25	5.64	20.91	208	277	6.11	272	60.82	
15:20	3.9	5.65	20.93	199	256	6.00	274	60.82	
15:25	4.55	5.65	21.07	197	225	5.99	274	60.82	> 2 system volumes
15:30	5.2	5.64	21.10	196	190	5.97	275	60.82	
15:35	5.85	5.66	20.99	195	165	5.94	276	60.82	
15:40	6.5	5.65	20.91	195	145	5.92	277	60.82	
15:45	7.15	5.65	20.98	195	130	5.87	278	60.82	
15:50	7.8	5.66	20.99	198	111	5.84	278	60.82	
16:00	9.1	5.65	20.74	199	88.6	5.98	279	60.82	
16:20	11.7	5.64	20.40	200	71.0	6.58	280	60.82	
16:40	14.3	5.64	20.32	199	52.2	6.54	282	60.82	
16:45	14.95	5.65	20.37	199	44.2	6.56	281	60.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:50	15.6	5.62	20.41	198	41.7	6.56	282	60.82	
16:55	16.25	5.63	20.39	198	41.4	6.71	282	60.82	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-23-110
Sample Date: 8/15/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):56.18
Final Water Level (feet TOIC):56.18
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: W-23-110-SU13
Purge Start Time: 9:15
Sample Time:11:50
Final Turbidity (NTUs) : 20.2
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Ferrous Iron
2x Pump System Volume (liters): 4.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:20	0.5	6.11	21.80	494	1000F	1.97	-7	56.18	
9:25	1.0	6.21	20.39	456	1000F	1.63	-36	56.18	
9:55	4.0	6.42	19.94	484	379	1.21	-43	56.18	
10:25	7.0	6.51	20.98	517	155	1.04	-70	56.18	> 2 system volumes
10:55	10.0	6.54	20.09	528	72.8	0.90	-90	56.18	
11:15	12.0	6.52	21.90	527	47.3	0.93	-92	56.18	
11:20	12.5	6.52	21.10	525	40.0	0.91	-93	56.18	
11:25	13.0	6.54	20.60	524	27.8	087	-96	56.18	
11:30	13.5	6.57	20.21	525	23.8	0.83	-99	56.18	
11:35	14.0	6.59	19.96	525	20.2	0.75	-104	56.18	
11:40	14.5	6.61	19.68	526	20.3	0.71	-107	56.18	
11:45	15.0	6.61	19.52	527	20.2	0.69	-110	56.18	F=Flashing

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-24-260
Sample Date: 8/19/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 260
Screen Interval (feet TOIC):250-260
Initial Water Level (Feet TOIC):56.15
Final Water Level (feet TOIC):56.15
Casing Type: **PVC** Steel (circle one)
Personnel: A. Zarnadze

Sample ID: W-24-260-SU13 & MS/MSD
Purge Start Time: 9:20
Sample Time:11:00
Final Turbidity (NTUs) : 3.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Ferrous Iron
2x Pump System Volume (liters): 17.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:25	1.0	5.48	17.34	500	0.4	2.07	222	56.15	
9:30	2.0	5.46	17.20	498	0.0	1.30	216	56.15	
9:35	3.0	5.45	17.07	498	3.5	1.04	213	56.15	
9:55	7.0	5.75	21.38	583	8.6	1.91	165	56.15	
10:10	10.0	5.74	21.40	580	8.2	1.89	162	56.15	
10:20	12.0	5.76	21.53	578	7.5	1.95	166	56.15	
10:25	13.0	5.74	22.13	562	4.2	1.96	169	56.15	
10:30	14.0	5.79	22.72	557	4.1	1.95	169	56.15	
10:35	15.0	5.80	23.00	553	4.0	1.97	169	56.15	
10:40	16.0	5.79	23.46	543	4.9	2.04	168	56.15	
10:45	17.0	5.80	23.82	538	3.8	2.10	169	56.15	
10:50	18.0	5.80	23.85	535	3.7	2.12	169	56.15	> 2 system volumes
10:55	19.0	5.79	24.12	532	3.7	2.15	170	56.15	
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-25-150
Sample Date: 8/15/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):140-150
Initial Water Level (Feet TOIC):53.35
Final Water Level (feet TOIC):55.00
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: W-25-150-SU13
Purge Start Time: 16:00
Sample Time:18:05
Final Turbidity (NTUs) : 4.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 140
Purge Rate d/sampling (ml/min): 140
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 6.51

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:15	2.1	6.46	24.55	580	32.0	3.68	-30	55.00	
16:20	2.8	6.76	21.34	604	4.0	2.40	-65	55.00	
16:25	3.5	6.75	20.27	602	0.0	2.05	-69	55.00	
16:30	4.2	6.77	19.98	592	0.0	1.82	-70	55.00	
16:35	4.9	6.84	19.70	572	0.0	1.70	-68	55.00	
16:40	5.6	6.93	19.84	559	0.0	1.59	-68	55.00	> 2 system volumes
16:45	6.3	7.04	19.78	551	5.7	1.58	-74	55.00	
16:50	7.0	7.19	19.45	541	3.4	1.48	-74	55.00	
16:55	7.7	7.46	19.76	522	4.0	1.45	-82	55.00	
17:00	8.4	7.73	19.20	517	8.9	1.51	-91	55.00	
17:05	9.1	8.23	19.00	503	8.4	1.50	-92	55.00	
17:10	9.8	8.72	19.29	486	4.3	1.45	-90	55.00	
17:15	10.5	9.12	19.09	424	4.3	1.49	-88	55.00	
17:20	11.2	9.40	18.52	467	8.0	1.53	-86	55.00	
17:25	11.9	9.56	18.69	456	4.2	1.46	-81	55.00	
17:30	12.6	9.68	18.10	455	7.6	1.55	-80	55.00	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:35	13.3	9.82	18.24	445	6.2	1.51	-75	55.00	
17:40	14.0	9.90	18.46	437	4.5	1.43	-71	55.00	
17:45	14.7	9.96	18.18	436	4.6	1.45	-70	55.00	
17:50	15.4	10.02	18.29	430	5.2	1.46	-67	55.00	
17:55	16.1	10.09	18.78	427	4.8	1.46	-64	55.00	
18:00	16.8	10.11	18.45	425	4.9	1.45	-63	55.00	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-25-188
Sample Date: 8/19/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 188
Screen Interval (feet TOIC):178-188
Initial Water Level (Feet TOIC):54.35
Final Water Level (feet TOIC):54.35
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: W-25-188-SU13
Purge Start Time: 9:30
Sample Time:10:45
Final Turbidity (NTUs) : 17.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Ferrous Iron and CSIA
2x Pump System Volume (liters): 11.78

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:40	2.2	6.83	23.57	370	13.9	6.19	219	54.35	
9:50	4.4	5.76	21.19	348	337	3.51	181	54.35	
10:00	6.6	5.76	21.12	345	377.4	1.99	170	54.35	
10:10	8.8	5.78	21.27	349	28.3	1.76	129	54.35	
10:20	11.0	5.80	21.81	346	21.9	1.38	100	54.35	
10:25	12.1	5.78	21.91	346	19.6	1.27	87	54.35	> 2 system volumes
10:30	13.2	5.81	22.15	345	18.7	1.26	84	54.35	
10:35	14.3	5.81	22.42	345	17.9	1.29	79	54.35	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-26-270
Sample Date: 8/19/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 270
Screen Interval (feet TOIC):260-270
Initial Water Level (Feet TOIC):43.82
Final Water Level (feet TOIC):43.82
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka

Sample ID: W-26-270-SU13 & DUP
Purge Start Time: 15:25
Sample Time:16:55
Final Turbidity (NTUs) : 1.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 19.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:40	6.0	5.77	17.40	260	0.0	7.13	174	43.85	
15:50	10.0	5.84	17.02	260	0.0	7.05	185	43.85	
16:00	14.0	5.85	16.91	261	0.0	7.04	196	43.85	
16:10	18.0	5.87	16.87	262	0.0	7.00	205	43.85	
16:20	22.0	5.87	16.79	262	0.5	7.02	210	43.85	> 2 system volumes
16:30	26.0	5.89	16.77	262	1.3	6.98	214	43.85	
16:40	30.0	5.89	16.77	262	1.5	6.94	219	43.85	
16:45	32.0	5.90	16.76	261	1.6	6.93	219	43.85	
16:50	34.0	5.90	16.76	261	1.6	6.92	217	43.85	
									Duplicate Sample Collected
									MW-612-SU13

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-240
Sample Date: 8/19/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC):230-240
Initial Water Level (Feet TOIC):48.45
Final Water Level (feet TOIC):48.51
Casing Type: **PVC** Steel (circle one)
Personnel: N. Pargamos & R. Sekerka

Sample ID: W-27-240-SU13
Purge Start Time: 9:10
Sample Time:10:20
Final Turbidity (NTUs) : 2.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) CSIA
2x Pump System Volume (liters): 15.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:20	3.0	6.77	17.56	345	47.4	1.42	-61	48.50	
9:30	6.0	6.15	17.36	331	28.7	1.28	-8	48.59	
9:40	9.0	6.14	17.20	330	11.1	1.12	-2	48.51	
9:50	12.0	6.26	17.25	329	4.5	1.03	-6	48.57	
10:00	15.0	6.33	17.27	327	2.4	0.98	-7	48.52	
10:05	16.5	6.32	17.37	326	2.2	0.96	-5	48.49	> 2 system volumes
10:10	18.0	6.34	17.48	325	2.4	0.95	-5	48.51	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-285
Sample Date: 8/19/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):48.04
Final Water Level (feet TOIC):48.13
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka & N. Parganos

Sample ID: W-27-285-SU13
Purge Start Time: 8:40
Sample Time:12:45
Final Turbidity (NTUs) : 46.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300/150/100
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA
2x Pump System Volume (liters): 19.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8:50	3.0	6.16	17.80	172	0.0	5.65	165	48.07	
8:55	4.5	5.93	17.78	189	7.0	5.84	163	48.09	
9:00	6.0	5.84	17.80	195	4.0	5.81	161	48.12	
9:05	7.5	5.82	17.74	202	6.0	5.60	164	48.13	
9:15	10.5	5.79	17.68	215	12.3	5.14	170	48.14	> 2 system volumes
9:20	12.0	5.81	17.64	225	18.6	5.26	175	48.14	
9:30	15.0	5.68	17.95	246	39.3	4.79	189	48.15	
9:40	16.5	5.72	17.98	252	48.4	4.69	191	48.15	Decreased flow rate to 150ml/min
9:50	18.0	5.69	18.02	264	58.1	4.56	197	48.15	
9:55	18.75	5.69	17.94	274	66.5	4.43	201	48.16	
10:00	19.5	5.68	17.92	281	68.3	4.43	204	48.15	
10:05	20.25	5.65	17.91	287	66.2	4.32	209	48.15	
10:15	21.75	5.66	18.00	292	69.4	4.20	215	48.16	
10:25	23.25	5.66	18.12	306	73.1	4.00	222	48.15	
10:35	24.75	5.63	18.20	315	80.4	3.78	228	48.16	
10:45	25.75	5.63	18.47	326	83.3	3.92	233	48.15	Decreased flow rate to 100ml/min

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:55	26.75	5.66	19.80	329	88.4	3.55	236	48.14	
11:05	27.75	5.66	20.73	331	75.1	3.51	235	48.15	
11:15	28.75	5.65	21.05	333	72.3	3.44	237	48.16	
11:25	29.75	5.67	21.48	336	71.6	3.40	237	48.13	
11:35	30.75	5.64	21.45	338	68.9	3.35	240	48.13	
11:45	31.75	5.65	21.56	339	67.5	3.33	241	48.14	
11:55	32.75	5.63	21.59	340	66.1	3.28	239	48.13	
12:05	33.75	5.66	21.70	341	65.2	3.25	242	48.13	
12:10	34.25	5.67	21.67	342	63.1	3.35	240	48.13	
12:15	34.75	5.63	21.50	339	59.7	3.27	237	48.14	
12:20	35.25	5.61	20.96	338	53.3	3.21	235	48.13	
12:25	35.75	5.60	20.35	337	49.5	3.19	230	48.13	
12:30	36.25	5.62	19.98	337	47.7	3.16	228	48.14	
12:35	36.75	5.63	19.88	338	46.1	3.14	226	48.13	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-30-285
Sample Date: 8/19/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):46.98
Final Water Level (feet TOIC):47.33
Casing Type: PVC **Steel** (circle one)
Personnel: R. Sekerka

Sample ID: W-30-285-SU13
Purge Start Time: 11:25
Sample Time:12:45
Final Turbidity (NTUs) : 2.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 19.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:50	7.5	5.67	16.87	202	0.0	3.55	188	47.33	
12:00	10.5	5.65	16.74	202	0.0	3.57	197	47.33	
12:10	13.5	5.68	16.72	202	1.1	3.54	208	47.33	
12:20	16.5	5.69	16.70	202	1.9	3.49	217	47.33	
12:30	19.5	5.68	16.68	202	2.1	3.47	224	47.33	> 2 system volumes
12:35	21.0	5.68	16.68	202	2.2	3.45	228	47.33	
12:40	22.5	5.68	16.67	202	2.3	3.44	230	47.33	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-31-95
Sample Date: 8/15/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC):85-95
Initial Water Level (Feet TOIC):60.47
Final Water Level (feet TOIC):60.47
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: W-31-95-SU13 & MS/MSD
Purge Start Time: 8:55
Sample Time:10:20
Final Turbidity (NTUs) : 48.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.16

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:00	1.0	6.78	17.17	864	0.0	10.53	265	60.47	
9:05	2.0	6.26	16.93	901	0.0	9.33	269	60.47	
9:10	3.0	5.94	16.67	877	1000F	8.51	235	60.47	
9:15	4.0	5.87	16.54	863	650	8.01	217	60.47	
9:20	5.0	5.88	16.44	849	415	7.94	202	60.47	> 2 system volumes
9:25	6.0	5.87	16.60	848	298	7.75	197	60.47	
9:35	8.0	5.85	16.47	872	160	7.82	196	60.47	
9:45	10.0	5.87	16.55	892	102	7.37	196	60.47	
9:55	12.0	5.86	16.07	889	73.5	7.25	196	60.47	
10:05	14.0	5.86	16.90	890	53.4	7.39	197	60.47	
10:10	15.0	5.87	16.63	894	50.7	7.38	197	60.47	
10:15	16.0	5.87	16.87	887	48.8	7.11	197	60.47	F=Flashing
									MS/MSD Collected

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-32-110
Sample Date: 8/15/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC):100-110
Initial Water Level (Feet TOIC):60.54
Final Water Level (feet TOIC):59.85
Casing Type: **PVC** Steel (circle one)
Personnel: N. Parganos

Sample ID: W-32-110-SU13
Purge Start Time: 14:15
Sample Time:15:50
Final Turbidity (NTUs) : 38.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 150/100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
Total Uranium (ASTM-D5174) & Ferrous Iron
2x Pump System Volume (liters): 4.72

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:25	1.5	5.12	23.57	78	126	7.35	239	60.31	
14:30	2.25	5.30	23.25	79	134	6.92	232	60.35	
14:35	3.0	5.35	23.53	80	123	6.84	232	60.15	
14:40	3.75	5.35	23.55	80	121	7.01	234	60.07	
14:45	4.5	5.38	21.85	79	92.8	7.37	238	59.70	
14:50	5.25	5.33	21.50	80	90.1	7.43	245	59.35	Decreased flow rate to 100ml/min
14:55	5.75	5.37	21.51	80	90.3	7.73	246	59.30	> 2 system volumes
15:00	6.25	5.37	20.47	79	84.1	7.79	246	59.50	
15:05	6.75	5.34	19.79	81	75.4	8.06	252	60.50	
15:10	7.25	5.33	19.66	80	74.4	8.09	254	59.85	
15:15	7.75	5.34	19.38	81	64.5	8.15	256	59.82	
15:20	8.25	5.38	19.49	81	65.6	8.07	256	59.80	
15:25	8.75	5.37	19.46	81	55.7	8.07	259	59.91	
15:30	9.25	5.37	19.35	83	51.4	8.03	260	59.88	
15:35	9.75	5.39	19.32	83	42.1	8.04	261	59.80	
15:40	10.25	5.39	19.38	83	40.8	7.98	262	59.83	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:45	10.75	5.39	19.34	83	38.7	7.96	263	59.85	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-34-285
Sample Date: 8/21/2013
Sampling Device: Watera
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):275-285
Initial Water Level (Feet TOIC):56.84
Final Water Level (feet TOIC):56.84
Casing Type: **PVC** Steel (circle one)
Personnel: B. Hewitt

Sample ID: W-34-285-SU13
Purge Start Time: 9:25
Sample Time:10:55
Final Turbidity (NTUs) : 13.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260) Ni (SW6010B) and Ferrous Iron
2x Pump System Volume (liters): 17.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:35	2.5	6.14	18.19	299	16.4	5.29	99	56.84	
9:45	5.0	6.49	17.71	528	19.8	3.47	3	56.84	
9:55	7.5	6.44	17.62	755	1000F	2.56	23	56.84	
10:05	10.0	6.29	17.59	857	102	2.03	51	56.84	
10:15	12.5	6.14	17.80	953	41.7	1.69	82	56.84	
10:25	15.0	6.04	17.44	994	20.8	1.34	112	56.84	
10:35	17.5	6.02	17.67	1000	14.6	1.15	120	56.84	> 2 system volumes
10:40	18.75	6.01	17.82	1000	12.8	1.04	125	56.84	
10:45	20.0	6.01	17.79	1000	12.7	0.99	126	56.84	
10:50	21.25	6.01	17.90	1010	13.4	0.95	127	56.84	
									F=Flashing

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-36-390
Sample Date: 8/20/2013
Sampling Device: Marshalk
Well Depth (feet TOIC): 390
Screen Interval (feet TOIC):380-390
Initial Water Level (Feet TOIC):46.87
Final Water Level (feet TOIC):46.93
Casing Type: PVC **Steel** (circle one)
Personnel: A. Zarnadze

Sample ID: W-36-390-SU13
Purge Start Time: 10:00
Sample Time:11:50
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA and Ferrous Iron
2x Pump System Volume (liters): 27.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:05	1.5	6.50	16.90	654	0.0	3.70	193	46.93	
10:10	3.0	6.27	16.57	672	0.0	3.75	202	46.93	
10:20	6.0	6.12	16.84	680	0.0	3.21	204	46.93	
10:30	9.0	6.19	16.86	675	0.0	2.87	202	46.93	
11:00	18.0	6.21	16.88	659	0.0	2.48	212	46.93	
11:30	27.0	6.21	16.40	653	0.0	2.37	221	46.93	
11:40	30.0	6.20	16.41	653	0.0	2.34	221	46.93	> 2 system volumes
11:45	31.5	6.20	16.27	652	0.0	2.26	221	46.93	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-36-448
Sample Date: 8/20/2013
Sampling Device: Marshalk
Well Depth (feet TOIC): 448
Screen Interval (feet TOIC):438-448
Initial Water Level (Feet TOIC):47.00
Final Water Level (feet TOIC):47.00
Casing Type: PVC **Steel** (circle one)
Personnel: J. Lacanlale & A. Zarnadze

Sample ID: W-36-448-SU13
Purge Start Time: 9:50
Sample Time:13:00
Final Turbidity (NTUs) : 49.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 160/360
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA
2x Pump System Volume (liters): 31.76

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9:55	0.8	6.49	20.08	569	0.0	7.25	162	47.00	
10:00	1.6	6.85	19.23	572	0.0	6.00	156	47.00	
10:05	2.4	7.00	18.69	566	0.0	6.00	152	47.00	
10:10	3.2	7.08	18.71	563	0.0	5.72	150	47.00	
10:30	6.4	6.87	18.53	566	103	5.19	78	47.00	
11:00	11.2	6.04	19.12	659	98.0	3.67	99	47.00	
11:30	16.0	---	---	---	---	---	---	47.00	Stopped purging at 11:30, replaced
11:50	17.8	6.72	19.06	644	17.6	4.66	130	47.00	Tubing. Increased flow rate to
11:55	19.6	6.60	18.34	617	14.4	3.58	132	47.00	360ml/min when resumed purging
12:00	21.4	6.55	18.03	593	16.0	3.42	136	47.00	At 11:45
12:05	23.2	6.44	17.80	580	68.5	3.10	125	47.00	
12:10	25.0	6.46	17.59	630	661	2.65	106	47.00	
12:15	26.8	6.57	17.48	602	428	2.48	117	47.00	
12:20	28.6	6.37	17.26	604	387	2.42	133	47.00	
12:25	30.4	6.37	17.58	583	172	3.02	144	47.00	
12:30	32.2	6.39	17.36	554	76.8	2.74	139	47.00	> 2 system volumes

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:35	34.0	6.38	17.32	531	57.0	2.77	140	47.00	
12:40	35.8	6.35	17.45	529	51.0	2.75	142	47.00	
12:45	37.6	6.32	17.37	524	46.2	3.14	145	47.00	
12:50	39.4	6.32	17.40	518	48.3	3.30	145	47.00	
12:55	41.2	6.30	17.24	513	49.4	3.32	149	47.00	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-37-325
Sample Date: 8/19/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC):315-325
Initial Water Level (Feet TOIC):49.98
Final Water Level (feet TOIC):50.08
Casing Type: PVC **Steel** (circle one)
Personnel: B. Hewitt

Sample ID: W-37-325-SU13
Purge Start Time: 14:30
Sample Time:16:30
Final Turbidity (NTUs) : 22.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260) Ni (SW6010B) CSIA
2x Pump System Volume (liters): 22.33

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:40	2.2	5.34	19.39	303	0.0	3.21	255	50.08	
14:50	4.4	5.32	18.60	300	50.8	2.28	273	50.08	
15:00	6.6	5.30	18.31	301	218	1.73	284	50.08	
15:10	8.8	5.31	18.14	301	125	1.44	287	50.08	
15:20	11.0	5.27	17.79	301	89.0	1.25	288	50.08	
15:30	13.2	5.29	17.93	300	79.9	1.14	290	50.08	
15:40	15.4	5.32	17.82	292	59.4	1.09	293	50.08	
15:50	17.6	5.32	17.72	293	48.6	0.99	293	50.08	
16:00	19.8	5.30	17.61	294	34.5	0.92	294	50.08	
16:10	22.0	5.30	17.60	296	24.2	0.85	296	50.08	
16:15	23.1	5.30	17.64	297	23.1	0.82	297	50.08	> 2 system volumes
16:20	24.2	5.29	17.61	296	22.5	0.80	298	50.08	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-37-385
Sample Date: 8/19/2013
Sampling Device: Marschalk
Well Depth (feet TOIC): 385
Screen Interval (feet TOIC):375-385
Initial Water Level (Feet TOIC):50.28
Final Water Level (feet TOIC):50.28
Casing Type: PVC **Steel** (circle one)
Personnel: A. Zarnadze

Sample ID: W-37-385-SU13
Purge Start Time: 14:35
Sample Time:16:10
Final Turbidity (NTUs) : 13.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 375
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260) Ni (SW6010B)
2x Pump System Volume (liters): 26.87

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:40	1.875	9.47	21.32	252	65.0	2.80	245	50.28	
14:45	3.75	5.41	19.40	230	134	2.89	238	50.28	
14:55	7.5	5.45	19.06	231	80.6	2.86	245	50.28	
15:05	11.25	5.46	17.51	242	16.2	3.82	250	50.28	
15:15	15.0	5.37	17.63	215	11.9	4.41	249	50.28	
15:25	18.75	5.33	17.43	200	10.5	4.99	247	50.28	
15:30	20.615	5.25	17.36	182	12.1	5.46	245	50.28	
15:35	22.5	5.41	17.19	179	10.8	5.79	250	50.28	
15:40	24.375	5.32	17.16	178	10.9	5.79	255	50.28	
15:45	26.25	5.24	17.07	182	14.1	5.81	261	50.28	
15:50	28.125	5.25	17.04	183	14.1	5.74	260	50.28	> 2 system volumes
15:55	30.0	5.25	17.05	182	16.2	5.21	260	50.28	
16:00	31.875	5.30	17.30	182	13.3	5.04	255	50.28	
16:05	33.75	5.30	17.38	184	13.8	5.14	260	50.28	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-3
Sample Date: 3/26/2015
Sampling Device: Bladder pump
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC): 58-78
Initial Water Level (Feet TOIC): 64.10
Final Water Level (feet TOIC): 64.11
Casing Type: **PVC** Steel (circle one)
Personnel: L.R.

Sample ID: MW-3-SP15
Purge Start Time: 8:50
Sample Time: 9:32
Final Turbidity (NTUs): 1.6
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni,**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.05	3	5.76	13.30	0136	4.5	8.94	158.6	64.11	
09.10	4	5.78	13.34	0130	3.0	8.85	172.3	64.11	
09.15	5	5.81	13.66	0129	2.3	8.80	178.5	64.11	
09.20	6	5.82	13.81	0129	2.2	8.80	185.7	64.11	
09.25	7	5.81	13.81	0129	1.4	8.79	191.3	64.11	
09.30	8	5.81	13.81	0128	1.6	8.78	195.2	64.11	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-4
Sample Date: 3/26/2015
Sampling Device: Bladder pump
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC): 58-78
Initial Water Level (Feet TOIC): 63.71
Final Water Level (feet TOIC): 63.71
Casing Type: **PVC** Steel (circle one)
Personnel: L.R

Sample ID: MW-4-SP15
Purge Start Time: 13:20
Sample Time: 14:15
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni,**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.35	3	6.56	13.65	0269	0.0	8.38	192.7	63.71	
13.40	4	6.56	13.63	0270	0.0	8.33	195.5	63.71	
13.45	5	6.55	13.64	0270	0.0	8.31	196.6	63.71	
13.50	6	6.51	13.50	0270	0.0	8.29	202.1	63.71	
13.55	7	6.46	13.54	0270	0.0	8.27	204.1	63.71	
14.00	8	6.51	13.55	0270	0.0	8.26	201.6	63.71	
14.05	9	6.50	13.53	0270	0.0	8.26	200.1	63.71	
14.10	10	6.50	13.55	0270	0.0	8.25	199.9	63.71	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-8
Sample Date: 3/26/2015
Sampling Device: Bladder pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC): 120-130
Initial Water Level (Feet TOIC): 63.91
Final Water Level (feet TOIC): 63.91
Casing Type: **PVC** Steel (circle one)
Personnel: L.R

Sample ID: MW-8-SP15
Purge Start Time: 10:45
Sample Time: 12:07
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni**,
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.05	3	5.25	11.30	0167	0.0	9.21	162.3	63.91	
11.10	4	5.23	11.37	0166	0.0	9.21	165.1	63.91	
11.15	5	5.88	11.88	0169	0.0	9.05	175.4	63.91	
11.20	6	5.86	11.95	0177	0.0	8.97	184.4	63.91	
11.25	7	5.77	11.99	0189	0.0	8.87	203.9	63.91	
11.30	8	5.76	11.99	0190	0.0	8.89	204.7	63.91	
11.35	9	5.75	11.99	0192	0.0	8.85	207.9	63.91	
11.40	10	5.74	11.99	0210	0.0	8.73	214.3	63.91	
11.45	11	5.67	11.99	0219	0.0	8.64	219.1	63.91	
11.50	12	5.71	11.99	0233	0.0	8.53	223.4	63.91	
11.55	13	5.61	11.98	0248	0.0	8.43	232.4	63.91	
12.00	14	5.60	11.98	0249	0.0	8.34	235.4	63.91	
12.05	15	5.60	11.99	0248	0.0	8.31	235.4	63.91	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-9
Sample Date: 3/26/2015
Sampling Device: Bladder
Well Depth (feet TOIC): 82
Screen Interval (feet TOIC): 72-82
Initial Water Level (Feet TOIC): 64.51
Final Water Level (feet TOIC): 64.51
Casing Type: **PVC** Steel (circle one)
Personnel: L R

Sample ID: MW-9-SP15
Purge Start Time: 13:45
Sample Time: 16:53
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.05	4	8.07	13.34	0133	0	9.49	141.5	64.51	
16.10	5	7.96	13.35	0130	0	9.44	149.1	64.51	
16.15	6	7.76	13.21	0129	0	9.44	160.1	64.51	
16.20	7	7.62	13.27	0127	0	9.43	168.1	64.51	
16.25	8	7.68	13.52	0125	0	9.39	170.6	64.51	
16.30	9	7.50	13.51	0125	0	9.39	172.6	64.51	
16.35	10	7.51	13.50	0124	0	9.38	175.2	64.51	
16.40	11	7.34	13.44	0123	0	9.37	184.9	64.51	
16.45	12	7.35	13.44	0123	0	9.36	184.9	64.51	
16.50	13	7.35	13.45	0122	0	9.32	185.0	64.51	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-10
Sample Date: 3/30/2015
Sampling Device: QED Bladder
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC): 120-130
Initial Water Level (Feet TOIC): 64-39
Final Water Level (feet TOIC): 64-39
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-10-SP15
Purge Start Time: 13:12
Sample Time: 14:05
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 225
Purge Rate d/sampling (ml/min): 225
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.30	1	6.01	14.30	169	0.0	3.43	130.4	64.39	
13.35	2.125	5.97	14.30	172	0.0	3.68	144.6	64.39	
13.40	3.25	5.97	14.34	171	0.0	3.64	147.4	64.39	
13.45	4.375	5.97	14.61	170	0.0	3.82	150.5	64.39	
13.50	5.5	5.98	15.01	170	0.0	3.76	152.2	64.39	
13.55	6.625	5.98	15.11	170	0.0	3.73	154.8	64.39	
14.00	7.75	5.97	14.95	164	0.0	3.74	156.3	64.39	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-11
Sample Date: 3/30/2015
Sampling Device: QED bladder
Well Depth (feet TOIC): 81
Screen Interval (feet TOIC): 71-81
Initial Water Level (Feet TOIC): 64.65
Final Water Level (feet TOIC): 64.65
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-11-SP15
Purge Start Time: 15:35
Sample Time: 16:20
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.45	0.5	6.40	13.19	98	0.0	1.84	110.3	64.65	
15.50	1.5	6.49	13.43	98	0.0	2.02	118.3	64.65	
15.55	2.5	6.48	13.33	97	0.0	2.19	127.8	64.65	
16.00	3.5	6.47	13.36	96	0.0	2.31	133.3	64.65	
16.05	4.5	6.45	13.61	94	0.0	2.46	139.2	64.65	
16.10	5.5	6.42	13.62	94	0.0	2.50	144.4	64.65	
16.15	6.5	6.41	13.56	93	0.0	2.52	147.4	64.65	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-13D
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 300
Screen Interval (feet TOIC): 290-300
Initial Water Level (Feet TOIC): 68.25
Final Water Level (feet TOIC): 68.25
Casing Type: **PVC** Steel (circle one)
Personnel: T.Cayes

Sample ID: MW-13D-SP15
Purge Start Time: 16:40
Sample Time: 18:30
Final Turbidity (NTUs): 1.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 225
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.27

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.48	-	6.40	11.84	196	0	8.75	151.5	68.25	
16.53	0.9	6.09	12.15	190	0	7.62	165.6	68.25	
16.58	0.9	5.93	12.21	189	0	7.58	176.6	68.25	
17.03	0.9	5.90	12.16	189	0	7.62	182.7	68.25	
17.08	0.9	5.91	12.22	189	0	7.66	187.8	68.25	
17.13	0.9	5.84	12.11	189	0	7.60	190.6	68.25	300
17.18	1.5	5.84	11.11	187	0	7.72	195.0	68.25	
17.23	1.5	5.84	10.81	189	0	7.71	195.8	68.25	
17.28	1.5	5.85	10.12	191	0	7.70	197.5	68.25	
17.33									
17.38									Problems with mp50
17.43	1.9	5.83	10.73	181	1.9	7.82	202.3	68.25	380
17.48	1.9	5.85	10.72	202	0.8	7.97	199.7	68.25	
17.53								68.25	
17.58	0.92	6.00	9.98	216	3.6	8.02	201.5	68.25	230
18.03	0.92	5.99	12.42	270	1.5	8.05	197.1	68.25	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-13D **Date:** 3/18/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
18.08	.92	6.09	12.53	290	0	8.06	195.0	68.25	
18.13	.92	6.09	12.66	296	0	8.18	193.8	68.25	
18.18	.92	6.07	12.64	288	1.4	8.26	194.7	68.25	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-13S
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 68.10
Final Water Level (feet TOIC): 68.10
Casing Type: **PVC** Steel (circle one)
Personnel: P.Lamont

Sample ID: MW-13S-SP15
Purge Start Time: 16:40
Sample Time: 17:20
Final Turbidity (NTUs): 1.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.52

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.50	4	5.48	13.53	503	2.0	6.66	187.9	68.10	
16.55	6	5.49	13.56	478	0.6	6.75	194		
17.00	8	5.48	13.40	465	-0.2	6.73	198	68.10	
17.05	10	5.47	13.64	455	-0.8	6.73	201	-	
17.10	12	5.44	13.65	461	0.6	6.60	208		
17.15	14	5.45	13.66	463	-0.09	6.43	211	68.10	
17.20	16	-	-	-	-	-	-	-	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14DD
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC): 365-375
Initial Water Level (Feet TOIC): 67.25
Final Water Level (feet TOIC): 67.30
Casing Type: **PVC** Steel (circle one)
Personnel: T.Cayes

Sample ID: MW-14DD-SP15
Purge Start Time: 13:14
Sample Time: 14:15
Final Turbidity (NTUs): 0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 14.31

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.20	1.7	5.80	12.34	274	0	7.42	109.8	67.30	
13.25	1.7	5.80	12.56	272	0	7.09	115.6	67.30	
13.30	1.7	5.73	12.68	273	0	7.32	129.0	67.30	
13.35	1.7	5.72	12.46	273	0	7.47	143.0	67.30	
13.40	1.7	5.79	12.48	258	1.4	7.50	152.9	67.30	
13.45	1.7	5.81	12.96	243	0	7.42	163.5	67.30	
13.50	1.7	5.85	12.83	240	0	7.42	165.8	67.30	
13.55	1.7	5.91	12.48	237	0.1	7.46	172.3	67.30	
14.00	1.7	5.81	12.43	233	0	7.44	179.8	67.30	
14.05	1.7	5.81	12.39	232	0	7.41	182.0	67.30	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-14S
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 67.26
Final Water Level (feet TOIC): 67.26
Casing Type: **PVC** Steel (circle one)
Personnel: T.Cayes

Sample ID: MW-14S-SP15
Purge Start Time: 14:55
Sample Time: 15:45
Final Turbidity (NTUs): 9.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.51

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.01	1.5	5.65	12.72	1950	42.0	2.00	174.6	67.26	
15.06	1.5	5.68	12.69	1924	31.2	1.77	181.0	67.26	
15.11	0.65	5.66	12.18	1910	18.7	1.84	184.1	67.26	130 ml/min
15.16	0.65	5.63	11.25	1890	18.4	1.94	186.9	67.26	
15.21	0.65	5.72	11.10	1882	15.0	2.09	188.2	67.26	
15.26	0.65	5.68	10.98	1864	13.3	2.12	188.4	67.26	
15.31	0.65	5.65	10.90	1845	9.8	2.04	190.2	67.26	
15.36	0.65	5.62	10.70	1831	9.9	2.11	192.3	67.26	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15D
Sample Date: 4/1/2015
Sampling Device: Dedicated bladder pump
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC): 300-310
Initial Water Level (Feet TOIC): 65.53
Final Water Level (feet TOIC): 65.53
Casing Type: **PVC** Steel (circle one)
Personnel: T. ollin L.Reid

Sample ID: MW-15D-SP15
Purge Start Time: 11:10
Sample Time: 12:35
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.78

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:15	1	6.23	12.80	358	0.4	5.63	139.8	65.53	
11:20	2	6.18	12.86	303	0.0	5.92	146.7	65.53	
11:30	4	6.16	12.85	313	0.0	6.24	166.1	65.53	
11:40	6	6.20	12.85	302	0.0	6.40	163.3	65.53	
11:50	6	6.15	12.32	291	0.0	6.53	167.5	65.53	500 ml/min
11:55	8.5	6.05	13.50	288	0.0	6.36	167.4	65.53	
12:00	9.5	5.99	13.45	256	0.0	6.72	186.4	65.53	
12:05	10.5	5.85	13.44	243	0.2	6.81	195.9	65.53	
12:10	12	5.72	13.48	234	1.4	6.94	208.0	65.53	
12:15	14	5.58	13.34	220	1.1	7.10	220.5	65.53	175 ml/min
12:20	14.525	5.56	13.08	210	1.1	7.20	222.5	65.53	
12:25	15.4	5.53	12.90	217	4.6	7.23	227.0	65.53	
12:30	16.275	5.51	12.80	216	0.0	7.26	230.7	65.53	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15DD
Sample Date: 3/31/2015
Sampling Device: QED Bladder
Well Depth (feet TOIC): 370
Screen Interval (feet TOIC): 360-370
Initial Water Level (Feet TOIC): 67.40
Final Water Level (feet TOIC): 67.41
Casing Type: **PVC** Steel (circle one)
Personnel: J, Rayne

Sample ID: MW-15DD-SP15
Purge Start Time: 15:55
Sample Time: 16:50
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 14.10

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.04	4.5	6.87	12.30	112	0.0	4.90	234.5	67.41	
16.10	7.0	7.01	12.29	112	0.0	4.84	237.2	67.41	
16.15	9.0	5.82	12.29	173	26.8	6.08	254.2	67.41	
16.20	12.0	5.60	12.23	212	11.4	7.34	260.8	67.41	
16.25	14.0	5.56	12.24	217	0.4	7.85	267.2	67.41	
16.30	16.5	5.52	12.18	217	0.0	8.01	274.1	67.41	
16.35	18.0	5.52	11.98	217	0.0	8.08	279.0	67.41	
16.40	20.0	5.50	11.94	217	0.0	8.15	284.9	67.41	
16.45	21.5	5.49	11.95	217	0.0	8.19	288.6	67.41	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-15-S
Sample Date: 3/31/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 66.7
Final Water Level (feet TOIC): 66.4
Casing Type: **PVC** Steel (circle one)
Personnel: D. H. A. Z.

Sample ID: MW-15-S-SP15
Purge Start Time: 15:10 12:8
Sample Time: 16:00
Final Turbidity (NTUs): 3.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.40	7	6.25	12.54	4697	3.8	9.47	139	66.4	
15.45	8.5	6.25	12.54	4697	3.8	9.47	139	66.4	
15.50	10	6.25	12.94	4582	3.6	9.37	135	66.4	
15.55	11.5	6.25	12.92	4577	3.6	9.0	134	66.4	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-13D **Date:** 3/18/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
18.08	.92	6.09	12.53	290	0	8.06	195.0	68.25	
18.13	.92	6.09	12.66	296	0	8.18	193.8	68.25	
18.18	.92	6.07	12.64	288	1.4	8.26	194.7	68.25	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-16D
Sample Date: 3/17/2015
Sampling Device: QED, Bladder pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC): 280-290
Initial Water Level (Feet TOIC): -
Final Water Level (feet TOIC): -
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R. Jani

Sample ID: MW-16D-SP15 (MW-901-SP15)
Purge Start Time: 14:57
Sample Time: 15:45
Final Turbidity (NTUs): 8.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 10.96

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.17	6.0	5.34	13.25	190	126.2	8.11	187.7	-	
15.22	7.5	5.28	13.00	211	164.1	8.24	198.8	-	
15.27	9.0	5.41	13.02	220	26.6	8.33	192.0	-	
15.32	10.5	5.37	13.20	221	14.0	8.28	199.9	-	
15.37	12.5	5.47	13.25	220	12.0	8.30	198.8	-	
15.42	15.0	5.46	13.12	221	8.7	8.31	200.4	-	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-16S
Sample Date: 3/17/2015
Sampling Device: QED, Bladder pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 68.07
Final Water Level (feet TOIC): 68.06
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R.Jani

Sample ID: MW-16S-SP15
Purge Start Time: 15:22
Sample Time: 16:05
Final Turbidity (NTUs): -1.5
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.40	5.25	5.29	13.63	0.114	30.0	8.87	254.6	68.07	
15.45	7.80	5.30	13.58	0.114	90.0	8.69	253.6	68.06	
15.50	9.50	5.29	13.52	0.113	40.0	8.71	254.5	68.06	
15.55	11.50	5.29	13.48	0.114	50.0	8.58	254.3	68.06	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-18I
Sample Date: 3/18/2015
Sampling Device: dedicated bladder
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC): 120-130
Initial Water Level (Feet TOIC): 67.01
Final Water Level (feet TOIC): 66.99
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-18I-SP15
Purge Start Time: 15:40
Sample Time: 16:40
Final Turbidity (NTUs): 6.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.55	1	5.77	12.82	833	6.8	6.05	217.8	66.99	
16.00	3	6.03	12.97	1105	36.9	8.63	216.2	66.99	
16.05	5	6.04	13.02	1105	20.0	8.65	217.2	66.99	
16.10	7	6.05	12.93	1113	15.4	8.67	218.7	66.99	200 ml/min
16.15	8	6.06	12.20	1117	12.4	8.66	220.0	66.99	
16.20	9	6.06	11.81	1124	11.7	8.61	221.0	66.99	
16.25	10	6.06	11.27	1126	9.9	8.57	224.1	66.99	
16.30	11	6.05	11.12	1126	7.6	8.56	226.4	66.99	
16.35	12	6.05	11.24	1125	6.4	8.55	227.3	66.99	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-18S
Sample Date: 3/18/2015
Sampling Device: QED MP40
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC): 62-72
Initial Water Level (Feet TOIC): 66.82
Final Water Level (feet TOIC): -
Casing Type: **PVC** Steel (circle one)
Personnel: Shupta / Dillon

Sample ID: MW-18S-SP15
Purge Start Time: 16:10
Sample Time: 17:15
Final Turbidity (NTUs): 1.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.20	0.5	6.84	10.17	913	20.3	8.01	189.8	-	Water level was below the top of
16.25	1	6.84	9.30	914	18.2	7.99	192.5	-	The pump
16.30	1.5	6.85	8.62	915	13.5	7.93	195.1	-	
16.35									
									Reaching purge rate of about
16.55	2.5	6.83	10.09	906	6.5	8.74	201.3	-	150 ml/min
17.00	3.1	6.86	10.88	900	6.6	8.41	201.2	-	
17.05	3.7	6.85	11.08	903	3.0	8.11	201.8	-	
17.10	4.2	6.85	11.27	905	1.9	8.04	202.6	-	
17.15									

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-19D
Sample Date: 3/17/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 305
Screen Interval (feet TOIC): 295-305
Initial Water Level (Feet TOIC): 65.95
Final Water Level (feet TOIC): 65.97
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R.Jani

Sample ID: MW-19D-SP15
Purge Start Time: 09:44
Sample Time: 10:55
Final Turbidity (NTUs): 5.5
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 480
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.56

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.05	5.5	5.69	12.58	638	0.7	2.22	174.2	65.95	
10.10	6.5	5.70	12.21	547	42.2	2.87	178.6	65.95	
10.15	8.0	5.45	12.91	337	300.9	4.87	187.5	65.97	
10.20	10.5	5.60	12.93	256	69.4	6.99	184.0	65.97	
10.25	13.0	5.58	12.86	242	20.8	7.39	191.3	65.97	
10.30	15.2	5.36	12.84	234	12.1	7.75	202.5	65.97	
10.35	18.0	5.32	12.82	231	8.9	7.88	216.1	65.97	
10.40	19.0	5.60	12.75	229	5.9	7.98	199.3	65.97	
10.45	21.5	5.58	12.78	228	5.3	8.02	202.5	65.97	
10.50	24.0	5.55	12.81	227	5.5	8.00	205.1	65.97	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-19S
Sample Date: 3/17/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 66.08
Final Water Level (feet TOIC): 66.10
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R.Jani

Sample ID: MW-19S-SP15
Purge Start Time: 12:08
Sample Time: 12:40
Final Turbidity (NTUs): 0.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.56

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.16	5.5	5.88	14.56	2	-1.1	10.33	233.5	66.09	
12.21	7.0	5.88	14.56	2	-1.1	10.33	233.5	66.09	
12.26	7.8	6.04	12.91	64	0.6	9.20	180.6	66.09	
12.31	9.0	6.04	12.71	64	0.0	9.06	183.7	66.10	
12.36	10.0	6.04	12.62	65	0.8	9.05	185.3	66.10	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20D
Sample Date: 3/24/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 310
Screen Interval (feet TOIC): 300-310
Initial Water Level (Feet TOIC): 66.90
Final Water Level (feet TOIC): 66.90
Casing Type: **PVC** Steel (circle one)
Personnel: P.Lamont

Sample ID: W-20D-SP15
Purge Start Time: 16:30
Sample Time: 17:55
Final Turbidity (NTUs): 4.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.35	2	6.36	12.01	2.131	0.8	0.42	100	66.90	
16.40	3	6.36	12.68	2.155	0.0	0.38	92.4	66.90	
16.45	4	6.35	12.80	2.171	0.0	0.37	90.8	66.90	
16.50	5	6.38	12.63	2.175	0.0	0.35	89.0	66.90	
16.55	6	6.53	12.51	2.014	1.9	0.35	84.0	66.90	
17.00	7	8.45	12.45	2.668	20.1	0.37	46.7	-	
17.05	8	9.17	12.67	2.861	46	0.47	46.0	66.90	
17.10	9	8.41	12.69	2.107	40.3	0.58	58.4	66.90	
17.15	10	7.76	12.61	2.250	25.8	0.69	63.1	66.90	
17.20	11	7.30	12.67	2.337	19.7	0.78	68.3	-	
17.25	12	6.83	12.71	2.430	11.4	0.85	78.5	-	
17.30	13	6.59	12.71	2.470	10.2	0.89	84.8	-	
17.35	14	6.40	12.72	2.517	7.6	0.97	93.7	66.90	
17.40	15	6.26	12.72	2.536	5.1	1.01	98.0	-	
17.45	16	6.20	12.68	2.550	3.8	1.10	103.5	-	
17.50	17	6.17	12.74	2.553	4.1	1.11	105.7		

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20I
Sample Date: 3/19/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC): 140-150
Initial Water Level (Feet TOIC): 67.04
Final Water Level (feet TOIC): 67.04
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-20I-SP15
Purge Start Time: 09:00
Sample Time: 09:45
Final Turbidity (NTUs): 2.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.15	2	6.29	15.17	1375	0.0	1.81	185.3	67.04	
09.20	3	6.29	12.24	1348	3.6	4.79	184.5	67.04	
09.25	4	6.35	12.32	1410	4.5	7.41	191.6	67.04	
09.30	5	6.36	12.37	1404	1.3	7.05	194.1	67.04	
09.35	6	6.36	12.37	1397	0.0	7.78	196.5	67.04	
09.40	7	6.36	12.37	1389	2.6	7.81	198.6	67.04	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-20S
Sample Date: 3/19/2015
Sampling Device: dedicated QED MP50
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 66.71
Final Water Level (feet TOIC): 66.71
Casing Type: **PVC** Steel (circle one)
Personnel: *unclear*

Sample ID: MW-20S-SP15 (MS/MSD)
Purge Start Time: 09:10
Sample Time: 09:50
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 25
Purge Rate (ml/min) 225
Purge Rate d/sampling (ml/min): 225
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.53

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.30	2	6.74	12.53	948	0.0	8.11	205.5	66.72	
09.35	3.2	6.75	12.76	951	0.9	7.95	210.0	66.72	
09.40	4.8	6.75	12.86	956	0.3	7.86	207.0	66.72	
09.45	6.3	6.75	12.86	957	0.0	7.79	203.2	66.72	
09.50	Sample								

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21D
Sample Date: 3/16/2015
Sampling Device: QED, Bladder pump
Well Depth (feet TOIC): 310 Fr
Screen Interval (feet TOIC): 300-310
Initial Water Level (Feet TOIC): 66.00
Final Water Level (feet TOIC): 66.05
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R. Jani

Sample ID: MW-21D-SP15
Purge Start Time: 16:06
Sample Time: 17:22
Final Turbidity (NTUs): 74
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.76

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.57	10.5	5.66	13.52	407	79.1	6.45	137.1	66.09	
17.02	14.0	5.64	13.41	415	72.2	7.15	149.8	66.10	
17.07	16.1	5.57	13.39	415	41.5	7.14	152.6	66.08	
17.12	19.0	5.57	13.35	415	22.1	7.12	152.4	66.06	
17.17	22.0	5.58	13.35	417	7.4	7.19	158.4	66.05	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21I
Sample Date: 3/16/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 180
Screen Interval (feet TOIC): 170-180
Initial Water Level (Feet TOIC): 66.34
Final Water Level (feet TOIC): 66.40
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R.Jani

Sample ID: MW-21I-SP15
Purge Start Time: 17:46
Sample Time: 18:22
Final Turbidity (NTUs): 17.14
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 280
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.54

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.51	2.10	4.59	14.28	628	15.8	7.77	279.3	66.36	Initial well PID = 0.0
17.56	6.10	4.66	14.06	469	45.7	7.79	295.9	66.38	
18.01	8.0	4.61	13.86	476	16.8	7.79	301.8	66.38	
18.06	9.5	4.60	13.76	482	27.7	7.81	313.8	66.38	
18.11	10.5	4.61	13.80	480	17.6	8.78	318.1	66.38	
18.16	11.5	4.60	13.78	479	14.1	9.18	317.9	66.40	
18.21	13.5	4.59	13.77	476	17.4	8.15	324.1	66.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-21S
Sample Date: 3/17/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 65-98
Final Water Level (feet TOIC): 66.05
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R.Jani

Sample ID: MW-21S-SP15
Purge Start Time: 08:20
Sample Time: 09:05
Final Turbidity (NTUs): -1.1
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 400
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.12

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08.27	1.0	6.27	12.29	102	34.1	8.56	233.2	66.05	
08.32	2.5	6.05	13.00	100	19.5	8.26	232.7	66.05	
08.37	4.1	6.03	13.14	99	15.2	8.28	232.3	66.08	
08.42	6.0	5.76	13.16	98	5.9	8.46	234.6	66.05	
08.47	7.9	5.92	13.18	98	2.3	8.56	224.1	66.04	
08.52	9.5	6.16	13.21	98	1.0	8.55	207.6	66.05	
08.57	11.0	6.19	13.26	98	0.1	8.57	203.4	66.05	
09.02	12.5	6.19	13.27	98	10.0	8.59	202.2	66.05	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22D
Sample Date: 3/15/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 315
Screen Interval (feet TOIC): 305-315
Initial Water Level (Feet TOIC): 67.75
Final Water Level (feet TOIC): 68.0
Casing Type: **PVC** Steel (circle one)
Personnel: P.Lamont T.Cayes

Sample ID: MW-22D-SP15
Purge Start Time: 08:20
Sample Time: 10:30
Final Turbidity (NTUs): 12.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 225
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08.25	1.125	6.33	9.74	2.659	106.9	6.50	214.2	68.07	
08.30	2.250	6.26	11.28	2.612	69.2	4.95	209.2	68.05	
08.35	3.25	6.24	11.31	2.619	70.0	4.29	205.7	68.05	Adjusted to 200 ml/min
08.40	4.25	6.21	11.20	2.615	80	4.06	203.9	68.05	
08.45	6.25	6.21	11.25	2.607	76	3.97	201.5	68.10	
08.50	6.25	6.19	11.30	2.608	90	3.86	198.7	68.05	
08.55	7.25	6.19	11.26	2.625	190	3.84	197.5		
09.00	8.25	6.17	11.40	2.675	550	3.56	195.0		
09.05	9.25	6.17	11.33	2.772	720	3.44	193.4		
09.10	10.25	6.17	11.35	2.801	650	4.00	192.5		
09.15	11.25								
09.20	12.25	6.20	11.56	2.793	150	5.63	189.3	68.10	
09.25	13.25	6.18	11.37	2.823	230	5.26	186.6		
09.30	14.25	6.17	11.36	2.830	250	5.03	184.0		
09.35	15.25	6.19	11.28	2.829	200	4.87	180.8	68.05	200 ml/min
09.45	16.25	6.18	11.39	2.802	195.6	4.75	177.1		

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-22D **Date:** 3/15/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.50	17.25	6.18	11.49	2.793	145	4.75	174.2	68.0	
09.55	18.25	6.18	11.56	2.772	132	4.70	172.3	-	
10.00	19.25	6.18	11.61	2.761	86	4.70	170.5	68.0	
10.05	20.25	6.17	11.66	2.750	65.5	4.71	168.3	-	
10.10	21.25	6.17	11.77	2.741	43.2	4.69	166.3	-	
10.15	22.25	6.17	11.64	2.723	12.8	4.70	165.1	-	
10.20	23.25	6.16	12.08	2.700	13.8	4.68	162.5		
10.25	24.25	6.16	12.34	2.698	12.7	4.65	159.9		
10.30	25.25	-	-	-	-	-	-	68.0	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22I
Sample Date: 3/17/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC): 140-150
Initial Water Level (Feet TOIC): 67.25
Final Water Level (feet TOIC): 67.25
Casing Type: **PVC** Steel (circle one)
Personnel: T. Cayes

Sample ID: MW-22I-SP15
Purge Start Time: 16:52
Sample Time: 17:40
Final Turbidity (NTUs): 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (None circled)
Total Uranium
2x Pump System Volume (liters): 5.31

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:03	0.75	6.46	12.43	684	1.1	2.69	149.6	67.25	
17:08	0.75	5.91	13.32	808	5.6	7.24	175.3	67.25	
17:13	0.75	5.74	13.31	818	0.9	8.35	197.0	67.25	
17:18	0.75	5.69	13.24	830	0.1	8.35	209.3	67.25	
17:23	0.75	5.70	13.20	836	0.8	8.36	214.0	67.25	
17:28	0.75	5.70	13.27	839	0	8.32	218.9	67.25	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
NTU =Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-22S
Sample Date: 3/17/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 67.16
Final Water Level (feet TOIC): 67.819
Casing Type: **PVC** Steel (circle one)
Personnel: T. Cayes

Sample ID: MW-22S-SP15
Purge Start Time: 15:37
Sample Time: 16:15
Final Turbidity (NTUs): 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 280
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs (None circled)
Total Uranium
2x Pump System Volume (liters): 2.81

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:44	1.15	6.47	13.47	540	0.6	7.31	124.9	67.16	
15:49	1.15	6.47	13.55	542	0	7.04	130.7	67.17	
15:54	1.15	6.46	13.57	543	0	6.84	136.8	67.17	
15:59	1.15	6.49	13.37	542	0	6.88	141.3	67.19	
16:04	1.15	6.45	13.39	542	0	6.84	144.7	67.19	
16:09	1.15	6.46	13.27	543	0	6.82	147.2	67.19	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
NTU =Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23D
Sample Date: 3/17/2015
Sampling Device: dedicated Bladder pump
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC): 330-340
Initial Water Level (Feet TOIC): 64.96
Final Water Level (feet TOIC): 65.02
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-23D-SP15
Purge Start Time: 08:30
Sample Time: 11:40
Final Turbidity (NTUs): 35.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 450
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 13

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08.35	4	9.37	13.64	1492	2.3	0.76	-163.3	65.08	
08.40	6.4	9.37	13.56	1340	3.7	0.50	-164.4	65.08	
08.45	8.0	8.97	13.42	1104	35.7	0.47	-132.0	65.08	400 ml/min
08.50	10	9.02	13.44	1042	39.0	0.42	-135.9	65.08	
08.55	12	9.65	13.48	888	70.6	0.59	-143.3	65.08	200 ml/min
09.00	13	9.67	12.89	884	104.9	0.40	-138.8	65.03	
09.05	14	9.64	12.63	893	121.1	0.52	-129.7	65.03	
09.10	15	9.50	12.63	943	168.5	0.58	-128.5	65.03	
09.15	16	9.29	12.63	1000	204.3	0.57	-109.0	65.03	
09.20	17	9.16	12.68	1026	217.2	0.56	-102.8	65.03	
09.25	18	8.85	12.74	1075	217.2	0.56	-110.0	65.03	
09.40	21	7.71	12.80	1182	205.1	0.58	-41.7	65.03	Halt purge to clean the cell
09.50	21	7.45	13.02	1201	156.4	1.93	-21.6	65.03	
10.05	24	7.10	13.02	1231	133.8	0.73	-8.2	65.03	100 ml/min
10.20	25.5	6.95	12.34	1241	114.3	0.76	1.2	65.02	
10.50	28.5	6.80	12.87	1253	73.9	0.84	8.7	65.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-23D **Date:** 3/17/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.05	30	6.74	13.26	1255	53.0	0.91	11.4	65.02	
11.10	30.5	6.73	13.21	1254	44.6	0.91	11.7	65.02	
11.15	31	6.71	13.19	1259	43.1	0.91	12.1	65.02	
11.20	31.5	6.69	13.17	1259	38.6	0.92	12.9	65.02	
11.25	32	6.67	13.14	1260	36.9	0.92	13.4	65.02	
11.30	32.5	6.67	13.10	1258	35.3	0.92	14.5	65.02	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23I
Sample Date: 3/24/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 180
Screen Interval (feet TOIC): 170-180
Initial Water Level (Feet TOIC): 64.66
Final Water Level (feet TOIC): 64.66
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-23I-SP15
Purge Start Time: 14:38
Sample Time: 15:15
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 66

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14.45	1.5	6.68	13.94	579	0.0	6.19	168.3	64.67	
14.50	4	6.25	14.11	441	2.5	4.95	179.2	64.67	
14.55	5.5	5.82	14.16	505	1.5	4.79	191.2	64.67	
15.00	7	5.75	14.17	511	0.3	4.64	194.2	64.67	
15.05	8.5	5.73	14.09	523	0.1	4.39	196.9	64.67	
15.10	10	5.71	13.48	529	0.0	4.36	198.4	64.67	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-23S
Sample Date: 3/24/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC): 90-100
Initial Water Level (Feet TOIC): 64.83
Final Water Level (feet TOIC): 64.83
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-23S-SP15
Purge Start Time: 15:20
Sample Time: 15:55
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.30	1	6.01	13.77	64	0.0	9.98	191.9	64.83	
15.40	3	5.94	14.23	61	0.0	9.76	192.0	64.83	
15.45	4	5.92	14.21	61	0.0	9.61	192.0	64.83	
15.50	5	5.92	14.35	61	0.0	9.23	193.2	64.83	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-24DD
Sample Date: 3/18/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 370
Screen Interval (feet TOIC): 360-370
Initial Water Level (Feet TOIC): 69.03
Final Water Level (feet TOIC): 69.03
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-24DD-SP15
Purge Start Time: 11:45
Sample Time: 14:10
Final Turbidity (NTUs): 3.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 300 to 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 14

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.40	4	5.60	11.29	189	28.5	8.16	206.1	69.03	
12.50	7	5.58	12.96	106	9.5	6.78	214.9	69.03	220 ml/min
13.00	9	5.54	12.33	223	15.5	4.91	223.1	69.03	
13.10	11.2	5.56	12.51	230	77.9	5.44	227.2	69.03	
13.20	13.4	5.55	12.73	255	103.0	5.64	223.0	69.03	
13.25	14.5	5.53	12.84	277	108.5	6.02	232.9	69.03	
13.30	15.6	5.53	12.92	295	109.8	6.16	234.9	69.03	
13.40	17.8	5.49	12.42	322	114.7	6.48	240.3	69.03	
13.50	19.0	5.48	12.64	337	4.3	6.70	241.8	69.03	
13.55	20.2	5.47	11.76	338	3.7	6.77	244.6	69.03	
14.00	21.4	5.49	12.12	336	4.1	6.77	246.0	69.03	
14.05	22.6	5.48	12.16	334	3.8	6.48	246.8	69.03	
14.10	Sample								

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-24S
Sample Date: 3/18/2015
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 80
Screen Interval (feet TOIC): 70-80
Initial Water Level (Feet TOIC): 65.27
Final Water Level (feet TOIC): 65.27
Casing Type: **PVC** Steel (circle one)
Personnel: Shupta

Sample ID: MW-24S-SP15
Purge Start Time: 11:50
Sample Time: 12:50
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 275 ml/min
Purge Rate d/sampling (ml/min): 150 ml/min
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.58

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.10	5	6.73	13.64	416	0.0	8.31	234.2	65.27	
12.15	6	6.38	13.29	419	0.0	8.29	235.6	65.27	150 ml/min
12.20	6.6	6.38	13.02	425	0.0	8.31	236.5	65.27	
12.25	7.2	6.40	12.81	437	0.0	8.28	237.3	65.27	
12.30	8	6.40	13.03	439	0.0	8.25	238.2	65.27	
12.35	8.7	6.38	12.93	420	0.0	8.30	239.5	65.27	
12.40	9.5	6.37	13.10	409	0.0	8.33	240.1	65.27	
12.45	10.2	6.36	13.12	406	0.0	8.32	240.6	65.27	
12.50									

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25D
Sample Date: 3/16/2015
Sampling Device: dedicated bladder pump
Well Depth (feet TOIC): 350
Screen Interval (feet TOIC): 340-350
Initial Water Level (Feet TOIC): 65.42
Final Water Level (feet TOIC): 65.42
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-25D-SP15
Purge Start Time: 16:45
Sample Time: 18:10
Final Turbidity (NTUs): 33.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 400 / 240
Purge Rate d/sampling (ml/min): 240
Sample Analyses: **VOCs, Ni**
Total U
2x Pump System Volume (liters): 13.38

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.05	3	6.42	14.06	757	12.0	1.31	-21.1	65.42	
17.10	5	6.33	14.00	758	20.2	0.96	13.9	65.42	
17.15	7	5.95	13.97	755	33.1	2.79	56.6	65.42	
17.20	8	5.88	13.93	676	43.6	3.53	76.7	65.42	
17.25	10	5.78	13.90	605	73.5	4.38	86.2	65.42	
17.30	12	5.66	13.88	603	68.3	5.21	100.0	65.42	
17.35	14	5.63	13.86	597	46.8	5.66	111.8	65.42	
17.40	14	5.61	13.66	592	42.8	5.83	117.7	65.42	
17.45	15.2	5.59	13.54	585	36.3	5.99	124.4	65.42	
17.50	16.4	5.58	13.47	578	34.5	6.14	131.6	65.42	
17.55	17.6	5.57	13.49	576	33.9	6.22	138.7	65.42	
18.00	18.8	5.56	13.44	574	33.3	6.25	144.2	65.42	
18.05	20	5.56	13.10	574	33.3	6.28	148.6	65.42	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25I
Sample Date: 3/16/2015
Sampling Device: QED - dedicated bladder
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC): 230-240
Initial Water Level (Feet TOIC): 64.97
Final Water Level (feet TOIC): 64.98
Casing Type: **PVC** Steel (circle one)
Personnel: Shuptan / Dillon

Sample ID: MW-25I-SP15
Purge Start Time: 16:50
Sample Time: 17:40
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.00								64.98	350 ml/min
17.10	7	5.35	13.94	1.013	0.0	7.68	227.4	64.98	
17.15	10	5.34	13.91	1.009	0.0	8.24	246.1	64.98	
17.20	12	5.34	13.94	1.004	0.0	8.45	253.8	64.98	
17.25	13.5	5.34	13.92	1.003	0.0	8.49	257.5	64.98	
17.30	15.8	5.35	13.89	1.001	0.0	8.51	262.2	64.98	
17.35	16.5	5.35	13.89	1.001	0.0	8.61	261.4	64.98	
17.40									Sampling rate 200 ml/min

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-25S
Sample Date: 3/19/2015
Sampling Device: dedicated QED MP50
Well Depth (feet TOIC): 115
Screen Interval (feet TOIC): 105-115
Initial Water Level (Feet TOIC): 65.02
Final Water Level (feet TOIC): 65.04
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-25S-SP15
Purge Start Time: 13:20
Sample Time: 13:50
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.99

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.25	1.2	5.59	14.48	619	0.0	8.79	219.0	65.04	
13.30	2.2	5.65	14.57	630	0.0	9.27	222.6	65.04	
13.35	3.2	5.63	14.41	631	0.0	9.41	226.7	65.04	Change to 200 ml/min
13.40	4.2	5.61	14.27	631	0.0	9.43	231.7	65.04	
13.45	5.2	5.60	14.38	630	0.0	9.42	236.6	65.04	
13.50	Sample								

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-26D
Sample Date: 3/17/2015
Sampling Device: QED
Well Depth (feet TOIC): 276
Screen Interval (feet TOIC): 266-276
Initial Water Level (Feet TOIC): 65.00
Final Water Level (feet TOIC): 65.00
Casing Type: **PVC** Steel (circle one)
Personnel: Shuptar

Sample ID: MW-26D-SP15 DUP MW-900-SP15
Purge Start Time: 08:35
Sample Time: 09:35
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 466
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 10.44

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08.50	3	6.14	14.02	0.231	0.0	0.46	174.8	64.98	
09.00	7	5.49	13.98	1.474	0.0	3.61	204.4	64.99	
09.10	9.5	5.49	13.98	1.508	0.0	4.17	236.1	64.99	
09.15	11.5	5.48	13.96	1.508	0.0	4.26	247.5	64.99	
09.20	13	5.48	13.91	1.505	0.0	4.29	253.2	65.00	
09.25	15.5	5.49	13.91	1.500	0.0	4.30	257.7	65.00	
09.30		5.50	13.90	1.488	0.0	4.26	263.2	65.00	
09.35									Duplicate MW-900-SP15

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-26S
Sample Date: 3/19/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC): 110-120
Initial Water Level (Feet TOIC): 65.24
Final Water Level (feet TOIC): 65.24
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-26S-SP15
Purge Start Time: 13:50
Sample Time: 14:35
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14.00	1	6.28	14.09	410	0.0	5.36	188.8	65.24	
14.05	2.1	5.61	14.34	540	0.0	1.73	208.0	65.24	
14.10	3.2	5.52	14.35	543	0.0	1.48	211.1	65.24	
14.15	4.3	5.45	14.37	542	0.0	1.36	216.4	65.24	
14.20	5.4	5.43	14.25	543	0.0	1.27	219.8	65.24	
14.25	6.5	5.41	14.19	543	0.0	1.20	222.2	65.24	
14.30	7.6	5.40	14.19	545	0.0	1.17	224.7	65.24	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27DD
Sample Date: 3/17/2015
Sampling Device: QED MP50
Well Depth (feet TOIC): 375
Screen Interval (feet TOIC): 365-375
Initial Water Level (Feet TOIC): 64.93
Final Water Level (feet TOIC): 64.95
Casing Type: **PVC** Steel (circle one)
Personnel: J.Shuptar

Sample ID: MW-27DD-SP15
Purge Start Time: 10:45
Sample Time: 11:50
Final Turbidity (NTUs): 21.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 500
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 14.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.55	4	6.54	13.62	0.185	4.6	1.35	206.0	64.97	500 ml/min
11.00	6.25	6.39	13.60	0.186	0.0	0.96	209.9	64.97	
11.10	10	5.48	13.58	0.176	70.4	4.78	252.9	64.97	
11.20	14	5.37	13.54	0.173	42.0	6.06	272.5	64.97	
11.25	16	5.39	13.08	0.171	31.4	6.25	282.7	64.97	
11.30	17	5.40	13.11	0.171	29.7	6.28	287.2	64.97	
11.35	18	5.40	13.12	0.170	25.7	6.28	289.7	64.97	
11.40	19	5.42	13.14	0.170	23.3	6.28	292.4	64.97	
11.45	20	5.42	13.18	0.170	21.0	6.29	294.9	64.97	200
11.50									

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27D
Sample Date: 3/17/2015
Sampling Device: QED MP
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC): 280-290
Initial Water Level (Feet TOIC): 64.42
Final Water Level (feet TOIC): 64.43
Casing Type: PVC Steel (circle one)
Personnel: Shuptar

Sample ID: MW-27D-SP15
Purge Start Time: 13:10
Sample Time: 17:55
Final Turbidity (NTUs): 48.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 450
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.02

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.15								64.79	450 ml/min
13.20	4	6.61	13.60	0.435	15.2	10.73	222.6	64.79	
13.30	8	6.76	13.53	0.048	8.2	10.75	219.7	64.70	
13.35	10	6.65	13.45	0.031	18.4	10.14	230.5	64.70	
13.40	12	6.65	12.74	0.020	40.0	9.60	241.6	64.66	200 ml/min
13.45	14	6.53	12.63	0.028	36.8	9.61	245.0	64.51	
13.50	15	6.54	12.60	0.025	37.3	9.61	248.6	64.50	
13.55	16	6.51	12.54	0.022	42.4	9.70	252.4	64.50	
14.00	17	6.50	12.58	0.022	50.8	9.73	255.4	64.50	
14.10	19	6.55	12.62	0.017	57.5	10.01	282.0	64.50	Cleaned flow cell
14.15	20	6.46	12.68	0.016	68.4	9.93	276.8	64.50	
14.20	21	6.46	12.71	0.015	67.2	10.02	277.1	64.48	100 ml/min
14.25	21.5	6.44	12.15	0.018	60.3	10.04	277.1	64.48	
14.30	21.7	6.45	11.87	0.016	64.7	10.06	275.9	64.48	
14.45	23.5	6.40	11.42	0.014	64.3	10.10	278.0	64.44	
15.00	25.0	6.43	11.18	0.014	62.6	10.14	280.2	64.44	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-27D **Date:** 3/17/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.30	26	6.43	10.75	0.013	68.6	10.28	279.3	64.43	
16.20	31	6.44	10.41	0.012	64.9	10.44	285.0	64.43	
16.45	33	6.44	10.66	0.012	70.9	10.60	293.7	64.43	Cleaned Flow through Cell
17.00	34.5	6.43	9.46	0.012	64.7	10.57	295.0	64.43	
17.15	36	6.44	9.90	0.012	65.8	10.59	296.3	64.43	
17.30	37.5	6.44	9.49	0.012	56.2	10.58	291.1	64.43	
17.35	38	6.44	9.50	0.012	50.3	10.58	294.3	64.43	
17.40	38.5	6.43	9.53	0.012	49.2	10.57	299.8	64.43	
17.45	39	6.43	9.50	0.012	48.8	10.56	297.2	64.43	
17.50	40.5	6.43	9.51	0.012	48.6	10.59	299.1	64.43	
17.55									

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-27S
Sample Date: 3/17/2015
Sampling Device: dedicated Bladder pump
Well Depth (feet TOIC): 88
Screen Interval (feet TOIC): 78-88
Initial Water Level (Feet TOIC): 64.58
Final Water Level (feet TOIC): 64.58
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-27S-SP15
Purge Start Time: 14:25
Sample Time: 15:10
Final Turbidity (NTUs): 1.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.93

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14.30	1	6.77	13.57	97	6.1	9.61	91.1	64.58	
14.35	3	6.55	13.68	95	4.9	9.37	99.8	64.58	
14.40	5	6.39	13.71	97	2.5	9.69	113.1	64.58	
14.45	7	6.37	13.69	97	3.7	9.42	113.8	64.58	200 ml/min
14.50	8	6.35	13.18	98	1.8	9.22	117.7	64.58	
14.55	9	6.32	13.10	98	1.9	9.14	121.9	64.58	
15.00	10	6.30	13.19	98	1.3	8.97	125.0	64.58	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28D
Sample Date: 3/17/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 287
Screen Interval (feet TOIC): 277-287
Initial Water Level (Feet TOIC): 70.26
Final Water Level (feet TOIC): 70.30
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont

Sample ID: MW-28D-SP15
Purge Start Time: 12:45
Sample Time: 13:50
Final Turbidity (NTUs): 35.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 450
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni
Total Uranium
2x Pump System Volume (liters): 8.67

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:50	2.25	8.69	14.02	1.990	197	4.26	-6.8	70.30	
12:55	4.5	10.10	13.96	1.600	42	3.56	-125.6	70.30	
13:00	6.75	8.08	13.98	3.103	34.8	3.17	-84.1	70.30	
13:05	9	7.89	14.08	3.219	46.9	3.26	-36.3	70.30	
13:10	11.25	7.48	14.15	3.240	56.9	3.36	-7.3	70.30	
13:15	13.50	7	14.12	3.236	44.5	3.42	19.7	70.30	
13:20	15.75	6.41	14.03	3.210	60.1	3.45	54.9	70.30	
13:25	18	6.30	14.17	3.197	25.8	3.53	60.7	70.30	
13:30	20.25	6.23	14.13	2.196	48.8	3.56	64.9	70.30	
13:35	23.5	6.19	14.06	3.191	32.3	3.54	68.3	70.30	
13:40	24.75	6.14	14.03	3.191	30.4	3.43	71.0	70.30	
13:45	27	6.13	14.01	3.190	32.8	3.64	71.7	70.30	
13:50									

Key:
BGS = Below ground surface.
NTU = Nephelometric turbidity unit.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28I
Sample Date: 3/17/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC): 150-160
Initial Water Level (Feet TOIC): 70.25
Final Water Level (feet TOIC): 70.25
Casing Type: **PVC** Steel (circle one)
Personnel: T. Cayes

Sample ID: MW-28I-SP15
Purge Start Time: 11:50
Sample Time: 12:30
Final Turbidity (NTUs): 2.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 230
Sample Analyses: VOCs, Ni
Total Uranium
2x Pump System Volume (liters): 5.59

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:58	1.75	7.13	13.86	1.579	3.6	1.43	171.4	70.25	
12:03	1.75	6.79	13.99	1.492	240.7	6.22	89.1	70.25	
12:08	1.75	6.57	13.94	1.604	31.1	7.97	113.1	70.25	
12:13	1.75	6.55	14.00	1.610	11.0	8.19	125.5	70.25	
12:18	1.75	6.53	13.87	1.611	6.1	8.31	133.8	70.25	
12:23	1.15	6.54	13.84	1.604	3.3	8.33	139.6	70.25	230 ml/min
12:28	1.15	6.53	13.88	1.603	2.3	8.32	143.0	70.25	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
NTU =Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-28S
Sample Date: 3/17/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 100
Screen Interval (feet TOIC): 90-100
Initial Water Level (Feet TOIC): 67.58
Final Water Level (feet TOIC): 67.58
Casing Type: **PVC** Steel (circle one)
Personnel: T. Cayes

Sample ID: MW-28S-SP15
Purge Start Time: 10:36
Sample Time: 11:20
Final Turbidity (NTUs): 0.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs, Ni
Total Uranium
2x Pump System Volume (liters): 3.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:46	1.5	6.05	13.37	246	2.8	7.41	180.3	67.58	
10.51	1.5	5.82	13.80	216	2.3	7.24	189.8	67.58	
10.56	1.5	5.79	13.30	204	2.2	7.36	197.5	67.58	
11.01	0.9	5.79	13.85	210	1.3	7.12	202.4	67.58	180 ml/min
11.06	0.9	5.80	13.87	209	0.7	7.03	203.7	67.58	
11.11	0.9	5.80	13.77	212	0.2	7.00	205.5	67.58	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
NTU =Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-29S
Sample Date: 3/17/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 76
Screen Interval (feet TOIC): 66-76
Initial Water Level (Feet TOIC): 65.32
Final Water Level (feet TOIC): 65.34
Casing Type: **PVC** Steel (circle one)
Personnel: T. Cayes, R. J

Sample ID: MW-29S-SP15
Purge Start Time: 17:32
Sample Time: 18:05
Final Turbidity (NTUs): 4.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium
2x Pump System Volume (liters): 2.43

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17:41	1.8	6.51	14.36	319	36.2	8.64	194.2	65.34	Well PID 1.7 ppm
17:46	3.5	6.50	14.39	319	27.8	8.69	194.5	65.34	
17:51	5.5	6.42	14.39	318	15.8	8.72	199.1	65.34	
17:56	7	6.37	14.39	317	9.3	8.74	199.7	65.34	
18:01	9	6.43	14.39	317	9.2	8.72	198.3	65.34	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
NTU =Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30D
Sample Date: 3/16/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC): 330-340
Initial Water Level (Feet TOIC): 64.61
Final Water Level (feet TOIC): 64.70
Casing Type: **PVC** Steel (circle one)
Personnel: T.Cayes

Sample ID: MW-30D-SP15
Purge Start Time: 16:55
Sample Time: 18:15
Final Turbidity (NTUs): 0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 180
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs, Ni, U
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.80

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.02		6.28	14.07	913	0	1.69	95.7	64.69	
17.07		6.63	14.04	903	0	1.18	77.4	64.70	
17.12		6.79	14.09	909	0	1.19	70.4	64.70	
17.17		6.31	14.06	900	0	2.12	94.6	64.70	
17.22		5.95	13.97	894	0	2.96	120.6	64.70	
17.27		5.88	13.97	874	0	3.23	130.4	64.70	
17.32		5.82	13.96	834	4.7	3.43	142.3	64.70	
17.37		5.78	13.86	806	3.4	3.55	148.8	64.70	
17.42		5.75	13.71	786	1.1	3.59	156.2	64.70	
17.47		5.73	13.86	774	0.1	3.62	160.9	64.70	Purge rate changed to 290
17.52	1.16	5.71	13.81	758	4.0	3.61	167.2	64.70	
17.57		5.69	13.71	741	1.5	3.60	172.0	64.70	
18.02		5.68	13.79	730	0	3.59	178.6	64.70	
18.07		5.67	13.72	724	0	3.54	182.0	64.70	180 ml/min

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30I
Sample Date: 3/17/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC): 230-240
Initial Water Level (Feet TOIC): 64.04
Final Water Level (feet TOIC): 64.04
Casing Type: **PVC** Steel (circle one)
Personnel: T. Cayes

Sample ID: MW-30I-SP15
Purge Start Time: 8:30
Sample Time: 9:20
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium
2x Pump System Volume (liters): 9.25

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08:49	2	6.16	14.06	684	0	3.17	188.2	64.04	
08.54	2	5.87	14.06	615	0	5.97	195.1	64.04	
08.59	2	5.83	14.06	569	0	6.64	200.4	64.04	
09.04	2	5.82	14.03	565	0	6.75	204.1	64.04	
09.09	2	5.83	14.02	568	0	6.77	206.5	64.04	
09.14	2	5.83	14.03	568	0	6.78	208.8	64.04	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
NTU =Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-30S
Sample Date: 3/16/2015
Sampling Device: dedicated
Well Depth (feet TOIC):
Screen Interval (feet TOIC): 90-100
Initial Water Level (Feet TOIC): 64.09
Final Water Level (feet TOIC): 64.04
Casing Type: **PVC** Steel (circle one)
Personnel: P.Lamont T. Cayes

Sample ID: MW-30S-SP15
Purge Start Time: 17:30
Sample Time: 18:10
Final Turbidity (NTUs): -3.2
Casing Inner Diameter (inches):
Purge Rate (ml/min): 200 ? 1730
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, U
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.24

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.30	0.0	6.25	12.85	0.196	-0.7	9.67	208		
17.35	1.0	5.41	13.60	0.199	-0.7	9.55	228.4		200 ml/min
17.40	2.0								Missed reading
17.45	3.0	5.05	13.76	0.201	-1.5	9.29	235.3	64.04	
17.50	4.0	5.09	13.54	0.204	-2.4	9.26	233.5	64.04	
17.55	5.0	5.09	13.51	0.204	-2.7	9.26	234.8		
18.00	6.0	5.11	13.53	0.206	-3.0	9.25	234.8	64.04	
18.05	7.0	5.13	13.61	0.208	-3.0	9.14	235.8	64.04	
18.10									

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-31D
Sample Date: 3/16/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 330
Screen Interval (feet TOIC): 320
Initial Water Level (Feet TOIC): 64.61
Final Water Level (feet TOIC): 64.69
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-31D-SP15
Purge Start Time: 4:30
Sample Time: 6:20 pm
Final Turbidity (NTUs): 11.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 350 / 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: **VOCs, Ni,**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.62

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
4.40	3.5	6.95	14.82	1.722	1.9	6.83	-39.1	64.69	
4.45	5.25	6.98	14.70	1.728	1.4	6.50	-43.0	64.69	
4.50	7.0	7.02	14.57	1.731	8.1	5.32	-48.6	64.69	
4.55	7.75	6.73	14.35	1.701	60.9	3.80	-31.2	64.69	
5.00	8.5	6.50	14.30	1.632	48.8	3.72	-20.2	64.69	
5.05	9.75	6.34	14.13	1.606	42.1	3.70	-18.7	64.69	
5.10	11.0	6.17	14.20	1.579	31.9	3.72	-15.7	64.69	
5.15	12.25	6.08	14.29	1.541	24.3	3.77	-14.8	64.69	
5.20	13.5	6.02	14.01	1.519	25.9	3.85	-13.8	64.69	
5.25	14.75	6.00	13.92	1.508	21.4	3.75	-13.9	64.69	
5.30	16.0	5.97	13.82	1.486	19.8	3.73	-13.2	64.69	
5.35	17.25	5.92	14.08	1.469	26.2	3.66	-13.7	64.69	
5.40	18.5	5.94	14.09	1.398	55.1	3.59	-14.7	64.69	
5.45	19.75	5.94	14.02	1.364	46.7	3.44	-16.6	64.69	
5.50	21.0	5.94	14.02	1.341	37.4	3.34	-17.4	64.69	
5.55	22.25	5.95	13.96	1.326	30.0	3.24	-18.8	64.69	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-31D **Date:** 3/16/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
6.00	23.5	5.97	13.90	1.310	2.4	3.22	-15	64.69	
6.05	24.75	5.97	13.92	1.305	12.00	3.18	-20.2	64.69	
6.10	26.00	5.98	13.86	1.298	11.7	3.11	-21.2	64.69	
6.15	27.25	5.96	13.86	1.291	11.9	3.09	-21.3	64.69	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-31I
Sample Date: 3/17/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC): 180-190
Initial Water Level (Feet TOIC): 64.02
Final Water Level (feet TOIC): 64.02
Casing Type: **PVC** Steel (circle one)
Personnel: L.R A.Z

Sample ID: MW-31I-SP15
Purge Start Time: 8:30
Sample Time: 9:00
Final Turbidity (NTUs): 7.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni
Total Uranium
2x Pump System Volume (liters): 7.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08:35	2.5	6.18	14.37	674	20.3	6.18	44	64.02	
08.40	5	5.68	14.36	720	7.7	5.83	47.3	64.02	
08.45	7.5	5.67	14.32	713	10.5	5.90	43.1	64.02	
09.50	10	5.68	14.29	712	10.4	6.68	40.8	64.02	
09.55	12.5	5.69	14.29	711	7.9	6.39	39.1	64.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
NTU =Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-32D
Sample Date: 3/17/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 330
Screen Interval (feet TOIC): 320
Initial Water Level (Feet TOIC): 64.89
Final Water Level (feet TOIC): 64.99
Casing Type: **PVC** Steel (circle one)
Personnel: L.R.

Sample ID: MW-32D-SP15
Purge Start Time: 12:20
Sample Time: 17:40
Final Turbidity (NTUs): 34.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.30	1.5	6.37	13.62	1924	12.6	54.0	5.5	65.01	
12.35	3.0	6.84	13.71	1919	24.2	30.1	1.5	65.01	
12.40	4.5	6.93	13.71	1919	31.0	33.2	-19.7	65.01	
12.40	6.0	6.25	13.70	1820	65.2	30.6	-17.1	65.02	
12.45	7.5	6.61	13.68	1875	100.6	28.7	-15.2	65.02	
12.50	9.0	6.69	13.65	1787	289.4	20.5	-10.5	65.02	
12.55	10.5	6.50	13.64	1643	311.5	17.1	-8.6	65.02	
13.00	12.0	6.30	13.99	0865	106.1	15.7	17.5	65.02	
13.05	13.5	6.41	14.02	0705	87.1	14.8	24.2	65.02	
13.10	15.0	6.43	13.71	0689	97.2	11.0	-1.4	65.02	
13.15	16.5	6.48	13.90	0564	136.4	11.4	-3.9	65.02	
13.25	19.5	6.51	14.10	0544	120.2	10.0	-9.7	65.02	
13.35	22.5	6.51	14.12	0533	148.2	9.6	-14.2	65.02	
13.45	25.5	6.50	14.0	0546	150.4	9.4	-15.7	65.02	
13.55	28.5	6.49	14.08	0559	142.5	9.8	-18.8	65.02	
14.05	31.5	6.48	14.08	0578	139.3	10.2	-17.0	65.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-32D **Date:** 3/17/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14.15	34.5	6.46	14.09	0579	148.2	10.6	-11.1	64.99	200 ml/min
14.25	36.5	6.44	13.78	0600	135.9	11.4	-21.5	64.99	
14.35	38.6	6.44	13.34	0602	134.2	11.4	-27.3	64.99	
14.45	40.6	6.44	13.35	0607	131.7	11.4	-27.1	64.99	
14.55	42.5	6.34	13.38	0638	138.6	11.8	-18.1	64.99	
15.05	44.5	6.34	13.39	0642	124.5	12.5	-18.3	64.99	
15.15	46.6	6.35	13.39	0650	120.1	12.6	-20.5	64.99	
15.25	48.5	6.36	13.34	0674	105.9	13.4	-24.6	64.99	
15.35	50.5	6.34	13.34	0675	105.0	13.4	-25.8	64.99	
15.45	52.5	6.34	13.34	0675	99.9	13.3	-25.9	64.99	
15.55	54.5	6.34	13.34	0671	91.7	13.3	-29.2	64.99	
16.05	56.5	6.34	13.34	0695	79.2	13.4	-32.4	64.99	
16.15	58.5	6.34	13.34	0697	69.4	13.5	-30.1	64.99	
16.25	60.5	6.34	13.34	0715	61.0	13.7	-34.0	64.99	
16.35	62.5	6.34	13.34	0718	58.2	13.8	-32.0	64.99	
16.45	64.5	6.33	13.34	0720	48.3	13.9	-25.5	64.99	
16.55	66.5	6.34	13.34	0727	44.3	14.0	-29.1	64.99	
17.05	68.5	6.34	13.34	0760	40.1	14.1	-27.4	64.99	
17.15	70.5	6.34	13.34	0764	37.8	14.8	-32.4	64.99	
17.25	72.5	6.34	13.34	0763	36.4	14.8	-33.1	64.99	
17.35	74.5	6.4	13.34	0765	34.2	14.8	-32.6	64.99	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-33S
Sample Date: 3/23/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 58.76
Final Water Level (feet TOIC): 58.76
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-33S-SP15 DUP: MW-907-SP15
Purge Start Time: 09:30
Sample Time: 10:20
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.40	0.5	4.65	10.04	93	1.2	9.68	255.9	58.76	
09.45	1.5	4.47	10.30	96	0.0	9.68	266.7	58.76	
09.50	2.5	4.40	10.48	98	0.0	9.61	278.0	58.76	
09.55	3.5	4.39	10.76	99	0.0	9.56	284.6	58.76	
10.00	4.5	4.36	10.83	100	0.0	9.58	296.8	58.76	
10.05	5.5	4.35	10.76	100	0.0	9.58	302.2	58.76	
10.10	6.5	4.34	10.71	101	0.0	9.52	308.8	58.76	
10.15	7.5	4.35	10.62	100	0.0	9.51	312.1	58.76	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-34D
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC): 270-280
Initial Water Level (Feet TOIC): 59.5
Final Water Level (feet TOIC): 59.5
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-34D-SP15
Purge Start Time: 13:45
Sample Time: 15:50
Final Turbidity (NTUs): 35.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.50	1.5	5.89	11.75	288	17	3.22	242	59.5	
14.00	4.5	5.98	12.84	290	18.6	1.04	234	59.5	
14.10	7.5	5.84	12.79	296	111.5	2.86	246	59.5	
14.25	12.00	5.74	12.88	309	180	5.58	244	59.5	
15.15	27.00	5.74	12.03	310	49	6.06	255	59.5	
15.25	30.00	5.67	11.95	309	45	6.11	260	59.5	
15.30	31.5	5.73	12.06	309	43	6.09	258	59.5	
15.35	33.0	5.66	12.02	309	38	6.08	262	59.5	
15.40	34.5	5.68	12.07	309	36.0	6.08	263	59.5	
15.45	36.0	5.68	11.87	310	35.0	6.08	264	59.5	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Ferrous Iron Reading:_____mg/L

Site: Sylvania Corning FUSRAP
Well No.: MW-34S
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC)65:
Initial Water Level (Feet TOI59.70C):
Final Water Level (feet TOIC): 59.70
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-34S-SP15
Purge Start Time: 12:22
Sample Time: 13:14
Final Turbidity (NTUs): -0.5
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs,
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.30	1.5	5.60	11.99	0069	0.2	102.2	234.4	59.70	
12.35	3.0	5.56	12.14	0069	0.0	102.5	236.4	59.70	
12.40	4.5	5.40	12.21	0069	0.0	102.6	244.6	59.70	
12.45	6.0	5.21	12.22	0069	0.0	102.4	259.8	59.70	
12.50	7.5	5.20	12.14	0070	0.0	102.6	263.4	59.70	
12.55	9.0	5.33	12.09	0071	0.0	102.5	258.4	59.70	
13.00	10.5	5.25	12.11	0074	-0.4	102.5	265.4	59.70	
13.05	12.0	5.27	12.12	0074	-0.5	102.4	266.5	59.70	
13.10	13.5	5.26	12.11	0074	-0.5	102.1	263.6	59.70	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-39S
Sample Date: 3/17/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 86
Screen Interval (feet TOIC): 76.86
Initial Water Level (Feet TOIC): 64.13
Final Water Level (feet TOIC): 64.12
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-39S-SP15
Purge Start Time: 10:00
Sample Time: 10:35
Final Turbidity (NTUs): 4.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.05	1	5.77	12.20	0.240	31.5	7.36	37.0	64.12	
10.10	2	5.69	12.15	0.241	29.2	7.11	43.6	64.12	
10.15	3	5.69	12.07	0.238	15.4	7.07	46.7	64.12	
10.20	4	5.68	12.04	0.238	10.0	7.03	47.3	64.12	
10.25	5	5.68	12.07	0.239	6.5	6.99	48.5	64.12	
10.30	6	5.68	12.12	0.239	4.6	6.95	50.5	64.12	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-41S
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 76
Screen Interval (feet TOIC)66-76:
Initial Water Level (Feet TOIC): 66.45
Final Water Level (feet TOIC): 66.45
Casing Type: **PVC** Steel (circle one)
Personnel: *unclear*

Sample ID: MW-41S-SP15
Purge Start Time: 11:10
Sample Time: 11:35
Final Turbidity (NTUs): 1.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.38

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.15	1.5	6.16	13.20	318	2.8	7.69	193.6	66.45	
11.20	3	6.17	13.38	317	3.6	7.57	197.6	66.45	
11.25	4.5	6.15	13.24	315	3.3	7.49	204.2	66.45	
11.30	6	6.14	13.16	314	1.3	7.43	207.1	66.45	
11.35	Sample								

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-42I
Sample Date: 3/19/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC): 140-150
Initial Water Level (Feet TOIC): 66.65
Final Water Level (feet TOIC): 66.65
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-42I-SP15
Purge Start Time: 15:50
Sample Time: 16:40
Final Turbidity (NTUs): 9.8
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.00	0.5	6.13	11.82	250	2.6	5.89	193.2	66.65	
16.05	4.5	5.97	12.63	244	2.7	2.40	195.3	66.65	
16.10	2.5	5.82	12.60	386	25.5	4.07	208.1	66.65	
16.15	3.5	5.61	12.45	757	44.6	7.16	226.4	66.65	
16.20	4.5	5.59	12.46	817	35.3	8.16	233.8	66.65	
16.25	5.5	5.58	12.46	834	18.2	8.33	237.7	66.65	
16.30	6.5	5.58	12.44	840	12.2	8.38	240.6	66.65	
16.35	7.5	5.58	12.46	843	9.8	8.33	243.2	66.65	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-43S
Sample Date: 3/19/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 73
Screen Interval (feet TOIC): 63-73
Initial Water Level (Feet TOIC): 66.92
Final Water Level (feet TOIC): 66.92
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-43S-SP15
Purge Start Time: 11:10
Sample Time: 11:40
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.24

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.20	2	6.57	12.45	604	2.8	7.99	161.0	66.92	
11.25	3	6.57	12.24	605	2.4	7.48	164	66.92	
11.30	4	6.57	12.46	603	0.0	7.40	165.3	66.92	
11.35	5	6.57	12.42	604	0.0	7.42	166.7	66.92	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-44S
Sample Date: 3/24/2015
Sampling Device: dedicated Bladder
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 65.70
Final Water Level (feet TOIC): 65.70
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-44S-SP15
Purge Start Time: 13:02
Sample Time: 13:30
Final Turbidity (NTUs): 2.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.10	1	6.35	13.03	352	13.2	8.58	187.6	65.70	
13.15	2	6.31	13.27	371	7.1	7.78	186.0	65.70	
13.20	3	6.33	13.44	372	3.6	7.83	185.2	65.70	
13.25	4	6.34	13.37	373	2.3	7.65	183.4	65.70	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-49S
Sample Date: 3/18/2015
Sampling Device: QED MP40 dedicated bladder
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC): 10-110
Initial Water Level (Feet TOIC): 66.82
Final Water Level (feet TOIC): 66.82
Casing Type: **PVC** Steel (circle one)
Personnel: Shupta/ Dillon

Sample ID: MW-49S-SP15 Duplicate MW-903-SP15
Purge Start Time: 09:20
Sample Time: 10:25
Final Turbidity (NTUs): 00
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 150 ml/min
Purge Rate d/sampling (ml/min): 125 ml/min
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.30	1.5	5.36	12.28	312	0.4	9.60	249.0	66.82	
09.35	2.25	5.33	12.58	322	0.0	9.98	262.1	66.82	
09.40	3	5.34	12.78	315	0.0	10.00	267.7	66.82	
09.45	4	5.34	12.79	310	0.0	10.09	272.2	66.82	
09.50	5	5.36	12.77	299	0.0	10.02	277.9	66.82	
09.55	6	5.39	12.84	289	0.0	9.97	281.4	66.82	
10.00	7	5.40	12.67	277	0.0	9.79	286.6	66.82	
10.05	8	5.40	12.67	271	0.0	9.61	288.7	66.82	
10.10	9	5.40	12.71	265	0.0	9.64	291.4	66.82	
10.15	10	5.41	12.80	261	0.0	9.63	293.3	66.82	
10.20	11	5.41	12.96	257	0.0	9.63	295.4	66.82	
10.25	Sample								

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-50I
Sample Date: 03/17/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC): 120-130
Initial Water Level (Feet TOIC): 64.64
Final Water Level (feet TOIC): 64.66
Casing Type: **PVC** Steel (circle one)
Personnel: Archil Zarnadze

Sample ID: MW-50I-SP15
Purge Start Time: 12:25
Sample Time: 12:55
Final Turbidity (NTUs): 0.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.30	1.75	5.66	13.56	0.441	7.5	5.53	24.5	64.66	
12.35	3.50	5.47	13.61	0.453	2.6	4.29	24.9	64.66	
12.40	5.25	5.44	13.63	0.457	1.5	4.10	24.0	64.66	
12.45	7.0	5.44	13.66	0.459	1.3	4.08	24.7	64.66	
12.50	8.75	5.43	13.66	0.460	0.6	4.07	24.30	64.66	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-51I
Sample Date: 3/18/2015
Sampling Device: QED MP40 dedicated bladder
Well Depth (feet TOIC): 140
Screen Interval (feet TOIC): 130-140
Initial Water Level (Feet TOIC): 63.51
Final Water Level (feet TOIC): 63.51
Casing Type: **PVC** Steel (circle one)
Personnel: Shupta / Dillon

Sample ID: MW-51I-SP15
Purge Start Time: 08:10
Sample Time: 08:45
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400 ml/min
Purge Rate d/sampling (ml/min): 200 ml/min
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.05

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08.15	1	5.91	13.31	0.475	0.0	5.69	205.0	63.51	
08.20	4.5	5.80	13.47	0.462	0.0	3.49	215.7	63.51	
08.25	5.5	5.78	12.68	0.468	0.0	3.25	224.1	63.51	200 ml/min
08.30	7	5.77	12.79	0.472	0.0	3.24	228.0	63.51	
08.35	7.8	5.77	12.82	0.477	0.0	3.18	231.7	63.51	
08.40	8.2	5.75	12.84	0.483	0.0	3.04	235.7	63.51	
08.45									

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-52D
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC): 275-285
Initial Water Level (Feet TOIC): 60.50
Final Water Level (feet TOIC): 60.94
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-52D-SP15
Purge Start Time: 16:15
Sample Time: 17:45
Final Turbidity (NTUs): 49.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.25	2	5.48	12.00	230	5	2.72	251	60.94	
17.00	9	5.13	12.71	260	26	0.77	277	60.94	
17.10	11	5.06	12.36	253	49.0	0.69	285	60.94	
17.15	12	5.03	12.35	250	60.0	0.70	289	60.99	
17.30	15	5.08	12.49	246	49.6	0.82	291	60.99	
17.35	16	5.11	12.49	245	49.2	0.78	291	60.99	
17.40	17	5.07	12.39	244	49.0	0.74	293	60.99	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-55S
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 95.5
Screen Interval (feet TOIC): 85.5-95.5
Initial Water Level (Feet TOIC): 59.50
Final Water Level (feet TOIC): 59.50
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-55S-SP15
Purge Start Time: 11:00
Sample Time: 11:30
Final Turbidity (NTUs): 1.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 250
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.10	3.5	5.94	12.74	925	4.8	10.0	201	59.5	
11.15	5.25	5.92	12.95	958	2.8	10.04	200	59.5	
11.20	7.0	5.95	12.06	971	1.8	9.93	203	59.5	
11.25	8.75	5.96	12.95	974	1.0	9.96	207	59.5	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-58-75
Sample Date: 1/20/2015
Sampling Device: Dedicated bladder pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 65.6
Final Water Level (feet TOIC): 65.6
Casing Type: **PVC** Steel (circle one)
Personnel: T pullon (iunclr0

Sample ID: MW-58-75-WI15 + MW – 604 (unclr)-WI15
Purge Start Time: 15:25
Sample Time: 16:05
Final Turbidity (NTUs): 4.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 175
Sample Analyses: **VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)**
2x Pump System Volume (liters): 2.176

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:35	2	6.06	14.38	586	24.9	5.66	120	65.6	
15:40	4.5	6.07	14.45	583	14.3	5.21	107	65.6	
15:45	5.315	6.12	13.32	582	7.1	5.21	97	65.6	
15:50	6,25	6.19	12.94	576	7.7	5.40	101	65.6	
15:55	7.125	6.19	12.65	579	5.7	5.64	96	65.6	
16:00	8	6.20	12.70	578	4.3	5.77	93	65.6	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-58S
Sample Date: 3/17/2015
Sampling Device: dedicated Bladder pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 65.57
Final Water Level (feet TOIC): 65.60
Casing Type: **PVC** Steel (circle one)
Personnel: T.Dillon

Sample ID: MW-58S-SP15
Purge Start Time: 16:55
Sample Time: 17:45
Final Turbidity (NTUs): 9.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.38

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.15	2.5	6.36	13.78	679	30.4	7.18	100.8		Leak at freeze line. Pad is broken,
17.20	3.5	6.38	13.94	669	20.8	7.28	81.1		readings can not be taken because
17.25	4.5	6.40	13.83	666	17.8	7.31	80.0		of leak water on tape
17.30	5.5	6.41	13.58	659	14.4	7.26	80.5		
17.35	6.5	6.41	13.53	660	11.1	7.17	79.8		
17.40	7.5	6.42	13.45	657	9.3	7.18	77.5		

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-59
Sample Date: 1/20/2014
Sampling Device: Dedicated bladder pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-70
Initial Water Level (Feet TOIC): 63.83
Final Water Level (feet TOIC): 63.83
Casing Type: **PVC** Steel (circle one)
Personnel: Archil Zarnadze

Sample ID: MW-59-WI15
Purge Start Time: 16:00
Sample Time: 17:30
Final Turbidity (NTUs): 14.1
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 150
Sample Analyses: **VOCs**
Total Uranium
2x Pump System Volume (liters): 2.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:00	4.0	10.32	13.72	0.288	152	10.12	52	63.83	
16:05	6	10.24	13.80	0.279	130	10.25	50	63.84	
16:10	6.75	10.12	13.11	0.233	43.1	9.39	43	63.84	
16:15	7.5	10.09	12.72	0.221	36.3	9.15	42	63.83	
16:20	8.25	10.03	12.70	0.218	31.6	9.04	42	63.83	
16:25	9.0	10.06	12.65	0.211	28.6	8.95	41	63.83	
16:30	9.75	9.91	12.56	0.193	23.1	8.83	42	63.83	
16:35	10.5	9.92	12.56	0.187	21.4	8.70	43	63.83	
16:40	11.25	9.85	12.53	0.179	19.3	8.70	47	63.83	
16:45	12.0	9.74	12.50	0.172	17.1	8.64	49	63.83	
16:50	12.75	9.66	12.38	0.167	16.5	8.66	54	63.83	
16:55	13.5	9.57	12.16	0.162	15.9	8.71	59	63.83	
17:00	14.25	9.52	11.52	0.159	14.9	8.62	66	63.83	
17:05	15.00	9.40	11.16	0.159	15.0	8.03	69	63.83	
17:10	15.75	9.48	11.00	0.160	14.5	7.53	67	63.83	
17:15	16.5	9.49	10.98	0.160	14.1	7.50	66	63.83	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-59S
Sample Date: 3/17/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 63.78
Final Water Level (feet TOIC): 63.8
Casing Type: **PVC** Steel (circle one)
Personnel: Archil Zarnadze

Sample ID: MW-59S-SP15
Purge Start Time: 16:30
Sample Time: 18:15
Final Turbidity (NTUs): 1.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min): 150
Sample Analyses: **VOCs, Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.35	1.5	11.08	13.87	0.561	44.3	8.11	-109	63.8	
16.40									Paused to fix the leak
16.45	3.0	11.18	13.80	0.753	33.1	7.68	-106	63.80	
16.50	4.5	11.13	14.19	0.690	24.1	7.81	-105	63.80	
16.55	6.0	11.15	14.19	0.673	22.3	7.81	-104	63.80	
17.00	7.5	11.06	14.15	0.619	19.8	7.79	-102.6	63.80	
17.05	9.0	11.06	14.55	0.499	12.8	7.92	-96.2	63.80	
17.10	10.5	10.85	14.56	0.465	11.3	7.88	-95.7	63.80	
17.15	12.00	10.75	14.55	0.405	8.2	7.98	-91.6	63.8	
17.20	13.5	10.62	14.58	0.363	6.4	7.93	-87.6	63.8	
17.25	15.0	10.49	14.61	0.317	4.8	7.98	-84	63.8	
17.30	16.5	10.37	14.61	0.206	3.9	8.04	-81.2	63.8	
17.35	18.0	10.24	14.35	0.260	3.2	8.01	-78	63.8	
17.40	19.5	10.18	14.45	0.250	2.6	8.06	-77	63.8	
17.45	21.0	10.10	14.32	0.237	2.1	8.08	-75	63.8	
17.50	22.5	10.04	14.20	0.230	1.9	8.14	-74.3	63.8	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-59S **Date:** 3/17/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.55	24.0	9.92	13.85	0.218	1.5	8.25	-71	63.8	
18.00	25.5	9.98	13.89	0.210	1.4	8.26	-70	63.8	
18.05	27.0	9.87	13.86	0.209	1.4	8.22	-70	63.8	
18.10	28.5	9.82	13.79	0.204	1.2	8.15	-69	63.8	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-140
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 305
Screen Interval (feet TOIC): 295-305
Initial Water Level (Feet TOIC): 67.10
Final Water Level (feet TOIC): 67.39
Casing Type: **PVC** Steel (circle one)
Personnel: P.Lamont

Sample ID: MW-140-SP15
Purge Start Time: 13:15
Sample Time: 14:40
Final Turbidity (NTUs): 5.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 11.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.25	4	6.50	12.97	294	-0.9	3.52	113.5	67.6	
13.30	6	6.56	12.97	293	-4.3	3.01	109.7	67.65	
13.35	8	6.59	12.72	360	28.5	2.73	113.5	67.60	
13.40	10	6.43	12.63	421	33.0	2.48	83.7	67.65	
13.45	12	6.02	12.03	401	1.5	2.84	72.2	-	
13.50	14	6.71	12.99	377	10.7	3.32	75.0	-	
13.55	16	6.25	12.59	348		4.03	82.0	67.65	
14.00	18	6.84	12.50	333	11.7	4.41	90.6	-	
14.05	20	6.45	12.52	316	12.8	4.92	106	-	
14.10	22	6.26	12.52	310	12.5	5.06	116	67.65	
14.15	24	6.12	12.34	304	15.2	5.15	124.3	-	
14.20	26	6.03	12.41	298	4.0	5.17	131.7	-	
14.25	28	5.98	12.66	297	5.2	5.24	136	-	
14.30	30	5.94	12.67	295	5.5	5.27	137	-	
14.35	32	5.89	12.63	291	5.42	5.29	144	67.65	
14.40	-	-	-	-	-	-	-	-	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-175
Sample Date: 3/27/2015
Sampling Device: dedicated bladder
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 67.20
Final Water Level (feet TOIC): 67.20
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-175-SP15
Purge Start Time: 08:45
Sample Time: 09:25
Final Turbidity (NTUs): 1.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08.50	1	6.34	15.03	81	54.9	8.79	187.5	67.20	
08.55	2	6.09	15.00	81	21.2	7.55	181.0	67.20	
09.00	3	6.02	15.01	84	8.8	7.46	171.5	67.20	
09.05	4	5.99	15.00	86	4.9	7.43	160.6	67.20	
09.10	5	5.98	15.00	87	3.0	7.16	152.7	67.20	
09.15	6	5.97	15.00	88	2.5	7.30	147.7	67.20	
09.20	7	5.95	15.00	89	1.9	7.16	144.4	67.20	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log **DUP: MW-913-SP15**

Site: Sylvania Corning FUSRAP
Well No.: MW-201-220
Sample Date: 3/26/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 220
Screen Interval (feet TOIC): 210-220
Initial Water Level (Feet TOIC): 64.80
Final Water Level (feet TOIC): 64.85
Casing Type: **PVC** Steel (circle one)
Personnel: A.Z.

Sample ID: MW-201-220-SP15
Purge Start Time: 15:00
Sample Time: 16:30
Final Turbidity (NTUs): -1.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 240
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 8.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.10	2.4	6.28	14.45	706	9.2	9.46	74	64.85	
15.20	4.8	6.26	14.47	679	3.8	10.76	75.5	64.85	
15.30	7.2	6.15	14.35	611	0.6	10.89	79.2	64.85	
15.40	9.6	6.07	14.34	563	0.2	10.98	82	64.85	
15.45	10.0	6.02	14.31	542	-0.8	10.97	83.2	64.85	
15.50	12.0	5.99	14.30	530	-0.9	11.04	84.5	64.85	
15.55	13.2	5.96	14.26	505	-1.2	11.00	86	64.85	
16.00	14.4	5.94	14.22	490	-1.2	11.01	87	64.85	
16.05	15.6	5.92	14.15	480	-1.5	10.68	87.5	64.85	
16.10	16.8	5.90	14.18	471	-2.2	10.62	88.2	64.85	
16.15	18.0	5.88	14.26	465	-2.0	10.46	89.0	64.85	
16.20	19.2	5.86	14.21	458	-1.2	10.24	89.2	64.85	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-220
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 220
Screen Interval (feet TOIC): 216-220
Initial Water Level (Feet TOIC): 58
Final Water Level (feet TOIC): 58.02
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-202-220-SP15
Purge Start Time: 08:30
Sample Time: 09:15
Final Turbidity (NTUs): -0.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
8.35	1.5	5.58	10.74	210	-0.4	7.42	249	58.02	
8.45	4.5	5.90	11.30	252	-0.6	7.52	238	58.02	
8.55	7.5	5.88	11.37	245	-0.9	7.22	238	58.02	
9.00	9.0	5.76	11.42	236	-0.9	7.34	241	58.02	
9.05	10.5	5.75	11.48	233	-0.9	7.28	240.8	58.02	
9.10	12.0	5.69	11.62	231	-0.9	7.25	242	58.02	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-380
Sample Date: 3/17/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC): 370-380
Initial Water Level (Feet TOIC): 58.47
Final Water Level (feet TOIC): 58.50
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-202-380-SP15
Purge Start Time: 16:30
Sample Time: 17:25
Final Turbidity (NTUs): 0.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 15

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.45	6	6.82	12.00	330	0.3	7.15	-2.6	58.48	
17.00	12	6.66	12.31	330	0.1	7.54	4.4	58.50	
17.10	16	6.61	12.15	328	-0.9	7.21	6.5	58.50	
17.15	18	6.60	12.23	327	-0.9	7.14	7.0	58.50	
17.20	20	6.60	12.10	327	-0.8	7.07	6.2	58.50	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-202-495
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 495
Screen Interval (feet TOIC): 485-495
Initial Water Level (Feet TOIC): 58.66
Final Water Level (feet TOIC): 58.99
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-202-495-SP15
Purge Start Time: 16:20
Sample Time: 18:00
Final Turbidity (NTUs): 6.1
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs
~~Total Uranium (ASTM-D5174)~~
2x Pump System Volume (liters): 21.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.35	4.5	11.00	11.66	256	0.8	7.90	-157	58.99	
16.50	9.0	11.17	11.69	352	100.5	7.84	-149	58.99	
17.00	12.00	12.08	11.20	1036	50.7	7.95	-177	58.99	
17.10	15.00	12.16	11.09	901	10.9	9.65	-158	58.99	
17.30	21.00	11.74	11.13	502	13.2	8.72	-154	58.99	
17.40	24.00	11.67	11.71	463	14.1	8.35	-151	58.99	
17.45	25.50	11.62	11.60	444	10.4	8.13	-153	58.99	
17.50	27.00	11.62	11.51	442	6.5	8.08	-155	58.99	
17.55	28.5	11.60	11.30	440	6.1	8.03	-156	58.99	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-160
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC): 150-160
Initial Water Level (Feet TOIC): 61.81
Final Water Level (feet TOIC): 61.81
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-203-160-SP15
Purge Start Time: 11:45
Sample Time: 12:50
Final Turbidity (NTUs): 9.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.00	3.75	6.20	13.18	303	40.1	3.22	107.4	61.81	
12.05	5.0	6.19	12.88	301	46.0	3.29	102.4	61.81	
12.10	6.25	6.17	13.05	301	43.0	3.31	100	61.81	
12.15	7.50	6.15	13.12	300	35.0	3.32	94.5	61.81	
12.20	8.75	6.14	13.03	298	27.0	3.33	87.5	61.81	
12.25	10.0	6.15	13.06	295	25.5	3.39	85.2	61.81	
12.30	11.25	6.13	12.60	294	15.0	3.42	75.0	61.81	
12.35	12.50	6.11	12.46	293	10.8	3.45	68	61.81	
12.40	13.75	6.11	12.60	292	10.0	3.48	70	61.81	
12.45	15.0	6.15	12.80	292	9.8	3.53	71.3	61.81	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-360
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 360
Screen Interval (feet TOIC): 350-360
Initial Water Level (Feet TOIC): 62.51
Final Water Level (feet TOIC): 62.59
Casing Type: **PVC** Steel (circle one)
Personnel: A.Z. L.R.

Sample ID: MW-203-360-SP15
Purge Start Time: 9:15
Sample Time: 11:15
Final Turbidity (NTUs): 9.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 14

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9.20	1.5	10.61	13.34	329	16.1	0.57	-205	62.59	
9.30	4.5	11.44	13.21	432	63.8	0.65	-230	62.59	
9.40	7.5	12.24	13.46	433	42.7	1.54	-207	62.59	
10.00	13.5	11.42	13.41	472	48.1	3.39	-163	62.59	
10.05	15	11.00	13.55	435	40.7	3.76	-151	62.59	
10.15	18.0	10.90	13.23	428	35.0	3.98	-147	62.59	
10.20	19.5	10.77	13.63	421	33.7	4.09	-142	62.59	
10.25	21.0	10.60	13.59	415	28.4	4.23	-138	62.59	
10.30	22.5	10.59	13.55	414	25.8	4.27	-137	62.59	
10.35	24.0	10.59	13.71	412	24.8	4.31	-136	62.59	
10.40	25.5	10.44	13.55	409	21.7	4.39	-132	62.59	
10.45	27.0	10.42	13.67	409	19.2	4.43	-132	62.59	
11.00	28.5	10.30	13.72	405	13.8	4.55	-126	62.59	
11.10	31.5	10.21	13.75	403	10.6	4.60	-123	62.59	
11.15	33.0	10.16	13.53	402	9.1	4.66	-121	62.59	
11.20	34.5	10.12	13.59	401	9.7	4.65	-120.8	62.59	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-203-440
Sample Date: 3/18/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 440
Screen Interval (feet TOIC): 430-440
Initial Water Level (Feet TOIC): 62.14
Final Water Level (feet TOIC): 62.21
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: MW-203-440-SP15
Purge Start Time: 9:30
Sample Time: 10:55
Final Turbidity (NTUs): 0
Casing Inner Diameter (inches):
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 17.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9.40	3.5	8.08	12.46	208	0.6	1.66	-147.7	62.21	
10.00	10.5	6.88	12.61	217	2.5	5.73	-83.9	62.21	
10.10	14	6.70	12.74	224	1.2	6.20	-80	62.21	
10.20	17.5	6.55	12.80	221	0.6	6.62	-71	62.21	
10.30	21.0	6.42	12.66	219	0.1	6.91	-64.3	62.21	
10.35	22.75	6.34	12.69	217	0	7.14	-59	62.21	
10.40	23.5	6.31	12.63	216	0	7.22	-57	62.21	
10.45	25.25	6.27	12.60	215	0	7.29	-56	62.21	
10.50	27.0	6.26	12.45	215	0	7.37	-55	62.21	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-204-320
Sample Date: 4/1/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 62.00
Final Water Level (feet TOIC): 62.05
Casing Type: **PVC** Steel (circle one)
Personnel: Peter Lamount

Sample ID: MW-204-320-SP15
Purge Start Time: 09:00
Sample Time: 10:20
Final Turbidity (NTUs): 1.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 600
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09:05	3	8.61	12.14	836	1.5	2.67	-105.1	62.15	170 ml/min
09:10	5.5	8.59	12.07	831	3.5	2.89	-49.8	62.15	
09:15	8	9.12	12.03	786	1.8	3.13	-32.8	62.15	
09:20	10.5	9.72	11.98	770	1.3	3.15	-35.3	62.10	510 ml/min
09:25	13	9.45	12.04	806	1.2	3.59	-23.4	62.15	
09:30	15.5	8.95	11.93	824	1.2	3.93	-11.1	62.10	375 ml/min
09:35	17.375	8.45	11.77	834	1.1	4.11	4.3	62.05	
09:40	19.25	8.03	11.76	839	1.1	4.18	17.7	62.10	
09:45	21.125	7.56	11.83	848	1.0	4.38	34.1	62.15	375 ml/min
09:50	23	7.38	11.87	854	1.1	4.49	43.1	62.10	
09:55	24.875	7.18	11.80	859	1.0	4.64	53.2	62.13	
10:00	26.75	7.10	11.85	863	1.0	4.72	60.0	62.15	
10:05	28.125	7.06	11.82	865	1.0	4.76	45.3	62.10	
10:10	30.5	7.06	11.80	866	1.0	4.73	68.2	62.15	
10:20									sample

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-204-470
Sample Date: 3/31/2015
Sampling Device: Dedicated bladder
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 62.23
Final Water Level (feet TOIC): 62.35
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont

Sample ID: MW-204-470-SP15
Purge Start Time: 10:45
Sample Time: 12:40
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 450 ml/min = 2.25 L/5min
Purge Rate d/sampling (ml/min): 225
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.45	0	11.56	12.25	804	0.1	2.54	-183	62.25	
10.50	2.25	11.46	12.38	789	0.0	2.08	-193	62.25	
10.55	4.50	11.50	12.34	743	0.0	2.16	-147.1	62.35	
11.00	6.75	11.45	12.33	683	3.3	2.45	-119.8	62.35	420 ml/min
11.05	9.00	11.48	12.27	766	22.0	2.62	-103.3	62.35	
11.10	10	11.70	12.31	1139	18.5	2.26	-108.3	62.35	
11.15	11.875	11.72	12.30	1072	16.3	2.49	-107.5	62.32	325 ml/min
11.20	13.750	11.65	12.30	957	9.2	2.92	-102.6	62.35	
11.25	15.625	11.56	12.35	800	6.0	3.60	-94.0	62.33	
11.30	17.50	11.50	12.36	700	6.5	4.07	-88.7	62.32	375 ml/min
11.35	19.375	11.42	12.39	620	3.3	4.50	-82.7	62.35	
11.40	21.25	11.37	12.34	572	2.8	4.77	-79.3	62.32	
11.45	23.120	11.30	12.31	512	1.3	5.08	-75.3	62.40	375 ml/min
11.50	25.0	11.25	12.32	476	0.9	5.29	-72.1	62.35	
11.55	26.875	11.21	12.55	446	0.5	5.90	-73.7	62.40	
12.00	28.75	11.13	12.35	405	0.1	5.97	-58.4	62.35	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-204-470 **Date:** 3/31/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.05	30.625	11.06	12.20	375	0.0	6.34	-49.3	62.40	
12.10	32.50	11.05	12.23	366	0.0	6.37	-48.3	62.45	
12.15	34.375	10.95	12.20	330	0.0	6.61	-43.9	62.40	
12.20	36.250	10.88	12.19	306	0.0	6.58	-39.3	62.43	450 ml/min
12.25	38.50	10.82	12.22	290	0.0	6.69	-37.2	62.40	
12.30	40.75	10.81	12.30	287	0.0	6.74	-37.2	62.45	
12.35	43.00	10.79	12.3	283	0.0	6.74	-36.7	62.43	
12.40									

Key:
BGS = Below ground surface.
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-170
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 58.19
Final Water Level (feet TOIC): 58.95
Casing Type: **PVC** Steel (circle one)
Personnel: T.Cayes P.Lamont

Sample ID: MW-207-170-SP15 DUP: MW-906-SP15
Purge Start Time: 14:52
Sample Time: 15:30
Final Turbidity (NTUs): 9.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 370
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.47

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14.59	1.85	5.46	13.63	258	4.2	4.73	168.3	59.10	
15.04	4.35	5.41	13.64	279	1.6	4.66	190.8	59.12	
15.09	5.85	5.40	13.25	282	4.0	4.62	200.7	59.05	
15.14	7.35	5.40	13.14	284	8.2	4.65	214.2	58.95	
15.19	8.85	5.37	13.00	282	7.1	4.48	220.4	58.95	
15.24	10.35	5.34	13.01	277	9.6	4.40	223.8	58.95	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-250
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 250
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 58.80
Final Water Level (feet TOIC): 58.80
Casing Type: **PVC** Steel (circle one)
Personnel: T.Cayes

Sample ID: MW-207-250-SP15
Purge Start Time: 13:17
Sample Time: 14:10
Final Turbidity (NTUs): 0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 290
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 9.65

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.24	1.45	9.26	12.85	333	0	5.89	90.2	58.80	
13.29	2.9	8.80	13.31	333	0	1.49	86.8	58.78	
13.34	4.35	8.25	13.17	333	0	1.94	106.6	58.80	
13.39	5.8	7.16	13.15	325	0	6.10	160.8	58.80	
13.44	7.25	6.36	13.29	321	0	7.15	183.5	58.80	
13.49	8.7	6.00	13.34	318	0	7.38	192.8	58.80	
13.54	10.15	5.81	13.19	315	0	7.53	206.4	58.80	
13.59	11.6	5.75	13.29	313	0	7.58	215.8	58.80	
14.04	13.05	5.71	13.31	312	0	7.66	215.9	58.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-207-320-SP15
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 58.8
Final Water Level (feet TOIC): 58.9
Casing Type: **PVC** Steel (circle one)
Personnel: P.Lamont

Sample ID: MW-207-320-SP15
Purge Start Time: 13:15
Sample Time: 14:15
Final Turbidity (NTUs): 1.4
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 12.45

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.20	2	9.30	13.59	362	0.4	0.50	-90.1	58.9	
13.25	4	8.84	13.59	346	22.2	0.37	-90.8	58.9	
13.30	6	7.86	13.52	314	19.7	0.60	-104.0	58.9	
13.35	8	7.67	13.47	302	15.5	0.83	-77.0	58.9	
13.40	10	7.11	13.51	288	9.7	1.12	-30	58.9	
13.45	12	6.57	13.38	277	7.3	1.25	11.7	58.9	
13.50	14	6.30	13.41	273	6.2	1.30	40.5	58.9	
13.55	16	6.12	13.41	271	4.5	1.32	61.8	-	
14.00	18	6.05	13.48	269	2.6	1.32	73.6	-	
14.05	20	6.00	13.50	268	1.2	1.34	80.7	58.9	
14.10	22	6.95	13.43	269	1.0	1.31	83.0	58.9	
14.05	-	-	-	-	104	-	-	58.9	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-208-350
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 350
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 57.30
Final Water Level (feet TOIC): 57.30
Casing Type: **PVC** Steel (circle one)
Personnel: P.Lamont

Sample ID: MW-208-350-SP15
Purge Start Time: 09:05
Sample Time: 10:35
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs

2x Pump System Volume (liters): 13.71

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.15	4	7.60	12.70	1578	0.3	10.48	177	57.30	
09.20	5.25	7.95	12.47	1577	0.0	9.44	164.7	57.30	
09.25	6.5	8.33	12.26	1525	4.0	8.84	149.6	57.30	250 ml/min
09.30		10.00	12.24	1352	0.0	8.45	91.3	57.30	
09.35	6	9.09	12.20	1390	0.0	8.16	107.0	57.30	200 ml/min
09.40		8.18	12.20	1410	0.0	7.93	118	57.30	
09.45									100 ml/min
09.50	8	7.14	10.53	1414	0.00	7.08	110	57.30	
09.55		6.95	10.97	1407	0.0	6.96	108.5	57.30	
10.00									
10.05	10	6.53	12.78	1410	0.0	6.54	110	57.30	300 ml/min
10.10	11.5	6.37	13.10	1417	0.0	6.06	113.1	57.30	
10.15	13	6.20	13.15	1416	0.0	5.70	117.1		
10.20	14.5	6.12	13.16	1420	0.0	5.46	120.3	57.30	
10.25	16.0	6.03	13.06	1420	0.0	5.32	124.6	57.30	
10.30	17.5	6.02	13.17	1418	0.0	5	12	57.30	Sample 10:30

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-208-540
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 540
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 57.80
Final Water Level (feet TOIC): 57.82
Casing Type: **PVC** Steel (circle one)
Personnel: T.Cayes

Sample ID: MW-208-540-SP15
Purge Start Time: 09:02
Sample Time: 10:40
Final Turbidity (NTUs): 5.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.29

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.14	1.25	10.62	10.62	385	6.3	4.80	68.5	57.80	
09.19	2.5	10.88	10.36	398	3.2	4.01	17.1	57.80	
09.24	3.75	11.01	11.20	405	1.0	3.46	-60.5	57.82	
09.29	5	11.04	12.64	430	0.1	2.78	-148.0	57.82	
09.34	6.25	11.04	13.00	436	4.4	2.82	-155.1	57.82	
09.39	7.5	11.05	12.84	437	9.0	2.87	-155.7	57.82	
09.44	8.75	11.65	12.74	1027	31.8	2.96	-155.7	57.82	
09.49	10	11.88	12.87	1497	35.1	3.08	-153.1	57.82	
09.54	11.25	12.03	12.68	1627	22.8	3.44	-145.7	57.82	
09.59	12.5	11.94	12.89	1460	19.8	3.95	-137.0	57.82	
10.04	13.75	11.83	12.70	1265	16.8	4.41	-127.2	57.82	
10.09	15	11.79	12.96	1129	12.7	4.77	-121.9	57.82	
10.14	16.25	11.69	12.87	935	2.0	5.28	-113.1	57.82	
10.27	17.5	11.65	12.89	858	5.7	5.55	-108.5	57.82	
10.24	18.75	11.60	12.75	777	5.5	5.79	-103.9	57.82	
10.29	20	11.52	12.84	779	6.8	5.90	-100.5	57.82	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-209-380
Sample Date: 3/26/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC): 370-380
Initial Water Level (Feet TOIC): 40.25
Final Water Level (feet TOIC): 40.27
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyno D. Henvera

Sample ID: MW-209-380-SP15
Purge Start Time: 18:44
Sample Time: 18:35
Final Turbidity (NTUs): 43.9
Casing Inner Diameter (inches): 30
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 120
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 15.59

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.58	7	12.18	12.58	2227	527.9	0.31	-47.7	40.30	Initial well PID 0.5 ppm
16.07	11.0	12.17	12.87	1612	437.2	1.69	-884	40.30	
16.12	13.5	12.03	12.71	1298	162.3	2.34	-78.2	40.30	
16.23	18.0	11.75	12.73	1273	63.0	3.19	-56.1	40.30	
16.29	20.0	11.69	12.83	852	93.4	3.23	-50.9	40.30	
16.34	23.5	11.49	12.75	732	82.2	3.57	-40.5	40.30	
16.39	27.0	11.19	12.70	620	66.1	3.90	-27.0	40.30	
16.45	30.0	11.03	12.68	582	79.0	4.01	-19.5	40.30	
16.50	33.0	10.86	12.69	559	94.3	4.12	-11.1	40.30	
16.58	35.0	10.75	12.34	541	82.7	4.22	-1.1	40.30	
17.03	36.5	10.69	12.21	530	102.3	4.21	3.7	40.30	Taking readings every 30 minutes
17.37	44.0	11.34	12.30	669	171.8	3.84	-9.7	40.30	
17.42	45.0	11.37	12.35	680	25.9	3.79	-14.0	40.30	
17.47	46.0	11.42	11.74	688	262.4	3.80	-15.6	40.30	
18.04	54.5	11.26	11.62	637	48.7	5.90	-3.6	40.27	
18.09	57.0	11.27	11.52	634	57.8	4.02	-7.0	40.27	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-209-380 **Date:** 3/26/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
18.14	57.5	11.26	11.42	628	66.2	3.89	-8.8	40.27	
18.19	58.2	11.25	11.41	621	46.4	3.84	-9.2	40.27	
18.27	59.0	11.21	11.60	626	46.2	4.17	-1.7	40.27	
18.32	60.0	11.23	11.60	640	43.9	3.96	-3.6	40.27	

Key:

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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-209-530
Sample Date: 3/26/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 530
Screen Interval (feet TOIC): 520-530
Initial Water Level (Feet TOIC): 41.20
Final Water Level (feet TOIC): 41.35
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyno D. Henvere

Sample ID: MW-209-530-SP15
Purge Start Time: 16:04
Sample Time: 18:25
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 3.0
Purge Rate (ml/min) 200-400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 21.55

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.12	1.5	9.06	10.90	172	0.3	4.30	232.0	41.31	
16.17	2.0	9.54	11.18	170	0.0	4.35	208.9	41.31	
16.23	3.0	9.58	11.36	169	0.0	4.14	204.6	41.31	
16.29	4.0	9.33	11.35	167	0.0	4.15	217.2	41.31	
16.34	5.5	9.42	11.86	167	4.9	4.16	209.3	41.41	
16.39	7.0	10.94	12.12	1099	8.1	4.18	182.6	41.41	
16.45	9.0	11.75	12.12	3093	9.1	4.20	116.9	41.41	
16.50	10.0	12.07	12.16	3910	4.9	4.33	71.6	41.41	
17.22	20.0	11.73	12.36	1655	0.4	6.48	20.3	41.41	
17.27	22.80	11.64	12.27	1457	1.3	6.65	26.9	41.41	
17.32	23.0	11.60	12.17	1374	1.4	6.73	30.6	41.41	
17.37	24.0	11.58	12.04	1297	1.2	6.82	34.4	41.35	
17.42	25.0	11.54	11.92	1190	1.2	6.86	39.2	41.35	
17.47	26.0	11.48	11.81	1140	1.1	6.89	43.0	41.35	
17.52	27.0	11.42	11.78	1066	1.8	6.94	48.3	41.35	
17.57	28.5	11.45	12.03	1040	0.0	6.96	47.9	41.35	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-209-530 **Date:** 3/26/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
18.03	29.5	11.46	11.83	981	0.6	7.04	51.6	41.35	
18.08	30.5	11.44	11.68	957	0.4	7.05	55.5	41.35	
18.13	31.0	11.40	11.65	927	0.0	7.09	58.7	41.35	
18.18	32.0	11.33	11.55	871	1.0	7.10	62.7	41.35	

Key:

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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-280
Sample Date: 3/30/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 280
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 47.76
Final Water Level (feet TOIC): 47.76
Casing Type: **PVC** Steel (circle one)
Personnel: L.R A. Z.

Sample ID: MW-210-280-SP15
Purge Start Time: 12:10
Sample Time: 13:40
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs**

2x Pump System Volume (liters): 11.2

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.00	10	5.18	11.64	0288	0.0	1.00	349.1	47.76	
13.05	11	5.19	11.62	0288	0.0	0.99	346.2	47.76	
13.10	12	5.20	11.65	0288	0.0	0.98	342.4	47.76	
13.15	13	5.29	11.64	0288	0.0	1.00	338.1	47.76	
13.20	14	5.20	11.72	0288	0.0	0.57	339.4	47.76	
13.25	15	5.23	11.75	0288	0.0	0.26	339.5	47.76	
13.30	16	5.23	11.71	0289	0.0	0.26	339.2	47.76	
13.35	17	5.22	11.72	0289	0.0	0.24	340.0	47.76	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-380
Sample Date: 3/30/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 380
Screen Interval (feet TOIC): 370-380
Initial Water Level (Feet TOIC): 47.50
Final Water Level (feet TOIC): 47.50
Casing Type: **PVC** Steel (circle one)
Personnel: A. Z.

Sample ID: MW-210-380-SP15
Purge Start Time: 09:30
Sample Time: 14:00
Final Turbidity (NTUs): -0.5
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs**

2x Pump System Volume (liters): 15.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.10	12	5.42	11.33	1043	0.7	3.46	219	47.5	
10.20	15	5.42	11.31	1044	0.2	7.50	228	47.5	
10.25	16.5	5.40	11.29	1047	0.2	7.08	231	47.5	
10.30	18.0	5.41	11.21	1043	0.1	6.65	230	47.5	
10.40	21.0	5.39	11.24	1049	-0.2	2.83	240	47.5	200 ml/min
10.50	24.0								
11.15	29.0	5.38	19.94	1052	-0.6	7.07	244	47.5	
11.30	32.0	5.38	9.88	1053	-0.2	6.35	243	47.5	
11.35	33.0	5.37	9.87	1055	-0.6	0.78	246	47.5	
11.45	35.0	5.35	9.88	1056	-0.6	0.64	252	47.5	
12.10	40.0	5.35	9.75	1056	-0.6	4.59	257	47.5	
12.20	42.0	5.35	9.73	1057	-0.6	4.18	258	47.5	
12.15	43.0	5.34	9.87	1056	-0.6	3.75	258	47.5	
12.45	49.0	5.33	10.44	1057	-0.6	3.15	254	47.5	
13.10	54.0	5.33	10.38	1057	-0.7	2.39	255	47.5	
13.15	55.0	5.32	10.44	1057	-0.6	2.14	255	47.5	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: MW-210-380 **Date:** 3/30/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.20	56.0	5.32	10.41	1061	-0.7	2.15	256	47.5	
13.25	57.0	5.32	10.74	1059	-0.7	2.34	255	47.5	
13.40	58.0	5.31	10.88	1058	-0.7	2.15	255	47.5	
13.45	59	5.31	11.12	1059	-0.6	2.01	255	47.5	
13.50	60	5.31	11.20	1059	-0.6	1.99	252	47.5	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-210-470
Sample Date: 3/30/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 470
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 47.55
Final Water Level (feet TOIC): 47.86
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z

Sample ID: MW-210-470-SP15
Purge Start Time: 9:15
Sample Time: 11:50
Final Turbidity (NTUs): 4.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs**

2x Pump System Volume (liters): 18.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.05	14	12.30	9.92	0914	2.7	14.89	28.2	47.86	
10.10	151	12.26	9.90	878	3.5	18.87	26.4	47.86	
10.15	16	12.27	9.90	868	3.9	17.49	26.2	47.86	
10.20	17	12.25	9.88	864	3.6	16.47	26.8	47.86	
10.25	18	12.21	9.96	789	4.9	2.69	27.2	47.86	
10.30	19	12.21	9.92	783	4.7	2.43	27.1	47.86	
10.35	20	12.21	9.94	788	4.6	2.81	27.2	47.86	
10.40	21	12.22	9.93	784	4.5	2.87	27.1	47.86	
10.45	22	12.22	9.89	752	4.4	2.86	29.8	47.86	
10.50	23	12.13	10.04	707	4.1	2.88	30.0	47.86	
10.55	24	12.13	10.02	703	4.2	3.16	31.3	47.86	
11.0	25	12.13	10.01	699	4.3	3.39	31.6	47.86	
11.05	26	12.13	10.00	677	4.7	3.21	33.6	47.86	
11.10	27	12.12	10.02	675	4.7	3.26	33.6	47.86	
11.15	28	12.08	10.15	636	4.8	3.61	34.4	47.86	
11.20	29	12.00	10.15	629	4.9	3.59	35.1	47.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-210-470 **Date:** 3/30/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.30	31	11.99	10.16	0604	4.4	4.03	38.3	47.86	
11.35	32	11.95	10.93	0583	5.0	4.13	40.7	47.86	
11.40	33	11.90	10.12	0567	4.6	4.40	42.8	47.86	
11.45	34	11.91	10.12	0568	4.4	4.39	46.7	47.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-190
Sample Date: 5/4/2015
Sampling Device: 98F0Ø529
Well Depth (feet TOIC): 190
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 52.48
Final Water Level (feet TOIC): 52.51
Casing Type: **PVC** Steel (circle one)
Personnel: D.herrera / Ncneplowitz

Sample ID: MW-211-190-SP15
Purge Start Time: 10:10
Sample Time: 11:30
Final Turbidity (NTUs): 1.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 140
Purge Rate d/sampling (ml/min): 140
Sample Analyses: **VOCs**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:55	5.8	9.94	17.58	0.880	2.0	0.76	11.3	52.54	
11:00	6.1	9.86	17.78	0.854	8.5	0.69	8.7	52.50	
11:05	6.4	9.79	17.81	0.839	1.1	0.65	11.5	52.51	
11:10	6.9	9.78	17.81	0.835	1.3	0.69	12.1	52.51	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-250
Sample Date: 5/4/2015
Sampling Device: 98F0Ø529
Well Depth (feet TOIC): 250
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 52.68
Final Water Level (feet TOIC): 52.70
Casing Type: **PVC** Steel (circle one)
Personnel: D. herrera / Ncneplowitz

Sample ID: MW-211-250-SP15
Purge Start Time: 11:50
Sample Time: 13:40
Final Turbidity (NTUs): 0.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 150
Sample Analyses: **VOCs**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 10

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:05	9.75	6.01	15.80	0.922	1.0	0.20	16.9	52.68	
13:10	10.50	6.01	15.71	0.929	1.2	0.17	25.3	52.70	
13:15	11.25	6.02	15.74	0.935	0.9	0.17	32.7	52.70	
13:20	12.00	6.02	15.81	0.944	1.0	0.16	40.2	52.71	
13:25	12.75	6.02	15.77	0.948	0.8	0.16	43.6	52.70	
13:30	13.50	6.02	15.80	0.954	0.6	0.15	47.1	52.70	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-211-455
Sample Date: 5/4/2015
Sampling Device: 27085
Well Depth (feet TOIC): 455
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 53.29
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: Ncneplowitz / D. herrera

Sample ID: MW-211-455-SP15
Purge Start Time: 10:10
Sample Time: 16:10
Final Turbidity (NTUs): 183.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 300 / (down to 150 to the readings)
Purge Rate d/sampling (ml/min): 150
Sample Analyses: **VOCs Talmetals**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:20	21.5	11.31	17.62	0.701	12.9	0.18	-564.9	54.85	
12:40	24.5	11.26	17.87	0.664	24.2	0.35	-449.1	53.80	
13:00	27.5	11.31	16.33	0.647	19.5	0.02	-563.9	53.82	
13:10	29.0	11.32	16.18	0.637	33.5	0.04	-546.0	53.83	
13:15	29.75	11.32	15.95	0.629	161.0	0.00	-558.5	53.80	Emptied heavy dark green floaters
13:40	32.75	11.36	16.30	0.657	10.9	0.37	-411.9	53.80	
13:45	33.50	11.38	16.49	0.671	5.7	0.09	-448.5	53.57	
13:50	34.25	11.39	16.73	0.672	9.0	0.06	-265.3	53.53	
13:55	35:00	11.39	17.00	0.675	5.3	0.03	-228.4	53.52	
14:00	35:75	11.45	15.68	0.727	30.0	0.04	-232.9	53.78	
14:05	36.50	11.48	15.23	0.730	196.3	0.00	-234.9	53.79	
14:15	38.00	11.47	15.67	0.718	175.0	0.04	-259.8	53.81	
14:20	38.75	11.46	15.92	0.712	174.1	0.03	-279.9	53.83	
14:25	39.50	11.45	16.10	0.707	170.1	-0.01	-260.2	53.82	
14:30	40.25	11.45	16.15	0.705	175.4	0.02	-268.7	53.83	
14:35	41.00	11.44	16.19	0.701	195.1	-0.01	-264.6	53.81	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-211-455 **Date: 5/4/15**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:40	41.75	11.43	16.45	0.695	199.3	0.00	-270.3	53.78	
14:55	42.50	11.39	17.21	0.680	216.1	-0.02	-272.4	53.78	
15:00	43.25	11.38	17.55	0.672	217.3	-0.02	-282.6	53.77	
15:05	44.00	11.38	17.73	0.673	223.0	-0.03	-283.4	53.77	
15:10	44.75	11.41	17.66	0.692	232.5	-0.02	-278.3	53.75	
15:15	45.50	11.44	18.30	0.718	230.0	-0.02	-291.8	53.74	
15:20	46.25	11.43	18.19	0.743	228.8	-0.01	-281.6	53.74	
15:25	47.00	11.40	18.02	0.688	221.3	-0.02	-272.4	53.74	
15:30	47.75	11.38	17.62	0.693	211.7	-0.03	-271.3	53.73	
15:35	48.50	11.33	17.32	0.642	201.7	0.02	-287.7	53.74	
15:40	49.25	11.32	17.38	0.639	220.5	-0.01	-290.5	53.73	
15:45	50.00	11.30	17.34	0.628	222.5	0.00	-282.3	53.74	
15:50	50.75	11.28	17.18	0.622	199.1	-0.02	-285.8	53.74	
15:55	51.50	11.26	17.35	0.617	218.7	-0.02	-272.2	53.73	
16:00	52.25	11.27	17.11	0.620	183.2	-0.03	-283.2	53.73	

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-212-580
Sample Date: 3/30/2015
Sampling Device: Dedicated bladder
Well Depth (feet TOIC): 580
Screen Interval (feet TOIC): 570-580
Initial Water Level (Feet TOIC): 47.04
Final Water Level (feet TOIC): 47.06
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-212-580-SP15
Purge Start Time: 09:10
Sample Time: 10:50
Final Turbidity (NTUs): 27.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs
~~Total Uranium (ASTM-D5174)~~
2x Pump System Volume (liters): 23.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.15	2	7.04	12.38	274	26.7	7.61	33.3	47.13	
09.30	6	6.64	12.46	266	25.2	8.35	72.9	47.13	
09.55	13	6.24	12.47	317	5.1	8.26	106.9	47.13	330 ml/min
10.05	16.5	6.21	12.46	316	15.7	7.71	116.8	47.13	
10.20	21.75	6.28	12.43	303	29.7	7.08	122.3	47.13	
10.30	25.25	6.27	12.34	290	29.4	6.75	126.1	47.13	200 ml/min
10.35	26.25	6.27	11.75	286	29.1	6.54	128.2	47.08	
10.40	27.25	6.26	11.56	282	28.2	6.49	129.9	47.08	
10.45	28.25	6.25	11.54	278	27.2	6.33	131.5	47.08	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-213-570
Sample Date: 5/4/2015
Sampling Device: ????
Well Depth (feet TOIC): 560-570
Screen Interval (feet TOIC): 47.53
Initial Water Level (Feet TOIC): 47.53
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: Archil Zarnadze

Sample ID: MW-213-570-SP15
Purge Start Time: 14:40
Sample Time: 16:30
Final Turbidity (NTUs): 4.1
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 23

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:00	6	6.12	16.69	71	4.4	5.0	258	47.53	
15:30	15	5.94	16.08	70	4.4	3.69	257	47.53	Decreased to 200 ml/min
16:00	21	6.04	15.38	88	4.8	3.39	274	47.53	
16:10	24	6.07	15.50	92	4.6	3.30	281	47.53	
16:15	25.5	6.08	15.57	93	4.3	3.29	283	47.51	
16:20	27.0	6.07	15.68	94	4.1	3.24	286	47.51	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-214-570
Sample Date: 5/4/2015
Sampling Device: Dedicated Geotech Pump
Well Depth (feet TOIC): 570
Screen Interval (feet TOIC): 560-570
Initial Water Level (Feet TOIC): 47.89
Final Water Level (feet TOIC): 47.87
Casing Type: **PVC** Steel (circle one)
Personnel: J. Ganz

Sample ID: MW-214-570-SP15
Purge Start Time: 09:30
Sample Time: 10:55
Final Turbidity (NTUs): 4.3
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 410
Purge Rate d/sampling (ml/min): 120
Sample Analyses: **VOCs**
~~Total Uranium (ASTM-D5174)~~
2x Pump System Volume (liters): 22.88

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
INT								47.89	
09:40	2	6.37	14.10	75	2.6	6.08	164	47.87	
09:45	4	6.40	14.16	75	3.0	6.19	157.4	47.87	
09:50	6	6.29	14.05	74	5.7	6.29	154.7	47.87	
09:55	7.5	6.24	14.07	76	13.4	6.39	154.2	47.87	
10:00	8	6.19	14.09	83	12.6	6.19	155.4	47.87	
10:05	9	6.20	14.04	92	9.7	6.48	154.9	47.87	
10:10	10	6.26	14.06	106	7.8	6.55	154.3	47.87	
10:15	12	6.26	14.08	112	4.8	6.70	153.4	47.87	
10:20	13.5	6.21	14.14	113	4.7	6.82	153.0	47.87	
10:25	15	6.12	14.19	113	4.0	6.92	154.1	47.87	
10:30	17	6.06	14.20	112	4.5	7.05	154.7	47.87	
10:35	18	6.03	14.30	112	3.6	7.11	155.6	47.87	
10:40	20	6.00	14.32	111	3.8	7.13	155.6	47.87	
10:45	21	5.97	14.33	110	4.1	7.15	156.3	47.87	
10:50	23								

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: **Date: 5/4/15**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
INT	-	-	-	-	-	-	-	47.89	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

PID=1.3

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-215-395
Sample Date: 1/21/2015
Sampling Device: Dedicated bladder pump
Well Depth (feet TOIC): 395
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 36.56
Final Water Level (feet TOIC): 36.56
Casing Type: **PVC** Steel (circle one)
Personnel: T, pullon (unclr)

Sample ID: MW-215-395-WI15
Purge Start Time: 09:15
Sample Time: 11:30
Final Turbidity (NTUs): 4.7
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 16.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09:50	3	12.15	12.33	144	4.2	3.84	-161	36.56	
10:05	10.5	11.85	12.42	881	13.6	2.09	-193	36.56	
10:20	18	11.12	12.51	374	8.7	1.85	-182	36.56	
10:25	19	10.92	11.10	332	7.0	2.26	-171	36.56	
10:30	19.5	10.89	10.43	322	5.9	2.08	-167	36.56	
10:35	20	10.83	9.85	307	5.8	2.11	-169	36.56	
10:40	20.5	10.64	10.44	288	10.5	2.07	-153	36.56	
10:45	21	10.59	10.52	283	10.5	2.11	-150	36.56	
10:50	21.5	10.36	10.66	274	9.5	2.07	-145	36.56	
10:55	22	10.21	10.65	271	8.5	2.08	-136	36.56	
11:00	22.5	10.17	10.65	270	7.9	2.20	-133	36.56	
11:05	23	10.03	10.71	268	6.2	2.22	-124	36.56	
11:10	23.5	9.95	10.82	269	5.3	2.27	-119	36.56	
11:15	24	9.80	10.94	267	5.2	2.31	-114	36.56	
11:20	24.5	9.77	10.94	267	5.2	2.30	-113	36.56	
11:25	25	9.74	10.90	267	4.7	2.24	-113	36.56	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-215-395
Sample Date: 3/18/2015
Sampling Device: QED, Bladder pump
Well Depth (feet TOIC): 395
Screen Interval (feet TOIC): 385-395
Initial Water Level (Feet TOIC): 35.87
Final Water Level (feet TOIC): 35.87
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R. J

Sample ID: MW-215-395-SP15
Purge Start Time: 08:44
Sample Time: 10:20
Final Turbidity (NTUs): 5.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 440
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 16.36

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.10	9.0	10.98	11.86	371	30	0.74	-236.5	35.87	
09.19	12.0	10.16	11.62	268	18.6	0.78	-210.6	35.87	
09.24	14.5	9.61	11.58	264	13.7	0.84	-198.5	35.87	
09.31	17.8	8.58	11.60	262	9.2	0.95	-157.7	35.87	
09.39	21.0	7.46	11.67	254	6.1	1.17	-114.1	35.87	
09.47	24.0	7.31	11.72	249	5.1	1.30	-101.6	35.87	
09.52	26.0	6.84	11.66	247	5.1	1.33	-90.5	35.87	
09.57	28.0	6.74	11.76	244	4.7	1.34	-92.2	35.87	
10.02	30.0	6.71	11.72	244	4.3	1.37	-87.3	35.87	
10.07	32.0	6.67	11.79	244	4.1	1.50	-84.4	35.87	
10.12	34.0	6.61	11.81	245	4.9	1.52	-92.4	35.87	
10.17	36.0	6.58	11.78	247	5.1	1.54	-84.9	35.87	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-216-510
Sample Date: 1/20/2015
Sampling Device: Horiba H-62
Well Depth (feet TOIC): 510.
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 40.05
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: Stephanie Kromhout

Sample ID: MW-216-510
Purge Start Time: 11:45
Sample Time:
Final Turbidity (NTUs):
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min):
Sample Analyses: **VOCs (SW8260)**
~~Total Uranium (ASTM-D5174)~~
3x Pump System Volume (liters): 30.90

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:51	0.5	6.6	11.85	0.178	34.2	4.43	-78	41.42	
11:56	1.5	7.17	11.85	0.170	34.8	4.02	-118	41.51	
12:01	2.0	7.79	11.97	0.167	36.1	3.60	-157	41.65	
12:06	2.5	8.04	12.19	0.166	36.9	3.45	-174	41.70	
12:11	3.0	8.13	12.44	0.164	37.9	3.31	-184	41.74	
12:16	3.5	8.21	12.87	0.161	39.1	3.22	-194	41.76	
12:21	4.0	8.23	13.15	0.160	40.5	3.05	-198	41.80	
12:26	4.5	8.28	13.40	0.158	39.8	3.05	-204	41.81	
12:31	5.0	8.27	13.62	0.158	42.6	2.96	-205	41.83	
12:36	5.5	8.29	13.79	0.157	43.0	2.91	-209	41.84	
12:41	6.0	8.29	13.82	0.156	41.9	2.90	-209	41.85	
12:46	6.5	8.28	13.80	0.155	48.3	2.84	-211	41.87	
12:51	7.0	8.26	13.71	0.156	52.4	2.77	-212	41.89	
12:56	7.5	8.31	13.50	0.156	62.5	2.60	-219	41.92	
13:01	8.0	8.30	13.49	0.156	62.7	2.61	-220	41.94	
13:06	8.5	8.33	13.28	0.156	67.6	2.53	-223	41.95	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-216-510 **Date: 01/20/15**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13:11	9.0	8.30	12.99	0.156	65.3	2.28	-225	41.97	
13:16	9.5	8.31	12.88	0.157	62.7	2.30	-226	41.99	
13:21	10.0	8.29	12.73	0.158	57.1	2.28	-226	41.99	
13:26	10.5	8.23	12.51	0.158	56.6	2.19	-225	41.99	
13:31	11.0	8.22	12.35	0.159	54.5	2.13	-225	41.99	
13:36	11.5	8.18	12.04	0.159	48.9	2.03	-222	41.99	
13:41	12.0	8.18	11.94	0.160	48.2	2.00	-222	41.99	
13:46	12.5	8.15	11.85	0.160	50.7	1.97	-220	42.00	
13:51	13.0	8.11	11.74	0.161	44.4	1.93	-219	42.05	
13:56	13.5	8.00	11.48	0.162	45.5	1.85	-214	42.05	
14:01	14.0	7.95	11.45	0.164	44.2	1.83	-212	42.01	
14:06	15.0	7.89	11.92	0.165	39.0	1.78	-211	42.30	
14:11	16.0	7.81	11.38	0.165	43.5	1.73	-210	42.52	
14:16	17.0	7.77	11.31	0.165	41.7	1.70	-202	42.64	
14:21	18.0	7.53	11.27	0.167	38.0	1.65	-198	42.75	
14:26	19.0	7.34	11.19	0.170	40.0	1.60	-190	42.77	
14:31	20.0	7.15	11.12	0.173	39.5	1.43	-180	42.78	
14:36	21.0	7.13	11.11	0.173	37.1	1.42	-180	42.79	
14:41	22.0	7.06	11.07	0.177	37.7	1.39	-174	42.82	
14:46	23.0	7.01	11.06	0.177	387.2	1.36	-170	42.82	
14:51	24.0	6.93	10.97	0.181	43.6	1.28	-164	42.83	
14:56	25.0	6.92	10.93	0.183	49.1	1.26	-162	42.84	
15:01	26.0	6.87	10.89	0.186	47.0	1.23	-158	42.85	
15:06	27.0	6.86	10.87	0.188	49.0	1.19	-155	42.85	
15:11	28.0	6.83	10.86	0.192	52.7	1.18	-151	42.85	
15:16	29.0	6.82	10.86	0.195	54.3	1.17	-149	42.85	
15:21	30.0	6.81	10.84	0.200	58.9	1.14	-147	42.85	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log
Well No.: MW-216-510 **Date: 01/20/15**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:26	31.0	6.81	10.85	0.206	58.8	1.13	-145	42.85	
15:31	32.0	6.83	10.86	0.211	60.0	1.11	-145	42.85	
15:36	33.0	6.83	10.86	0.219	63.6	1.08	-144	42.85	
15:41	34.0	6.84	10.85	0.225	64.0	1.09	-143	42.85	
15:46	35.0	6.85	10.82	0.221	64.3	1.07	-142	42.85	

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-216-510
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 510
Screen Interval (feet TOIC): 10
Initial Water Level (Feet TOIC): 39.84
Final Water Level (feet TOIC): 42.26
Casing Type: **PVC** Steel (circle one)
Personnel: R.J.

Sample ID: MW-216-510-SP15
Purge Start Time: 08:45
Sample Time: 14:25
Final Turbidity (NTUs): 109-5
Casing Inner Diameter (inches): 20.80
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 20

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.15	10.00	9.29	13.26	241	40.8	0.15	-602		
10.45	21.50	7.92	12.93	283	42.5	0.29	-365.5		
11.15	36.00	7.98	11.51	412	73.5	0.36	-346.2	44.54	
11.45	42.00	7.96	11.96	430	63.2	0.50	-340.4	42.80	
12.15	46.00	8.10	12.15	397	95.8	0.57	-367.9	42.43	
12.45	53.80	8.05	12.15	371	115.4	0.40	-373.5	42.36	
13.15	59.00	7.90	12.09	355	124.3	0.36	-364.5	42.26	
13.45	63.70	7.76	12.28	342	118.5	0.36	-365.4	42.26	
14.00	66.40	7.70	12.49	338	115.3	0.43	-350.0	42.26	
14.05	67.40	7.68	12.44	335	116.8	0.70	-347.5	42.26	
14.10	68.00	7.68	12.52	334	115.3	0.60	51.5	42.26	
14.15	68.50	7.68	12.52	333	108.6	0.53	45.9	42.26	
14.20	69.10	7.65	12.50	332	109.5	0.53	48.1	42.26	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-217-490
Sample Date: 1/21/2015
Sampling Device: Dedicated bladder pump
Well Depth (feet TOIC): 490
Screen Interval (feet TOIC): 480-490
Initial Water Level (Feet TOIC): 41.96
Final Water Level (feet TOIC): 42.00
Casing Type: **PVC** Steel (circle one)
Personnel: A.Z. A.B.

Sample ID: MW-217-490-WI15
Purge Start Time: 15:00
Sample Time: 18:00
Final Turbidity (NTUs): 2800
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 250
Sample Analyses: **VOCs**
Total Uranium (ASTM-D5174)
3x Pump System Volume (liters): 20

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:00	0	9.95	11.83	0.136	66.7	5.57	-227	41.96	
15:15	7.5	8.61	11.92	0.099	285	4.39	-235	42.00	
15:30	15	8.09	11.91	0.099	695	4.08	-190	42.00	
15:45	22.5	7.91	11.86	0.099	750	3.97	-175	42.00	
16:00	30	7.91	11.14	0.099	775	4.67	-165	42.00	
17:00	45	7.80	11.10	0.099	2800	4.20	-156	42.00	
17:30	52.5	7.61	10.95	0.091	2800	4.30	-141	42.00	
17:35	53.75	7.65	11.02	0.091	2800	4.25	-156	42.00	
17:40	55	7.74	10.99	0.089	2800	4.56	-160	42.00	
17:45	56.25	7.7	10.98	0.089	2800	4.34	-160	42.00	

Key:
BGS = Below ground surface.
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-217-490
Sample Date: 3/18/2015
Sampling Device: QED, Bladder pump
Well Depth (feet TOIC): 490
Screen Interval (feet TOIC): 480-490
Initial Water Level (Feet TOIC): 41.32
Final Water Level (feet TOIC): 41.31
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne R.Jani

Sample ID: MW-217-490-SP15
Purge Start Time: 11:30
Sample Time: 18:05
Final Turbidity (NTUs): 81.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 19.95

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.21	9	7.50	12.55	69	193.00	0.37	-394.9	41.37	
12.26	11.0	7.41	12.42	67	210.1	0.50	-362.3	41.37	
12.31	13.75	7.25	12.14	67	238.7	0.81	-310.7	41.37	
12.36	14.50	7.28	12.25	68	242.3	0.93	-290.2	41.31	
12.41	15.00	7.29	12.18	68	246.3	1.03	-276.2	41.31	
12.46	16.50	7.28	12.14	69	246.3	1.12	-266.7	41.31	
13.20	25.50	7.20	11.97	70	149.8	1.54	-208.2	41.31	
13.50	32.0	7.19	12.25	69	111.1	1.74	-180.3	41.31	
14.20	37.0	7.07	11.84	67	95.7	2.10	-138.6	41.27	
14.50	44.0	7.05	11.72	65	94.8	2.36	-142.4	41.27	
15.20	51.5	7.03	11.12	64	85.7	2.64	-118.4	41.27	
15.50	56.0	7.00	11.37	63	86.4	2.79	-144.1	41.26	
16.20	60.5	6.94	11.12	62	80.7	2.94	-143.5	41.26	
16.50	64.5	6.93	9.34	62	77.6	3.00	-194.4	41.29	
17.20	66.5	6.58	8.52	62	80.8	3.13	-120.9	41.29	
17.50	69.5	6.88	8.65	62	81.3	3.01	-162.3	41.31	

Key:
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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-217-490 **Date:** 3/18/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.55	7.7	6.84	8.47	62	80.6	3.00	-162.1	41.31	
18.00	7.9	6.79	8.50	62	81.1	2.98	-159.8	41.31	

Key:
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-218-90
Sample Date: 1/21/2014
Sampling Device: Dedicated bladder pump
Well Depth (feet TOIC): 90
Screen Interval (feet TOIC): 80-90
Initial Water Level (Feet TOIC): 60.59
Final Water Level (feet TOIC): 60.59
Casing Type: **PVC** Steel (circle one)
Personnel: T. Pullon (unclr)

Sample ID: MW-218-90-WI15
Purge Start Time: 14:35
Sample Time: 15:30
Final Turbidity (NTUs): 1.4
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 175
Sample Analyses: **VOCs (SW8260) Ni (SW6010B) and Total Uranium (ASTM-D5174)**
2x Pump System Volume (liters): 2.98

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14:40	1	8.41	12.21	230	51.3	10.20	190	60.59	
14:45	2.75	7.25	13.10	247	20.7	9.17	199	60.59	
14:50	4.5	6.51	13.15	246	8.3	8.89	212	60.59	175 ml/min
14:55	5.375	6.46	12.75	246	5.8	8.53	229	60.59	
15:00	6.15	6.24	12.18	245	4.0	8.53	217	60.59	
15:05	7.125	6.02	12.06	242	2.9	8.56	227	60.59	
15:10	8	5.98	11.91	237	1.2	8.52	228	60.59	
15:15	8.875	5.95	11.89	236	1.6	8.52	229	60.59	
15:20	4.75	5.95	11.86	235	1.4	8.55	229	60.59	

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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-218-95
Sample Date: 3/19/2015
Sampling Device: QED MP40 Bladder Pump
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC): 75-95
Initial Water Level (Feet TOIC): 60.64
Final Water Level (feet TOIC): 60.64
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne

Sample ID: MW-218-95-SP15
Purge Start Time: 09:43
Sample Time: 10:30
Final Turbidity (NTUs): 0.4
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 340
Purge Rate d/sampling (ml/min): 120
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.37

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.53	1.9	5.79	10.47	293	4.7	9.94	188.7	60.64	
09.58	2.6	5.74	11.05	299	3.5	9.86	196.8	60.64	
10.03	3.0	5.72	10.65	304	2.4	9.85	205.0	60.64	
10.08	3.2	5.73	8.78	310	1.5	10.11	215.3	60.64	
10.13	4.1	5.63	9.31	304	1.0	10.05	224.4	60.64	
10.18	5.0	5.64	9.68	304	0.8	10.11	229.7	60.64	
10.23	5.5	5.65	9.84	303	0.0	10.12	237.2	60.64	
10.28	7.0	5.63	9.75	301	0.4	10.08	239.1	60.64	

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-219-560
Sample Date: 1/21/2015
Sampling Device: Dedicated bladder pump
Well Depth (feet TOIC): 560
Screen Interval (feet TOIC): 558-560
Initial Water Level (Feet TOIC): 46.15
Final Water Level (feet TOIC): 46.17
Casing Type: **PVC** Steel (circle one)
Personnel: Archil Zarnadze Alex Balog

Sample ID: MW-219-560-WI15
Purge Start Time: 10:30
Sample Time: 12:30
Final Turbidity (NTUs): 2.2
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 150
Sample Analyses: **VOCs**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 22.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10:30	0	12.13	11.37	2.01	8.0	5.74	-187	46.15	
10:45	6	12.09	11.47	1.81	0	5.32	-190	46.21	
11:00	12.0	12.0	11.53	1.39	1.35	4.63	-230	46.20	
11:15	18.0	11.85	11.55	1.06	1.05	4.39	-217	46.19	
11:30	24.0	11.61	11.66	0.713	0.9	4.23	-208	46.21	
11:35	26.00	11.62	11.59	0.658	1.1	4.24	-207	46.21	
11:40	28.0	11.50	11.67	0.608	1.0	4.20	-204	46.21	
11:45	30.0	11.69	11.46	0.574	0.8	4.20	-203	46.22	
11:50	32	11.39	11.63	0.532	1.0	4.20	-200	46.21	
11:55	34	11.33	11.70	0.492	1.4	4.16	-197	46.17	
12:00	36	11.27	11.63	0.462	1.6	4.19	-191	46.17	
12:05	38	11.23	11.58	0.446	1.5	4.19	-190	46.17	
12:10	40	11.22	11.66	0.438	2.1	4.19	-189	46.17	
12:15	42	11.17	11.71	0.423	1.9	4.14	-187	46.17	
12:20	44	11.14	11.68	0.415	2.0	4.13	-185	46.17	
12:25	46	11.13	11.73	0.412	2.2	4.13	-185	46.17	

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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-219-560
Sample Date: 3/19/2015
Sampling Device: QED MP50 Bladder pump
Well Depth (feet TOIC): 560
Screen Interval (feet TOIC): 550-560
Initial Water Level (Feet TOIC): 46.67
Final Water Level (feet TOIC): 45.85
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne

Sample ID: MW-219-560-SP15
Purge Start Time: 12:10
Sample Time: 14:45
Final Turbidity (NTUs): 6.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 380
Purge Rate d/sampling (ml/min): 160
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 22.55

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.03	11.0	11.90	12.17	910	24.7	1.68	-329.2	46.01	
13.44	22.0	11.29	12.24	431	9.2	1.29	-274.7	45.97	
13.49	23.0	11.20	12.31	400	8.8	1.30	-268.8	45.97	
13.54	25.0	11.01	12.43	374	9.2	5.86	-252.0	45.97	
13.59	27.0	10.93	12.42	355	7.4	5.24	-250.0	45.97	
14.04	28.5	10.86	12.26	346	9.2	4.99	-235.8	45.97	
14.09	30.0	10.86	12.33	343	8.5	5.29	-201.8	45.97	
14.14	31.0	10.82	12.32	338	7.1	5.32	-178.6	45.97	
14.19	33.0	10.76	12.42	331	6.3	4.63	-179.5	45.97	
14.24	34.2	10.69	12.43	325	5.2	4.49	-194.7	45.97	
14.29	36.0	10.41	12.37	318	5.2	4.15	-214.8	45.97	
14.34	37.0	10.40	12.49	311	5.4	3.92	-222.2	45.97	
14.39	38.5	10.52	12.45	306	5.8	3.78	-222.4	45.85	
14.44	40.5	10.50	12.58	303	6.1	3.69	-221.9	45.85	Duplicate sample taken
									MW-909-SP15

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-220-325
Sample Date: 1/20/2015
Sampling Device: Dedicated bladder pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 44.25
Final Water Level (feet TOIC): 44.25
Casing Type: **PVC** Steel (circle one)
Personnel: T. OIlon, Archil Zarnadze

Sample ID: MW-220-325-WI15
Purge Start Time: 11:55
Sample Time: 13:35
Final Turbidity (NTUs): 6.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 125
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 13.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:25	2	9.55	11.16	458	2.0	8.40	-50	44.25	
12:35	4	8.07	12.02	287	15.4	4.24	-51	44.25	
12:45	6.25	7.56	12.51	243	8.2	2.77	-111	44.25	
12:55	10.25	6.44	12.66	304	10.2	2.81	-33	44.25	
13:00	12.25	6.36	12.71	303	10.1	2.46	-31	44.25	
13:05	14.25	6.28	12.68	304	9.5	2.03	-29	44.25	
13:10	16.25	6.24	12.21	303	9.0	1.83	-31	44.25	
13:15	18.25	6.18	12.68	302	7.3	1.62	-25	44.25	
13:20	20.25	6.15	12.68	301	8.1	1.47	-24	44.25	
13:25	22.25	6.14	12.65	302	6.9	1.40	-26	44.25	
13:30	24.25	6.14	12.67	302	6.1	1.48	-25	44.25	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-220-325
Sample Date: 3/19/2015
Sampling Device: dedicated
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC): 10
Initial Water Level (Feet TOIC): 43.85
Final Water Level (feet TOIC): 43.86
Casing Type: **PVC** Steel (circle one)
Personnel: R.J.

Sample ID: MW-220-325-SP15
Purge Start Time: 16:10
Sample Time: 17:15
Final Turbidity (NTUs): 3.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 13.25

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.40	9.00	5.84	12.89	316	4.3	0.31	-271.9	43.9	
16.53	14.00	5.84	13.18	315	3.6	0.32	-246.6	43.9	
16.58	15.50	5.85	12.94	314	3.4	0.33	-222.0	43.86	
17.03	16.75	5.84	12.94	315	3.2	0.32	-221.6	43.86	
17.13	19.00	5.84	12.90	316	3.0	0.32	-220.0	43.86	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P110-355
Sample Date: 5/4/2014
Sampling Device: Marshcaulk
Well Depth (feet TOIC): 355
Screen Interval (feet TOIC): 345-355
Initial Water Level (Feet TOIC): 47.03
Final Water Level (feet TOIC): 47.68
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-P110-355-SP15
Purge Start Time: 15:05
Sample Time: 16:00
Final Turbidity (NTUs): 12.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs
~~Total Uranium (ASTM-D5174)~~
2x Pump System Volume (liters): 8.16

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15:10	2	5.89	16.84	288	21.8	3.56	199.1	47.68	
15:15	3.5	5.84	16.76	284	27.5	2.74	204.0	47.68	
15:20	5	5.80	16.71	282	21.5	1.98	213.9	47.68	200 ml/min
15:25	6	5.79	16.99	282	18.4	1.96	225.0	47.68	
15:30	7	5.78	17.16	282	18.5	1.65	234.1	47.68	
15:35	8	5.77	17.1	282	16.7	1.64	246	47.68	
15:40	9	5.75	17.6	288	12.7	1.67	252	47.68	
15:45	10	5.74	17.5	279	12.8	1.68	252	47.68	
15:50	11	5.72	17.65	278	12.0	1.69	252.6	47.68	
									PID: 3 ppm @ well
									PID 0 ppm at breathing zone

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P110-440
Sample Date: 5/4/2015
Sampling Device: Marschalk
Well Depth (feet TOIC): 440
Screen Interval (feet TOIC): 430-440
Initial Water Level (Feet TOIC): 47.78
Final Water Level (feet TOIC): 47.78
Casing Type: **PVC** Steel (circle one)
Personnel: Archil Zarnadze

Sample ID: MW-P110-440-SP15
Purge Start Time: 11:25
Sample Time: 13:20
Final Turbidity (NTUs): 3.6
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 10

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:30	2	5.96	15.39	0.527	10.6	7.41	90.8	47.78	
11:40									Controller stopped working
12:00	4	6.15	15.26	0.511	8.8	4.71	123	47.78	
12:15	10	5.55	15.06	0.501	7.0	5.10	241	47.78	
12:20	12	5.51	15.10	0.501	6.6	5.37	272	47.78	
12:25	14	5.48	15.04	0.503	6.0	5.39	279	47.78	
12:30	16	5.46	15.08	0.503	4.9	5.46	285	47.78	
12:35	18	5.43	15.07	0.504	4.3	6.08	291	47.78	Purge rate: 200 ml/min
12:40	20	5.41	15.50	0.507	4.2	6.36	297	47.78	
12:55	23	5.35	15.82	0.510	3.9	7.0	308	47.78	
13:05	25	5.34	16.42	0.512	3.9	6.81	310	47.78	
13:10	26	5.34	16.57	0.512	3.7	6.67	311	47.78	
13:15	29	5.33	16.53	0.512	3.6	6.65	312	47.78	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P114-170R
Sample Date: 5/5/2015
Sampling Device: 98F0529
Well Depth (feet TOIC): 170
Screen Interval (feet TOIC): 160-170
Initial Water Level (Feet TOIC): 47.91
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: D. Herrera

Sample ID: MW-P114-170R-SP15
Purge Start Time: 11:00
Sample Time: 20:00
Final Turbidity (NTUs):
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.5

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16:25	4.5	5.71	16.85	0.595	403.8	1.60	233.2	47.90	Readings every 30 min until
16:55	9	5.84	16.39	0.590	304.5	1.02	209.4	47.90	Reaching NTU < 50
17:25	13.5	5.87	16.36	0.583	240.2	0.78	199.0	47.90	
17:55	18.0	5.87	15.95	0.582	366.9	1.30	49.1	47.40	
18:05	22.5	5.83	15.70	0.578	130.1	0.56	19.1	47.70	
19:00	32.5	5.80	15.33	0.577	120.6	0.49	25.7	47.90	
19:15	34.5	5.80	15.30	0.570	88.6	0.46	28.8	47.90	
19:20	35.1	5.80	15.29	0.568	111.9	0.45	31.5	47.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-P114-290
Sample Date: 5/4/2014
Sampling Device: Marschaull 24''SS Bludder Pump
Well Depth (feet TOIC): 290
Screen Interval (feet TOIC): 280-290
Initial Water Level (Feet TOIC): 47.94
Final Water Level (feet TOIC): 48.15
Casing Type: **PVC** Steel (circle one)
Personnel: J. Ganz

Sample ID: MW-P114-290-SP15
Purge Start Time: 12:40
Sample Time: 13:50
Final Turbidity (NTUs): 6.1
Casing Inner Diameter (inches): 4'' Sch 80 PVC
Purge Rate (ml/min) 450; 230 @ 13:07
Purge Rate d/sampling (ml/min):230
Sample Analyses: **VOCs**
~~Total Uranium (ASTM-D5174)~~
2x Pump System Volume (liters): 6.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12:50	1.5	5.80	17.65	356	3.5	3.15	153.6	48.11	
12:55	3.5	5.10	16.86	353	18.9	1.54	185.7	48.14	
13:00	5	5.13	17.05	353	18.3	1.19	191.9	48.15	
13:05	7.5	5.13	17.29	353	12.6	2.66	196.9	48.15	
13:10	8.0	5.14	18.54	354	11.1	2.81	198.2	48.15	
13:15	9.5	5.14	18.33	353	9.4	2.52	201.6	48.15	
13:20	10.5	5.13	18.65	354	8.1	2.40	202.8	48.15	
13:25	11.5	5.12	18.69	353	6.7	2.15	204.3	48.15	
13:30	12.5	5.12	18.57	353	6.6	1.99	205.3	48.15	
13:35	13.5	5.11	18.65	353	6.1	1.78	206.6	48.15	
13:40	14.5	5.11	18.57	353	6.1	1.65	207.3	48.15	
13:45	15.5	5.10	18.54	353	6.6	1.68	207.8	48.15	
13:50									
13:55									
14:00									

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-02-05
Sample Date: 3/23/2015
Sampling Device: Check valve (Manual)
Well Depth (feet TOIC): 133
Screen Interval (feet TOIC): 131-133
Initial Water Level (Feet TOIC): 58.16
Final Water Level (feet TOIC): 58.16
Casing Type: **PVC** Steel (circle one)
Personnel: T.Cayes P.Lamont

Sample ID: PW-02-05-SP15
Purge Start Time: 11:45
Sample Time: 14:40
Final Turbidity (NTUs): 48.5
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 50
Purge Rate d/sampling (ml/min): 50
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
3x Pump System Volume (liters): 2.25

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.44	.25	5.82	7.42	190	76.8	8.12	147.1		
									No water produced
13.03	.5	6.06	7.72	182	134.0	8.51	156.9		
13.08	.75	6.13	8.10	176	109.3	8.48	155.1		
13.13	1	5.14	8.16	172	140.7	8.72	158.9		
13.18	1.25	5.70	8.18	169	72	8.81	166.5		
13.23	1.5	5.63	8.06	164	57	8.91	164		
13.28	1.75	5.63	7.91	164	57	9.0	164		
13.33	2	5.66	7.89	165	55	9.01	165		
13.38	2.25	5.63	7.83	165	53	9.04	166		
13.43	2.5	5.65	7.74	165	190	9.23	169.2		
13.48	2.75	5.69	7.91	165	128.3	9.22	164.6		
13.53	3	5.65	8.06	166	124.8	9.32	171.5		
13.58	3.25	5.80	7.89	165	89.6	9.41	169.0		
14.03	3.5	5.73	7.84	165	132.5	9.53	170.8		
14.08	3.75	5.68	7.73	163	102.2	9.52	172.8		

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: PW-02-05 **Date:** 3/23/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14.13	4	5.66	7.83	163	79.2	9.43	174.3		
14.18	4.25	5.62	8.11	164	50.3	9.46	175.0		
14.23	4.5	5.61	8.05	164	51.4	9.53	176.0		
14.28	4.75	5.65	8.11	164	48.5	9.53	177.2		

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Ferrous Iron Reading:_____mg/L

Site: Sylvania Corning FUSRAP
Well No.: PW-2-6
Sample Date: 3/26/2015
Sampling Device: Wattera
Well Depth (feet TOIC): 148
Screen Interval (feet TOIC): 146-148
Initial Water Level (Feet TOIC): 58.10
Final Water Level (feet TOIC): 58.10
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont

Sample ID: PW-2-6-SP15
Purge Start Time: 10:50
Sample Time: 11:45
Final Turbidity (NTUs): 6.8
Casing Inner Diameter (inches): cmt
Purge Rate (ml/min) 200 1L/5min
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 1.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.55	1	5.42	11.53	314	197	9.36	223		
11.00	2								
11.05	3	5.43	11.55	312	49.7	9.69	241.8		
11.10	4	5.41	11.60	310	34.5	9.64	245.0		
11.15	5	5.41	11.51	310	19.5	9.60	248.8		
11.20	6	5.40	11.53	310	12.3	9.53	250.7		
11.25	7	5.39	11.56	309	10.4	9.49	254.5		
11.30		5.39	11.51	309	8.9	9.47	259.3		
11.35		5.38	11.45	309	7.3	9.43	263.4		

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-2-7
Sample Date: 3/26/2015
Sampling Device: Wattera
Well Depth (feet TOIC):
Screen Interval (feet TOIC): 162.5-163
Initial Water Level (Feet TOIC): 58.15
Final Water Level (feet TOIC): 58.15
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont

Sample ID: PW-2-7-SP15
Purge Start Time: 11:00
Sample Time: 14:15
Final Turbidity (NTUs): 450
Casing Inner Diameter (inches): smt
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 100
Sample Analyses: **VOCs, Ni, + Filtered Ni**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.10

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.05	1								
11.10	2	5.13	13.80	276	250	8.77	231		
11.15	3		14.04	274	1663	7.08	240		
11.20	4	5.31	14.03	285	1637	6.41	251		
11.25	5	5.21	13.98	297	1145	6.22	256		
11.30	6	5.27	13.92	297	892	6.01	260		
11.35	7	5.30	13.94	287	762	5.81	263		
11.40	8	5.27	13.93	287	684	5.69	268		
12.00	9		13.76	286	605	5.07	288		
12.10	10								
12.15	11	5.51	13.80	286	490	4.93	292.5		
12.20	12	5.57	13.75	287	494	4.89	294		
12.25	13								
12.30	14.75	5.63	13.72	287	631	4.81	299		150 ml/min
12.35	15.5								
12.40		5.63	13.27	287	492	4.55	304.6		

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: PW-2-7 **Date:** 3/26/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.45	16.25	5.62	13.16	288	528	4.61	304		
12.50	17.0	5.64	13.17	288	467	4.39	308		
12.55	17.75	5.62	13.26	289	525	4.42	311		
13.00	18	5.63	13.33	288	504	4.28	311		
13.05	18.75								
13.10	19.5	5.61	13.99	287	510	4.28	312		
13.15	20.25	5.63	13.43	288	473	4.25	314		
13.20	20.75	5.63	12.62	288	450	4.06	316		
13.25	21.25	5.65	12.16	288	445	4.03	318		
13.30	21.75	5.63	11.94	288	416	3.92	318		
13.35	22.25	5.63	11.92	287	472	3.99	319		
13.40	22.75								100 ml/min
13.45	23.25	5.62	12.04	287	442	3.81	320		
13.50	23.75	5.63	12.00	288	434	3.78	321		
13.55	24.25	5.62	11.89	287	475	3.75	322		
14.00	24.75	5.62	11.99	287	535	3.70	322		
14.05		5.62	12.00	287		3.63	323		
14.15									

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-5
Sample Date: 3/28/2015
Sampling Device: Wattera
Well Depth (feet TOIC): 168
Screen Interval (feet TOIC): 166-168
Initial Water Level (Feet TOIC): 56.19
Final Water Level (feet TOIC): 56.19
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne D. Henvera

Sample ID: PW-6-5-SP15
Purge Start Time: 10:22
Sample Time: 13:35
Final Turbidity (NTUs): 46.2
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 80
Purge Rate d/sampling (ml/min): 80
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.51

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.17	1.0	5.66	3.95	318	7.8	3.33	248.1		
12.07	2.0	5.87	3.37	283	30.6	3.57	236.5		
12.37	3.1	5.83	5.08	272	58.2	4.63	241.8		
12.51	4.0	5.74	5.77	269	53.7	5.74	250.3		
13.01	4.2	5.62	6.16	268	53.6	6.32	256.7		
13.11	5.0	5.56	6.32	268	49.0	6.95	263.6		
13.16	5.5	5.53	6.32	268	44.2	7.04	267.1		
13.24	5.9	5.51	6.39	268	42.8	7.27	271.9		
13.29	6.1	5.51	6.38	268	46.2	7.40	274.6		

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-6
Sample Date: 3/28/2015
Sampling Device: Waterra
Well Depth (feet TOIC): 182
Screen Interval (feet TOIC): 180-182
Initial Water Level (Feet TOIC): 56.17
Final Water Level (feet TOIC): 56.24
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyno D. Henvera

Sample ID: PW-6-6-SP15
Purge Start Time: 13:49
Sample Time: 15:50
Final Turbidity (NTUs): 5.0
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 90
Purge Rate d/sampling (ml/min): 90
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.03

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.06	2.2	5.94	6.92	319	5.1	2.94	252.1		
15.11	3.0	5.93	7.18	307	7.3	3.40	252.6		
15.16	3.3	5.88	7.49	291	8.5	4.07	254.9		
15.21	3.9	5.83	7.52	284	7.4	4.20	257.9		
15.29	4.6	5.79	7.50	275	8.6	4.60	263.8		
15.34	5.0	5.75	7.74	272	7.5	4.86	266.6		
15.39	5.2	5.71	7.80	271	4.4	5.08	269.6		
15.44	5.9	5.69	7.97	269	5.0	5.34	272.9		

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-6-7
Sample Date: 3/28/2015
Sampling Device: Wattera
Well Depth (feet TOIC): 222
Screen Interval (feet TOIC): 221.5-222
Initial Water Level (Feet TOIC): 56.67
Final Water Level (feet TOIC): 56.74
Casing Type: **PVC** Steel (circle one)
Personnel: j. Rhyno d. Henvere

Sample ID: PW-6-7-SP15
Purge Start Time: 09:57
Sample Time: 15:55
Final Turbidity (NTUs): 71.6
Casing Inner Diameter (inches): 0.5
Purge Rate (ml/min) 140
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.61

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.52	2.0	6.26	9.90	220	4.2	1.85	190.5		
11.02	3.0	5.41	9.40	218	24.5	2.00	226.4		
11.16	3.9	5.31	9.48	212	80.0	3.23	241.9		
11.20	4.8	5.20	10.48	205	185.1	5.08	260.1		
11.25	5.4	5.40	10.61	203	205.0	5.88	205.6		
11.30	6.8	5.71	10.47	201	214.0	6.53	270.5		
12.02	12.8	5.28	10.41	200	240.8	7.10	286.4		
12.30	16.0	5.53	9.19	201	218.5	7.18	290.5		
13.00	18.0	5.47	6.16	202	154.5	7.27	286.8		
13.30	22.1	5.30	9.21	201	64.5	6.98	293.8		
13.40	22.6	5.71	10.48	201	51.0	6.98	298.4		
13.51	24.0	5.42	10.24	201	64.3	6.93	300.5		
14.00	25.7	5.79	9.62	201	78.8	6.94	299.6		
14.23	32.0	5.80	10.65	202	97.5	7.07	304.8		
15.00	36.5	5.28	8.50	204	93.4	7.11	303.0		
15.30	38.5	6.03	8.24	202	76.1	7.23	297.3		

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: PW-6-7 **Date:** 3/28/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.35	39.0	5.53	8.61	202	74.2	7.23	296.9		
15.40	39.3	5.54	8.62	203	74.0	7.24	297.4		
15.45	39.9	5.54	8.42	203	71.6	7.21	297.5		

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-5
Sample Date: 3/30/2015
Sampling Device: Wattera
Well Depth (feet TOIC): 172
Screen Interval (feet TOIC): 170-172
Initial Water Level (Feet TOIC): 53.20
Final Water Level (feet TOIC): 53.22
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamount

Sample ID: PW-7-5-SP15
Purge Start Time: 09:30
Sample Time: 10:30
Final Turbidity (NTUs): 16
Casing Inner Diameter (inches):
Purge Rate (ml/min) 150 = 750ml/5min
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.75

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.30	-	5.65	9.16	263	103	4.68	121	-	
09.35	.75	5.53	10.01	258	128	5.30	143	-	
09.40	1.5	5.46	10.01	258	109	5.52	163	-	
09.45	2.25	5.41	10.28	257	71	5.80	187	-	
09.50	3.0	5.40	10.40	256	56	6.30	202	-	
09.55	3.75	5.50	10.40	257	40	6.82	214	-	
10.00	4.5	5.43	10.44	256	34	6.84	226	-	
10.05	5.0	5.43	10.42	255	26	6.85	230	-	
10.10	5.5	5.42	10.41	255	22.6	6.87	235	-	
10.15	6.0	5.43	10.44	255	22.7	6.86	240	-	
10.20	6.5	5.42	10.42	255	22.0	6.87	245	-	
10.25	7.0	5.41	10.34	254	16.2	6.87	250	-	
10.30									

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-6
Sample Date: 3/30/2015
Sampling Device: Wattera
Well Depth (feet TOIC): 199
Screen Interval (feet TOIC): 197-199
Initial Water Level (Feet TOIC): 53.40
Final Water Level (feet TOIC): 53.45
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont

Sample ID: PW-7-6-SP15
Purge Start Time: 12:15
Sample Time: 13:25
Final Turbidity (NTUs): 2.0
Casing Inner Diameter (inches):
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.15	-	5.77	11.29	402	8.8	2.18	20.1	-	
12.20	1	5.73	11.48	399	16.5	2.10	29.0	-	
12.25	2	5.74	11.64	370	8.9	2.08	34.2	-	
12.35	3	5.66	12.00	320	5.5	3.91	69.0	-	Sampling PW 7-7
12.40	4	5.63	12.02	314	0.8	4.51	78.4	-	
12.45	5	5.63	11.86	302	5.0	5.98	94.1	-	
12.50	6	5.63	11.95	297	0.0	6.54	109.6	-	
12.55	7	5.63	11.88	293	10.0	7.16	127.7	-	
13.00	8	5.62	11.88	290	1.7	7.48	145.0	-	20 ml/min
13.05	9	5.63	11.99	288	9.3	7.65	159.6	-	
13.10	10	5.63	11.97	287	0.8	7.82	163.6		
13.15	11	5.62	11.92	286	2.1	7.99	175.7		
13.20	12	5.61	12.08	285	0.0	8.24	188.4		
13.25									Sample MS MSD

Key:
BGS = Below ground surface.
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: PW-7-7
Sample Date: 3/30/2015
Sampling Device: Wattera
Well Depth (feet TOIC): 221
Screen Interval (feet TOIC): 220.5-221
Initial Water Level (Feet TOIC): 53.40
Final Water Level (feet TOIC): 53.41
Casing Type: **PVC** Steel (circle one)
Personnel: P. Lamont

Sample ID: PW-7-7-SP15
Purge Start Time: 09:45
Sample Time: 12:25
Final Turbidity (NTUs): 45.0
Casing Inner Diameter (inches):
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.45									
09.50	0.5	5.5	8.49	642	68	22.5	226	-	
09.55	1.0	5.43	9.74	597	13	16.27	212	-	
10.00	1.5	5.45	9.95	595	9	14.89	210	-	
10.05	2.0	5.42	10.27	591	7	13.44	202	-	100 ml/min
10.10								-	
10.15	2.0	5.76	10.52	589	16.6	11.65	153	-	
10.20	2.0	5.71	10.66	588	106	10.96	137	-	
10.25		5.79	10.58	584	325	11.60	127	-	
10.30								-	Sampling PW 7-5
10.35		5.74	10.53	575	310	13.73	134.7	-	
10.40	4.0	5.73	10.53	565	268	15.44	145.9	-	
10.45		5.75	10.47	559	228	16.26	152.0	-	
~~10.50~~									
11.00	5.0	5.65	10.29	554	137	14.19	171.3	-	
11.05		5.62	10.27	553	121.5	15.01	177.3	-	

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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: PW-7-7 **Date:** 3/30/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.15		5.56	10.33	551	79.5	15.60	187.0	-	
11.20	6	5.55	10.37	550	70.5	15.45	196.6	-	
11.25		5.55	10.51	548	63.3	15.43	199.4	-	
11.30	7	5.53	10.61	544	61.0	14.67	207.3	-	
11.35		5.53	10.51	547	57.5	14.56	210.6	-	
11.40	7.5	5.54	10.57	547	57.4	14.19	213.2	-	100 ml/min
11.45		5.54	10.58	544	55.2	13.90	217.6	-	
11.50	8.0	5.51	10.80	544	52.0	13.45	220.0	-	
11.55		5.51	10.99	543	50.0	12.52	224.5	-	
12.00		5.51	11.02	544	47.2	12.05	227.8	-	
12.05		5.45	10.79	545	43.6	11.43	233.7	-	
12.10		5.46	10.88	544	44.1	11.57	234.3	-	
12.15		5.46	10.91	544	45.1	11.33	234.3	-	
12.20		5.46	11.16	545	46.5	10.74	239.0		
12.25	10								Sample

Key:

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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-325
Sample Date: 5/5/2015
Sampling Device: 5311
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 48.38
Final Water Level (feet TOIC): 48.28
Casing Type: **PVC** Steel (circle one)
Personnel: D. Herrera, naveplowitz

Sample ID: S-1-325-SP15
Purge Start Time: 10:45
Sample Time: 18:55
Final Turbidity (NTUs): 41.5
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 350, dropped to 200 at 16:20
Purge Rate d/sampling (ml/min): 150
Sample Analyses: **VOCs**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 13

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:50	18	5.33	15.16	0.372	2130.7	2.87	182.2	48.48	
12:20	24.5	5.38	16.29	0.374	2158.3	2.45	171.3	48.44	
12:50	30.5	5.46	17.48	0.371	1689.0	2.10	139.0	48.44	
13:20	36.5	5.36	17.30	0.377	716.1	1.82	164.7	43.39	
13:50	42.5	5.36	18.62	0.379	384.0	1.73	170.7	48.38	
14:20	48.5	5.36	18.47	0.377	264.1	1.68	173.4	48.34	
14:50	54.5	5.35	18.02	0.378	194.6	1.75	167.0	48.31	
15:20	60.5	5.34	17.75	0.378	161.1	1.88	170.0	48.29	
15:50	66.5	5.37	17.72	0.379	145.2	1.85	166.2	48.27	
16:20	72.5	5.35	18.91	0.378	113.4	1.98	169.1	48.25	
16:50	77.0	5.37	18.33	0.380	94.3	2.11	164.7	48.24	
17:20	81.5	5.54	16.86	0.382	83.6	1.97	134.3	48.26	
17:50	86.0	5.54	15.81	0.382	57.1	1.85	141.1	48.26	
18:10	??	5.39	15.49	0.380	49.7	1.80	170.4	48.26	
18:15	89.75	5.39	15.40	0.380	48.8	1.72	173.0	48.26	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: S-1-325 **Date: 5/5/2015**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
18:20	90.5	5.40	15.27	0.380	52.6	1.76	170.5	48.28	
18:25	91.25	5.42	15.20	0.379	51.5	1.73	167.5	48.27	
18:30	92.00	5.44	15.02	0.379	49.5	1.72	162.0	48.28	
18:35	92.75	5.49	14.96	0.380	49.9	1.70	152.1	48.28	
18:40	93.50	5.53	14.92	0.380	46.6	1.69	145.3	48.29	
18:45	94.25	5.55	14.99	0.381	43.2	1.67	141.2	48.29	
18:50	95.00	5.56	14.85	0.381	41.5	1.66	139.4	48.20	

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-450
Sample Date: 5/5/2015
Sampling Device: 98FO529
Well Depth (feet TOIC): 450
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 48.77
Final Water Level (feet TOIC):
Casing Type: PVC **Steel** (circle one)
Personnel: ???

Sample ID: S-1-450-SP15
Purge Start Time: 09:50
Sample Time: 13:00
Final Turbidity (NTUs): 11.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250, dropped to 200 at 11:45
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 18

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11:15	20	5.37	15.78	0.198	746.6	6.32	175.7	48.84	
11:45	28.5	5.36	15.37	0.200	280.4	6.42	183.0	48.84	
12:15	30	5.40	16.21	0.200	90.0	6.27	182.0	48.84	
12:25	32	5.41	16.58	0.199	60.6	6.25	181.4	48.84	
12:30	33	5.42	17.13	0.200	47.9	6.29	180.8	48.84	
12:35	34	5.42	16.66	0.201	36.8	6.28	181.2	48.80	
12:40	34.4	5.42	16.96	0.201	3.0	6.23	180.7	48.80	
12:45	35	5.43	17.46	0.200	9.8	6.19	180.0	48.78	
12:50	36	5.43	17.75	0.201	11.8	6.17	180.3	48.79	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-01-75
Sample Date: 3/25/2015
Sampling Device: QED Dedicated
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC)65-75:
Initial Water Level (Feet TOIC): 60.40
Final Water Level (feet TOIC): 60.40
Casing Type: PVC **Steel** (circle one)
Personnel: T. Dillon

Sample ID: W-01-75-SP15
Purge Start Time: 16:45
Sample Time: 17:20
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.00	3	6.17	13.22	79	0.0	7.10	166.6	60.40	
17.05	4	6.18	12.99	80	0.0	5.54	171.7	60.40	
17.10	5	6.16	13.12	80	0.0	5.36	176.3	60.40	
17.15	6	6.15	13.28	81	0.0	5.29	177.5	60.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-01-120
Sample Date: 3/25/2015
Sampling Device: QED bladder pump
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC): 110-120
Initial Water Level (Feet TOIC): 62.38
Final Water Level (feet TOIC): 62.40
Casing Type: **PVC** Steel (circle one)
Personnel: D.Herrera

Sample ID: W-01-120-SP15
Purge Start Time: 15:04
Sample Time: 18:00
Final Turbidity (NTUs): 318
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 230
Purge Rate d/sampling (ml/min): ?0
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.15

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.44	3	6.63	12.29	204	130.5	1.10	-76.1	62.40	
16.15	8.5	6.63	11.30	203	121.1	0.59	-85.5	62.39	
16.45	14	6.63	11.65	204	28.8	0.37	-87.3	62.40	
17.19	17.5	6.64	10.08	204	49.7	0.35	-86.6	62.40	
17.25	18.2	6.64	8.00	205	51.2	0.44	-84.0	62.40	
17.30	20.2	6.64	11.71	204	68.7	0.58	-85.1	62.40	
17.38	21.5	6.63	12.11	204	43.8	0.30	-89.6	62.40	
17.44	22.2	6.63	12.27	204	38.6	0.27	-90.5	62.40	
17.50	22.9	6.63	12.32	204	34.7	0.25	-91.0	62.40	
17.55		6.63	12.34	204	31.8	0.23	-92.3	62.40	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-02-70
Sample Date: 3/26/2015
Sampling Device: QED bladder
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC): 60-70
Initial Water Level (Feet TOIC): 62.35
Final Water Level (feet TOIC): 62.35
Casing Type: PVC **Steel** (circle one)
Personnel: T. Dillon

Sample ID: W-02-70-SP15
Purge Start Time: 12:50
Sample Time: 13:50
Final Turbidity (NTUs): 34.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 175
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.15

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.55	1	6.51	12.65	520	204.0	8.69	162.8	62.35	
13.00	1.875	6.58	13.02	516	144.4	7.73	145.1	62.35	
13.05	2.75	6.61	13.19	514	104.2	7.71	123.8	62.35	
13.10	3.625	6.62	13.29	518	77.4	7.68	114.0	62.35	
13.15	4.5	6.62	13.20	522	59.6	7.77	108.9	62.35	
13.20	5.375	6.62	13.11	524	48.5	7.82	101.2	62.35	
13.25	6.25	6.62	12.92	523	43.6	7.79	89.2	62.35	
13.30	7.125	6.61	12.75	522	39.3	7.90	80.7	62.35	
13.35	8	6.61	12.73	518	37.6	7.83	78.6	62.35	
13.40	8.875	6.61	12.91	519	34.3	7.79	78.9	62.35	
13.45	9.75	6.61	12.93	520	34.0	7.81	80.1	62.35	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-03-72
Sample Date: 3/24/2015
Sampling Device: QED, MP50, Bladder pump
Well Depth (feet TOIC): 72
Screen Interval (feet TOIC): 62-72
Initial Water Level (Feet TOIC): 63.75
Final Water Level (feet TOIC): 64.00
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne D.Herrera

Sample ID: W-03-72-SP15
Purge Start Time: 16:48
Sample Time: 17:35
Final Turbidity (NTUs): 4.2
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 150
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.17

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.10	1.75	6.43	11.91	341	5.7	5.60	144.6	64.00	
17.15	2.25	6.51	11.95	341	2.8	5.79	142.4	64.00	
17.20	3.0	6.55	12.04	341	2.6	5.98	138.5	64.00	
17.25	3.6	6.56	11.86	343	3.7	5.76	129.9	64.00	
17.30	4.0	6.64	11.86	345	4.2	5.59	137.2	64.00	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-03-112
Sample Date: 3/24/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 112
Screen Interval (feet TOIC): 102-112
Initial Water Level (Feet TOIC): 63.90
Final Water Level (feet TOIC): 63.99
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne D.Herrera

Sample ID: W-03-112-SP15
Purge Start Time: 16:29
Sample Time: 18:30
Final Turbidity (NTUs): 29.4
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.96

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
17.12	2.0	6.53	13.88	255	21.?6	1.54	-66.9	64.05	
17.17	2.9	6.54	17.88	255	59.6	1.6	-70.3	64.05	
17.22	3.3	6.54	13.77	255	51.8	1.02	-71.1	64.05	
17.27	4.0	6.54	13.25	254	52.8	0.90	-73.3	64.05	
17.32	4.5	6.54	13.16	255	59.0	0.78	-74.5	64.05	
17.37	5.0	6.54	12.76	254	105.7	0.80	-74.1	64.05	
17.42	5.8	6.54	12.51	255	103.0	0.68	-76.2	64.05	
17.47	6.1	6.55	12.40	256	102.0	0.67	-77.1	64.02	
17.52	6.8	6.55	12.16	255	106.5	0.68	-76.8	64.00	
18.00	7.2	6.55	12.10	254	89.0	0.72	-76.6	64.00	
18.05	7.8	6.56	12.18	254	95.2	0.72	-76.9	64.00	
18.15	8.0	6.56	11.86	252	29.2	0.73	-76.3	63.99	
18.20	8.5	6.56	11.91	251	29.5	0.72	-76.7	63.99	
18.25	9.0	6.57	11.92	251	29.4	0.69	-77.3	63.99	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-05-78
Sample Date: 3/25/2015
Sampling Device: QED bladder
Well Depth (feet TOIC): 78
Screen Interval (feet TOIC): 68-78
Initial Water Level (Feet TOIC): 64.38
Final Water Level (feet TOIC): 64.54
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: W-05-78-SP15
Purge Start Time: 11:18
Sample Time: 12:10
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.25	1	6.05	14.49	254	0.0	8.29	197.8	64.61	
11.30	2	6.01	14.84	256	0.0	8.18	196.0	64.61	
11.35	3	5.97	14.85	257	0.0	8.09	195.2	64.61	
11.40	4	5.96	14.69	253	0.0	8.10	194.8	64.61	
11.45	5	5.96	14.67	250	0.0	8.06	194.3	64.61	
11.50	6	5.96	14.68	247	0.0	8.05	194.4	64.61	
11.55	7	5.96	14.68	242	0.0	8.05	194.2	64.61	
12.00	8	5.96	14.69	241	0.0	8.05	194.1	64.61	
12.05	9	5.96	14.70	240	0.0	8.05	193.8	64.61	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-06-79
Sample Date: 3/25/2015
Sampling Device: QED bladder
Well Depth (feet TOIC): 79
Screen Interval (feet TOIC): 69-79
Initial Water Level (Feet TOIC): 63.79
Final Water Level (feet TOIC): 63.79
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: W-06-79-SP15
Purge Start Time: 15:10
Sample Time: 15:45
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 4
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.3

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.25	2	5.31	13.64	145	0.0	8.77	191.2	63.83	
15.30	3	5.25	13.58	148	0.0	8.14	196.4	63.83	
15.35	4	5.22	13.58	149	0.0	8.05	201.6	63.83	
15.40	5	5.22	13.57	150	0.0	8.02	206.1	63.83	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-08-71
Sample Date: 3/26/2015
Sampling Device: QED bladder
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC): 61-71
Initial Water Level (Feet TOIC): 64.25
Final Water Level (feet TOIC): 64.25
Casing Type: PVC **Steel** (circle one)
Personnel: T. Dillon

Sample ID: W-08-71-SP15 / MS/MSD
Purge Start Time: 09:35
Sample Time: 10:35
Final Turbidity (NTUs): 9.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.45	1	5.91	13.11	171	109.7	10.78	171	64.25	
09.50	2.1	5.70	13.18	170	80.2	10.02	170	64.25	
09.55	2.85	5.67	12.79	170	60.4	10.03	201.5	64.25	
10.00	3.6	5.64	12.72	170	41.6	10.99	204.5	64.25	
10.05	4.35	5.64	12.69	172	32.0	10.09	206.2	64.25	
10.10	5.1	5.64	12.70	173	27.7	10.07	207.7	64.25	
10.15	5.85	5.65	12.82	173	20.0	10.06	208.8	64.25	
10.20	6.6	5.65	12.90	173	12.6	10.07	210.9	64.25	
10.25	7.35	5.65	13.01	172	10.7	10.07	210.4	64.25	
10.30	8.1	5.65	12.95	172	9.2	10.04	212.5	64.25	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-71
Sample Date: 3/26/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 71
Screen Interval (feet TOIC): 61-71
Initial Water Level (Feet TOIC): 61.95
Final Water Level (feet TOIC): 61.92
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne

Sample ID: W-10-71-SP15
Purge Start Time: 12:40
Sample Time: 13:30
Final Turbidity (NTUs): 16.1
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 175-200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.18

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.53	1.0	5.63	11.18	685	122.2	7.44	254.9	61.95	
12.58	1.8	5.60	11.47	694	73.4	7.20	252.8	61.92	
13.03	2.5	5.57	11.56	700	63.2	7.13	253.2	61.92	
13.08	3.5	5.53	11.80	705	34.8	7.16	256.0	61.92	
13.13	4.5	5.63	11.97	708	24.5	7.21	251.6	61.92	
13.18	5.5	5.65	11.99	709	20.2	7.24	251.8	61.92	
13.23	6.5	5.65	11.68	710	16.1	7.27	252.8	61.92	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-10-120
Sample Date: 3/27/2015
Sampling Device: Waterna
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC): 120-130
Initial Water Level (Feet TOIC): 62.65
Final Water Level (feet TOIC): 62.65
Casing Type: PVC **Steel** (circle one)
Personnel: P. Hamont

Sample ID: W-10-120-SP15 MS MSD
Purge Start Time: 08:20
Sample Time: 10:45
Final Turbidity (NTUs): 1.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 1200/
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
3x Pump System Volume (liters): 104

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
08.35	-	5.71	12.40	249	14.6	7.73	216	62.65	
08.40	10	5.77	12.45	255	3.8	5.88	216	62.65	
08.45	16.0	5.96	12.45	297	4.9	8.44	200	62.65	
08.50	22	5.98	12.40	298	1.7	10.15	198	62.65	
08.55	28	5.92	12.41	291	1.5	8.93	199	62.65	1.2 L/min
09.00	34	5.85	12.36	282	26	9.44	198	62.64	
09.05	40	5.82	12.39	276	1.5	9.47	192	62.65	
09.10	46	5.81	12.35	271	1.4	10.19	185	62.65	
09.15	52	5.80	12.30	269	35.6	10.47	179	62.65	
09.20	58	5.78	12.36	267	2.5	10.05	177	62.65	
09.25	60	5.76	12.40	266	47.3	10.11	177	62.63	Check vol 40 L
09.30	66	5.76	12.35	265	2.7	10.41	177	62.65	
09.35	72	5.74	12.33	264	1.2	10.30	176	62.63	1.2 L/min
09.40	78	5.71	12.36	264	4.2	10.18	175	62.65	
09.45	84	5.72	12.42	264	1.1	9.79	175	62.63	
09.50	40	5.71	12.36	264	18.7	10.42	175	62.65	Check vol 40L

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: **Date:**

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.55	96	5.72	12.32	264	17.4	10.42	175	62.65	
10.00	102	5.72	12.34	263	2.3	10.58	175	62.65	
10.05	108	5.71	12.37	265	3.6	10.58	176	62.65	200 ml/min
10.10	109	5.71	12.19	266	0.8	10.56	177	62.65	
10.15	110	5.71	9.53	266	0.8	10.67	178	62.65	
10.20	111	5.72	8.43	266	0.9	10.67	179	62.64	
10.25	112	5.67	8.33	266	0.8	10.57	182	62.65	
10.30	113	5.69	8.28	266	0.8	10.41	182	62.65	
10.35	114	5.71	8.37	266	1.8	10.31	183		
10.45									

Key:

BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-11-70
Sample Date: 3/26/2015
Sampling Device: QED bladder
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC): 60-70
Initial Water Level (Feet TOIC): 62.34
Final Water Level (feet TOIC): 62.33
Casing Type: PVC **Steel** (circle one)
Personnel: D. Henvera

Sample ID: W-11-70-SP15
Purge Start Time: 12:21
Sample Time: 14:40
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 100
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.15

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
12.45	1.8	5.79	12.78	240	30.6	9.17	237.1	62.34	
12.50	2.8	5.81	12.27	242	17.2	9.13	245.2	62.34	
12.55	3.3	5.82	12.16	244	13.7	9.09	251.1	62.30	
13.01	3.8	5.82	12.30	245	8.7	9.05	254.4	62.34	
13.06	4.2	5.83	12.35	245	7.4	9.04	255.1	62.34	
13.11	4.9	5.83	12.30	245	4.9	9.04	255.0	62.34	
13.16	5.5	5.82	12.21	245	1.3	9.04	255.4	62.34	
13.20	6.0	5.82	12.09	245	12.1	9.08	255.7	62.34	
14.20	11.0	5.83	13.45	253	0.7	8.97	253.8	62.33	
14.26	12.0	5.83	13.41	252	0.0	9.01	245.6	62.33	
14.31	12.9	5.82	13.33	251	0.0	9.01	247.7	62.33	
14.36		5.81	13.19	250	0.0	9.01	240.9	62.33	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Ferrous Iron Reading:_____mg/L

Site: Sylvania Corning FUSRAP
Well No.: W-12-70
Sample Date: 3/26/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 70
Screen Interval (feet TOIC): 60-70
Initial Water Level (Feet TOIC): 61.57
Final Water Level (feet TOIC): 61.28
Casing Type: **PVC** Steel (circle one)
Personnel: J. Rhyne D. Herrera

Sample ID: W-12-70-SP15
Purge Start Time: 09:35
Sample Time: 10:35
Final Turbidity (NTUs): 0.5
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 110
Purge Rate d/sampling (ml/min): 80
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 217

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.02	1.2	4.66	10.80	53	48.4	9.86	342.1	61.28	
10.08	1.9	4.71	11.02	54	28.2	9.79	349.3	61.28	
10.18	2.2	4.78	11.45	55	20.1	9.76	355.6	61.28	
10.24	3.1	4.75	11.90	54	9.9	9.69	357.4	61.28	
10.30	4.0	4.76	12.80	54	0.5	9.68	361.3	61.28	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Ferrous Iron Reading:_____mg/L

Site: Sylvania Corning FUSRAP
Well No.: W-12-120
Sample Date: 3/26/2015
Sampling Device: QED Bladder
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC): 110-120
Initial Water Level (Feet TOIC): 61.80
Final Water Level (feet TOIC): 61.80
Casing Type: PVC **Steel** (circle one)
Personnel: J. Rhyne D. Heriera

Sample ID: W-12-120-SP15
Purge Start Time: 09:25
Sample Time: 11:00
Final Turbidity (NTUs): 13.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 220
Purge Rate d/sampling (ml/min): 180
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.14

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.44	2.5	5.39	12.41	193	34.6	9.94	230.3	61.80	
09.49	4.0	5.27	12.45	189	98.6	10.04	245.2	61.80	
09.58	6.0	5.28	12.47	188	99.0	10.05	246.3	61.80	
10.09	7.5	5.24	12.15	180	47.3	10.47	268.7	61.80	
10.14	8.2	5.28	12.21	179	39.5	10.17	274.3	61.80	
10.19	9.0	5.27	12.28	177	36.7	10.22	279.6	61.80	
10.24	9.5	5.40	12.20	176	22.5	10.03	278.7	61.80	
10.29	10.0	5.39	11.97	176	19.4	10.10	282.7	61.80	
10.34	10.5	5.36	11.30	175	24.0	10.21	288.2	61.80	
10.48	11.2	5.30	11.57	171	12.9	10.13	300.3	61.80	
10.53	12.0	5.30	11.68	170	10.5	10.10	301.8	61.80	
10.58	13.0	5.30	11.90	168	13.2	10.07	304.8	61.80	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-14-150
Sample Date: 3/25/2015
Sampling Device: QED bladder pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC): 140-150
Initial Water Level (Feet TOIC): 62.82
Final Water Level (feet TOIC): 62.77
Casing Type: PVC **Steel** (circle one)
Personnel: J.Rhyne

Sample ID: W-14-150-SP15
Purge Start Time: 15:13
Sample Time: 16:50
Final Turbidity (NTUs): 13
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.74

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.54	4.0	5.96	11.46	460	94.7	2.56	104.6	62.78	
16.11	7.0	5.67	11.15	468	49.8	2.82	95.1	62.77	
16.16	8.0	5.71	11.19	469	41.7	2.92	93.2	62.77	
16.21	8.5	5.69	11.18	469	34.1	3.11	99.7	62.77	
16.26	9.5	5.90	11.12	470	26.7	3.29	88.6	62.77	
16.31	11.0	5.91	11.11	470	15.7	3.55	93.1	62.77	
16.40	12.0	5.90	11.10	471	14.8	3.71	98.8	62.77	
16.45	13.0	5.89	11.17	471	13.1	3.78	100.3	62.77	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-16-148
Sample Date: //201
Sampling Device: Marschalk dedicated pump
Well Depth (feet TOIC):
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC):
Final Water Level (feet TOIC):
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon P. Lamont J. Rhyne D. Herrera

Sample ID: W-16-148-SP15
Purge Start Time: 09:24
Sample Time: 13:05
Final Turbidity (NTUs): 37.8
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 130
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.76

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.09	1.5	5.77	12.96	192	130.9	8.91	161.3	60.00	
11.39	2.8	5.71	12.13	193	85.2	7.89	189.3	60.00	
12.14	5.2	5.83	12.38	199	72.0	7.27	218.5	60.00	
12.44	7.0	6.00	13.12	206	45.1	7.35	248.2	60.00	
12.49	7.2	5.96	13.64	205	43.0	7.18	249.7	59.99	
12.54	7.6	5.90	13.77	205	40.5	7.15	254.8	59.99	
12.59	7.8	5.90	13.78	206	39.3	7.22	257.2	59.99	
13.04	8.0	5.89	13.75	206	37.8	7.25	259.6	59.99	

Key:
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°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-17-130
Sample Date: 3/24/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 130
Screen Interval (feet TOIC): 120-130
Initial Water Level (Feet TOIC): 59.85
Final Water Level (feet TOIC): 59.90
Casing Type: PVC **Steel** (circle one)
Personnel: J.Rhyne D.Herrera

Sample ID: W-17-130-SP15
Purge Start Time: 10:45
Sample Time: 13:30
Final Turbidity (NTUs): 40.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 5.05

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.16	3.0	6.78	12.25	151	530.5	6.60	164.9	59.90	
11.46	9.0	6.68	12.48	149	233.8	5.95	184.8	59.90	
12.16	15.5	6.58	12.89	144	108.7	5.92	196.5	59.90	
12.46	18.0	6.53	12.69	140	63.8	5.10	121.7	59.90	
13.06	23.0	6.49	12.32	138	48.9	5.22	222.9	59.90	
13.11	24.0	6.47	12.23	137	46.6	5.25	225.7	59.90	
13.16	25.0	6.46	12.43	136	44.0	5.31	227.8	59.90	
13.21	25.5	6.46	12.44	136	40.9	5.34	230.1	59.90	
13.26	26.0	6.43	12.49	135	40.1	5.35	232.5	59.90	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log **DUP: MW-910-SP15**

Site: Sylvania Corning FUSRAP
Well No.: W-18-150
Sample Date: 3/25/2015
Sampling Device: ???
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 56.85
Final Water Level (feet TOIC): 56.87
Casing Type: PVC **Steel** (circle one)
Personnel: P. Lamont

Sample ID: W-18-150-SP15
Purge Start Time: 10:15
Sample Time: 15:20
Final Turbidity (NTUs): 1000
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 800-7400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.15	6	5.81	13.23	275	220	0	53	-	
10.20	9.5	6.09	13.30	280	119	0	19.8	-	
10.25	11.5	6.14	13.16	285	282	0	12.6	-	
10.30	14.5	6.20	13.14	295	311	0	2.2	-	
10.35	16	6.22	12.78	294	287	0	-3.9	-	
10.40	17.5	6.24	12.85	294	170	0	-8.7	-	
10.45	19	6.24	12.81	293	136	0	-11.5	-	
10.50	21.5	6.25	13.46	292	133	0	-9.6	-	
10.55	23	6.25	13.09	292	110	0	-10.6	-	
11.00	24.5	6.24	13.86	292	154	0	-13.7	-	
11.05	26	6.24	13.09	292	245	0	-15.0		
11.10	27.5	6.25	13.18	291	615	0	-17.0		
11.15	27.5	6.22	13.24	292	1230	-	-18.2		
11.20	29	6.25	13.17	291	890	-	-19.3		
11.25	30.5	-	-	-	-	-	-		
11.30	32	6.26	13.70	291	1005	-	-15.7		

Key:
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mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Well No.: W-18-150 **Date:** 3/25/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.35	33.5	6.26	13.15	291	1240	0	-17.8	-	
11.40	35	6.26	12.66	291	1244	0	-21.3	-	
11.45	36.5	6.26	12.46	291	1237	0	-24.4		
11.50	37.0	6.26	12.30	291	1241	0	-26.3	570	
11.55	38	6.26	12.96	292	1247	0	-28.5	-	
12.00	39	6.27	13.09	292	1249	0	-30.3	-	
12.05	40	6.26	13.54	292	1253	0	-31.6	-	
12.10	41	6.23	13.10	292	1248	0	-32.3	-	
12.15	42	6.26	13.25	292	1250	0	-33.2	-	
12.20	43	6.25	13.44	291	1249	0	-33.9	-	
12.25	44	6.25	13.84	291	1249	0	-34.7	-	
12.30	45	6.25	13.98	291	1257	0	-24.6	-	
12.35	46	6.23	13.54	290	795	0	-21.7	-	
12.40	47.5	6.23	13.72	291	555	0	-20.0		
12.45	49	6.23	14.09	291	1200	0	-18.9		
12.50	50	6.25	13.45	292	1292	0	-21.7		
12.55	51	6.25	13.43	292	1292	0	-29.8		
13.00	52	6.24	13.36	292	1251	0	-28.2		
13.05	53	6.24	13.66	292	1254	0	-30.3		
13.10	54	6.24	13.79	292	1255	0	-31.5		
13.16	55	6.25	13.37	291	1251	0	-16.4		
13.20	56	6.24	13.45	291	1252	0	-20.6		
13.25	57	6.24	13.43	290	1251	0	-22.4		
13.30	58	6.23	13.00	290	1180	0	-22.9		
13.35	59	6.22	13.13	289	976	0	-24.2		
13.40	60	6.22	13.26	289	696	0	-24.7		
13.45	61	6.21	13.18	290	1149	0	-26.1		

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mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Well No.: W-18-150 **Date:** 3/25/2015

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
13.50	62	6.21	13.40	290	870	0	-27.4	-	
13.55	63	6.22	13.56	290	1238	0	-28.5	-	
14.00	64	6.22	12.67	290	1217	0	-28.8	-	
14.05	65	6.23	12.03	290	1229	0	-29.3	-	
14.10	66	6.23	12.13	290	1233	0	-29.9	-	
14.15	67	6.24	13.21	290	1190	0	-20.8	-	
14.20	68	6.22	12.98	290	1163	0	-17.3	-	
14.25	69	6.22	12.54	289	1195	0	-17.7	-	
14.30	70	6.22	12.24	289	1179	0	-19.6	-	
14.35	70.75	6.20	12.13	289	1153	0	-19.9	-	
14.40	71.50	6.22	12.00	289	1058	0	-20.4	-	
14.45	72.25	6.22	11.77	289	950	0	-21.1		
14.50	73.0	6.21	11.22	288	989	0	-21.5		
14.55	73.75	6.21	10.01	289	986	0	-21.7		
15.00	74.50	6.19	10.07	288	902	0	-21.2		
15.05	75.25	6.20	9.65	288	938	0	-20.9		
15.10	76	6.20	9.40	288	945	0	-20.5		
15.15	76.75	6.19	9.10	288	885	0	-21.2		
15.20	77.50								

Key:

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Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-19-110
Sample Date: 3/23/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC): 100-110
Initial Water Level (Feet TOIC): 57.2
Final Water Level (feet TOIC): 57.45
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: W-19-110-SP15
Purge Start Time: 10:40
Sample Time: 13:20
Final Turbidity (NTUs): 11.8
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.1

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.45	2	6.01	11.42	0.101	69.2	9.42	40.2	57.45	
10.50	4	5.71	11.84	0.120	57.8	9.23	38.2	57.45	
11.00	8	5.59	11.98	0.129	83.5	9.18	36.2	57.45	
11.10	12	5.53	12.14	0.134	92.0	9.12	36.3	57.45	
11.25	18	5.54	12.07	0.135	108	9.08	35.7	57.45	
12.00	27.5	5.51	11.69	0.134	137	9.04	34.7	57.45	
12.20	32.5	5.56	11.93	0.134	50	9.05	34.3	57.45	
12.25	33.75	5.56	11.93	0.134	40.3	9.06	34.3	57.45	
12.40	37.50	5.56	11.98	0.134	20.2	9.02	34.5	57.45	
12.45	38.75	5.55	12.08	0.134	20.8	8.90	34.7	57.45	
12.50	40.0	5.55	11.97	0.134	15.8	8.99	34.8	57.45	
13.00	42.5	5.55	12.05	0.134	13.0	9.03	35.7	57.45	
13.05	43.75	5.55	12.03	0.134	12.7	9.02	35.7	57.45	
13.10	45.0	5.55	12.14	0.134	11.8	9.03	35.7	57.45	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-19-150
Sample Date: 3/23/2015
Sampling Device: QED bladder pump
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC): 140-150
Initial Water Level (Feet TOIC): 57.41
Final Water Level (feet TOIC): 57.41
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: W-19-150-SP15
Purge Start Time: 10:40
Sample Time: 13:45
Final Turbidity (NTUs): 202
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.0

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.45									
12.00	3	5.98	12.07	0.186	401	4.71	145	57.41	
13.00	15	5.72	11.57	0.221	106	4.82	172	57.41	
13.30	21	5.63	11.36	0.385	20.1	4.09	193.8	57.41	
13.35	22	5.60	11.47	0.387	21.5	4.08	194.8	57.41	
13.40	23	5.70	11.62	0.389	20.5	4.07	187.0	57.41	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20-120
Sample Date: 3/23/2015
Sampling Device: QED
Well Depth (feet TOIC): 120
Screen Interval (feet TOIC): 110
Initial Water Level (Feet TOIC): 58.5
Final Water Level (feet TOIC): 58.52
Casing Type: **PVC** Steel (circle one)
Personnel: R.J.

Sample ID: W-20-120-SP15
Purge Start Time: 10:10
Sample Time: 11:15
Final Turbidity (NTUs): 21.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 400
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.23

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.21	1.50	6.06	11.01	169	160.4	6.31	45.2	58.73	
10.30	3.50	5.28	11.32	212	45.2	4.92	50.1	58.72	
10.35	5.50	5.77	11.43	239	35.8	4.13	52.7	58.73	
10.40	6.80	5.73	11.17	261	30.8	3.63	55.4	58.73	
10.45	8.20	5.78	11.73	273	31.5	3.31	288.1	58.73	
10.50	10.00	5.76	11.22	281	25.0	3.11	289.3	58.73	
10.55	12.00	5.72	11.37	287	22.4	3.09	289.6	58.73	
11.00	13.40	5.73	11.52	291	22.7	2.91	291.3	58.73	
11.05	15.00	5.78	11.61	294	21.6	2.83	293.2	58.73	
11.10	16.80	5.75	11.55	296	21.1	2.80	296.1	58.73	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-20-160
Sample Date: 3/23/2015
Sampling Device: OED Bladder pump
Well Depth (feet TOIC): 160
Screen Interval (feet TOIC): 150-160
Initial Water Level (Feet TOIC): 58.84
Final Water Level (feet TOIC): 58.81
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne

Sample ID: W-20-160-SP15
Purge Start Time: 10:00
Sample Time: 11:46
Final Turbidity (NTUs): 32.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.02

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.22	3.0	5.82	10.34	334	89.6	1.86	227.3	58.85	
10.28	4.0	5.82	10.25	336	97.0	1.32	229.6	58.85	
10.33	5.5	5.80	10.28	336	79.7	1.19	232.4	58.84	
10.38	6.5	5.79	10.35	336	66.8	1.03	232.3	58.84	
10.43	7.5	5.81	10.10	337	57.4	0.89	233.0	58.84	
10.48	8.5	5.80	10.04	336	53.9	0.89	234.5	58.86	
10.53	9.5	5.81	10.16	337	57.7	0.90	235.1	58.86	
10.58	10.5	5.80	10.31	337	44.2	1.03	234.1	58.86	
11.03	11.5	5.81	10.67	337	50.5	1.03	235.0	58.86	
11.08	12.0	5.80	10.65	338	39.3	1.03	235.2	58.86	
11.13	13.0	5.80	10.64	338	41.4	1.04	235.4	58.86	
11.18	14.5	5.79	10.82	339	37.1	1.10	235.7	58.86	
11.23	15.5	5.80	10.74	338	32.6	1.22	235.4	58.86	
11.28	16.5	5.79	10.53	339	33.5	1.66	235.3	58.86	
11.33	17.5	5.79	10.50	339	32.7	1.61	235.4	58.86	
11.38	18.0	5.79	10.54	339	32.1	1.59	235.5	58.81	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-22-95
Sample Date: 3/25/2015
Sampling Device: QED Bladder
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC): 85-95
Initial Water Level (Feet TOIC): 62.84
Final Water Level (feet TOIC): 62.84
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: W-22-95-SP15
Purge Start Time: 09:05
Sample Time: 09:45
Final Turbidity (NTUs): 8.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.20	0.5	5.90	14.17	138	24.6	7.93	201.8	62.84	
09.25	1.5	5.80	14.55	138	15.8	7.56	193.0	62.84	
09.30	2.5	5.79	14.64	138	22.3	7.53	190.3	62.84	
09.35	3.5	5.78	14.57	140	12.0	7.50	189.9	62.84	
09.40	4.5	5.78	14.74	137	8.0	7.46	190.0	62.84	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-23-110
Sample Date: 3/23/2015
Sampling Device: QED
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC): 10
Initial Water Level (Feet TOIC): 57.58
Final Water Level (feet TOIC): 57.75
Casing Type: **PVC** Steel (circle one)
Personnel: R J

Sample ID: W-23-110-SP15
Purge Start Time: 15:00
Sample Time: 17:45
Final Turbidity (NTUs): 22.7
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 320
Purge Rate d/sampling (ml/min): 320
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 3.04

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
15.20	2.00	6.58	12.02	793	634.2	0.93	-41.6	57.58	
15.25	3.00	6.56	11.74	786	279.0	2.01	-46.4	57.58	
15.35	5.00	6.65	11.15	797	216.0	1.47	-58.9	57.58	
15.50	6.20	6.56	11.67	786	82.3	2.95	-59.7	57.84	
16.05	8.00	6.32	11.18	779	334.3	3.95	-46.0	57.75	
16.15	9.00	6.61	11.16	780	176.3	3.94	-47.7	57.75	
16.30	13.20	6.63	11.40	791	84.7	3.17	-64.1	57.75	
16.45	12.50	6.48	11.34	788	52.1	3.44	-32.6	57.75	
17.00	14.30	6.51	11.44	793	38.1	3.09	-68.3	57.75	
17.05	15.20	6.49	11.36	798	31.9	2.97	-69.6	57.75	
17.10	16.00	6.52	11.33	802	30.7	2.94	-70.5	57.75	
17.15	16.80	6.45	11.33	803	27.2	2.83	-71.5	57.75	
17.20	17.40	6.50	11.41	808	23.4	2.71	-74.8	57.75	
17.25	18.20	6.64	11.34	813	24.3	2.51	-77.5	57.75	
17.30	18.70	6.60	11.37	812	22.7	2.51	-77.4	57.75	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-24-260
Sample Date: 3/23/2015
Sampling Device: QED Bladder pump
Well Depth (feet TOIC): 260
Screen Interval (feet TOIC): 250-260
Initial Water Level (Feet TOIC): 57.74
Final Water Level (feet TOIC): 57.75
Casing Type: **PVC** Steel (circle one)
Personnel: J.Rhyne L.

Sample ID: W-24-260-SP15 MS / MSD
Purge Start Time: 16:27 17:30
Sample Time: 18:50
Final Turbidity (NTUs): 36.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 500
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.85

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.45	3.0	6.87	14.11	450	34.6	10.86	203.3	57.74	
16.50	5.5	5.48	14.26	441	31.2	7.83	208.4	57.74	
16.55	8.0	5.47	14.26	445	8.0	8.00	214.2	57.74	
17.00	10.0	5.49	13.76	439	8.3	7.98	221.1	57.74	
17.05	12.2	5.40	13.31	432	14.1	8.11	225.1	57.75	
17.10									Pulling pump up, pumping refreshed at 17:30
17.58	19.5	5.45	12.55	403	89.9	8.36	244.4	57.75	
18.03	21.5	5.46	12.51	400	74.5	7.95	246.0	57.75	
18.10	24.5	5.47	12.57	397	54.0	7.64	240.9	57.75	
18.15	26.0	5.46	12.63	397	46.0	7.33	241.9	57.75	
18.20	27.5	5.45	12.76	395	46.2	6.78	244.3	57.75	
18.25	29.0	5.42	12.83	394	41.0	6.77	242.4	57.75	
18.30	31.0	5.47	12.70	391	36.9	6.53	241.0	57.75	
18.35	33.0	5.49	12.66	390	36.1	6.01	239.9	57.75	
18.40	35.0	5.46	12.60	389	34.7	5.77	240.9	57.75	
18.45	37.0	5.44	12.57	390	35.6	5.54	243.5	57.75	MS / MSD taken with sample

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-25-150
Sample Date: 3/24/2015
Sampling Device: QED
Well Depth (feet TOIC): 150
Screen Interval (feet TOIC): 140-150
Initial Water Level (Feet TOIC): 55.14
Final Water Level (feet TOIC): 57.64
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: W-25-150-SP15
Purge Start Time: 9:45
Sample Time: 11:10
Final Turbidity (NTUs): 3.0
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.00	3.75	6.97	8.24	0.462	3.9	7.0	-44.8	57.15	
10.25	10.0	9.38	10.27	0.418	3.2	5.19	-117	57.15	
10.30	11.25	9.57	10.43	0.408	3.6	5.0	-122	57.15	
10.35	12.5	9.69	10.47	0.402	3.1	4.89	-126	57.15	
10.40	13.75	9.76	10.51	0.398	3.5	4.78	-128	57.15	
10.45	15.0	9.87	10.53	0.395	4.5	4.73	-130	57.15	
10.50	16.25	9.92	10.62	0.393	3.7	4.67	-132	57.15	
10.55	17.5	9.96	10.62	0.393	3.0	4.67	-132	57.15	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-25-188
Sample Date: 3/24/2015
Sampling Device: QED
Well Depth (feet TOIC): 188
Screen Interval (feet TOIC): 178-188
Initial Water Level (Feet TOIC): 56.03
Final Water Level (feet TOIC): 56.05
Casing Type: **PVC** Steel (circle one)
Personnel: L.R. A.Z.

Sample ID: W-25-188-SP15
Purge Start Time: 9:15
Sample Time: 12:25
Final Turbidity (NTUs): 0.9
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 50
Purge Rate d/sampling (ml/min): 50
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 4.6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.00	1.5	6.01	4.47	0.357	8.2	3.76	183	56.05	
11.20	2.5	5.89	4.82	0.354	3.6	3.70	186	56.05	
11.40	3.5	5.91	6.01	0.349	3.8	3.63	185	56.05	
12.00	4.5	5.95	8.54	0.346	1.3	3.45	180	56.05	
12.10	5.0	5.96	8.63	0.346	0.2	3.47	180	56.05	
12.15	5.5	5.97	8.70	0.347	0.9	3.42	179	56.05	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-26-270
Sample Date: 3/25/2015
Sampling Device: Dedicated
Well Depth (feet TOIC): 270
Screen Interval (feet TOIC): 260
Initial Water Level (Feet TOIC): 45.17
Final Water Level (feet TOIC): 45.16
Casing Type: **PVC** Steel (circle one)
Personnel: L.R

Sample ID: W-26-270-SP-15
Purge Start Time: 10:45
Sample Time: 12:15
Final Turbidity (NTUs): 23.6
Casing Inner Diameter (inches):
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min):
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.4

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.10	5	5.33	14.00	0221	96.9	7.90	218.4	45.16	
11.15	6	5.41	13.12	0219	81.2	8.02	232.9	45.16	
11.20	7	5.42	13.11	0220	76.1	8.03	231.7	45.16	
11.25	8	5.50	13.19	0218	74.1	8.06	231.9	45.16	
11.30	9	5.53	13.56	0218	62.1	8.11	233.4	45.16	
11.35	10	5.54	13.55	0219	55.9	8.09	233.9	45.16	
11.40	11	5.57	13.04	0219	46.1	8.07	243.4	45.16	
11.45	12	5.47	12.76	0218	38.3	8.04	245.2	45.16	
11.50	13	5.64	13.24	0217	31.4	8.04	237.3	45.16	
11.55	14	5.65	13.25	0218	31.7	8.05	235.2	45.16	
12.00	15	5.66	13.27	0218	25.5	8.04	234.2	45.16	
12.05	16	5.68	13.26	0218	24.6	8.05	234.5	45.16	
12.10	17	5.69	13.25	0218	23.6	8.06	234.2	45.16	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-240
Sample Date: 3/25/2015
Sampling Device: Marschalk
Well Depth (feet TOIC): 240
Screen Interval (feet TOIC): 230-240
Initial Water Level (Feet TOIC): 49.76
Final Water Level (feet TOIC): 49.76
Casing Type: PVC **Steel** (circle one)
Personnel: A.Z.

Sample ID: W-27-240-SP15
Purge Start Time: 16:00
Sample Time: 17:00
Final Turbidity (NTUs): 8.3
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 275
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs**

2x Pump System Volume (liters): 6

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.10	2.75	6.94	10.86	427	18.6	1.93	-89.5	49.76	
16.20	5.5	7.01	10.95	420	7.6	1.83	-87.0	49.76	
16.30	8.25	7.05	10.49	417	6.2	1.30	-84	49.76	
16.40	11.0	7.05	10.35	413	6.9	1.25	-79	49.76	
16.50	12.75	7.06	10.36	411	8.3	1.19	-78	49.76	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-27-285
Sample Date: 3/26/2015
Sampling Device: Marschalk
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC): 275-285
Initial Water Level (Feet TOIC): 49.05
Final Water Level (feet TOIC): 49.05
Casing Type: PVC **Steel** (circle one)
Personnel: A.Z.

Sample ID: W-27-285-SP15
Purge Start Time: 09:20
Sample Time: 10:40
Final Turbidity (NTUs): 519
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs**

2x Pump System Volume (liters): 6.8

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.30	2	5.04	11.31	244	143.4	26.07	164	49.05	
09.40	4	5.62	11.40	236	22.3	19.96	139	49.05	
09.50	6	5.68	11.28	239	9.7	18.78	134	49.05	
09.55	7	5.69	10.98	248	7.2	18.30	132	49.05	
10.00	8	5.69	10.94	252	6.5	17.28	130	49.05	
10.05	9	5.69	10.87	269	6.1	16.67	128	49.05	
10.10	10	5.69	11.04	272	5.8	15.87	125	49.05	
10.15	11	5.69	11.28	275	5.3	14.98	124	49.05	
10.20	12	5.69	11.48	280	5.7	14.41	122	49.05	
10.25	13	5.69	11.64	286	5.3	13.69	120	49.05	
10.30	14	5.69	11.58	289	5.9	12.84	118	49.05	
10.35	15	5.69	11.57	290	5.9	12.75	116	49.05	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-30-285
Sample Date: 3/25/2015
Sampling Device Bladder pump
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC): 275
Initial Water Level (Feet TOIC): 48.10
Final Water Level (feet TOIC): 48.39
Casing Type: PVC **Steel** (circle one)
Personnel: L.R

Sample ID: W-30-285-SP15
Purge Start Time: 14:05
Sample Time: 15:15
Final Turbidity (NTUs): 48.39
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 6.7

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
14.35	6	5.78	12.22	0302	57.5	5.82	256.4	48.39	
14.40	7	5.76	12.19	0301	48.0	5.71	257.7	48.39	
14.45	8	5.75	12.14	0302	24.0	5.63	259.7	48.39	
14.50	9	5.72	11.94	0301	20.0	5.52	263.2	48.39	
14.55	10	5.74	11.91	0302	18.2	5.56	261.9	48.39	
15.00	11	5.74	11.79	0301	12.3	5.53	262.2	48.39	
15.05	12	5.74	11.78	0301	5.6	5.52	263.2	48.39	
15.10	13	5.75	11.79	0301	5.3	5.51	263.0	48.39	
15.15	14	5.75	11.78	0301	5.1	5.50	263.8	48.39	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-31-95
Sample Date: 3/25/2015
Sampling Device: QED bladder pump
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC): 85-95
Initial Water Level (Feet TOIC): 60.00
Final Water Level (feet TOIC): 60.00
Casing Type: **PVC** Steel (circle one)
Personnel: D. Herrera

Sample ID: W-31-95-SP15
Purge Start Time: 10:15
Sample Time: 11:35
Final Turbidity (NTUs): 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs, Ni, Fe+2
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.70

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
10.44	2.7	5.88	13.94	516	49.0	10.87	223.8	60.0	
10.49	3.2	5.88	13.71	531	24.5	10.95	224.5	60.0	
10.58	4.6	5.88	14.01	578	11.6	10.97	226.7	60.0	
11.04	5.5	5.88	13.94	583	6.5	10.95	228.8	60.0	
11.09	6.2	5.88	13.97	583	0.8	10.87	230.1	60.0	
11.16	7.0	5.88	13.86	581	7.0	10.94	232.3	60.1	
11.21	8.0	5.88	13.89	580	0.0	10.97	234	60.05	
11.26	8.7	5.88	14.00	579	0.0	10.98	234.7	60.0	
11.31	9.2	5.88	13.97	580	0.0	10.99	235.7	60.0	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-32-110
Sample Date: 3/26/2015
Sampling Device: QED Bladder
Well Depth (feet TOIC): 110
Screen Interval (feet TOIC): 100-110
Initial Water Level (Feet TOIC): 62.51
Final Water Level (feet TOIC): 62.51
Casing Type: **PVC** Steel (circle one)
Personnel: T. Dillon

Sample ID: MW-32-110-SP15
Purge Start Time: 16:10
Sample Time: 19:50
Final Turbidity (NTUs): 44.9
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min) 175
Purge Rate d/sampling (ml/min): 175
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 2.9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
16.30	1	5.66	14.26	166	227.9	9.67	171.3	62.51	
16.35	1.875	5.62	14.18	166	173.5	9.54	174.3	62.51	
16.40	2.72	5.61	14.12	167	136.2	9.48	177.5	62.51	
16.45	3.595	5.60	14.04	167	106.2	9.38	180.4	62.51	
16.50	4.47	5.59	13.96	169	90.4	9.24	183.9	62.51	
16.55	5.345	5.58	14.00	170	85.3	9.15	187.0	62.51	
17.05	7	5.58	13.96	170	66.2	9.01	192.1	62.51	
17.15	8.75	5.57	14.05	170	38.2	8.97	196.6	62.51	
17.20	9.6	5.57	14.11	170	48.1	8.86	197.9	62.51	
17.25	10.5	5.57	13.93	170	44.3	8.87	199.5	62.51	
17.30	11.375	5.57	13.82	170	44.9	8.87	201.2	62.51	

Key:
BGS = Below ground surface.
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DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-34-285
Sample Date: 3/24/2015
Sampling Device: Wattera
Well Depth (feet TOIC): 285
Screen Interval (feet TOIC):
Initial Water Level (Feet TOIC): 58.35
Final Water Level (feet TOIC): 58.36
Casing Type: **PVC** Steel (circle one)
Personnel: P.Lamont

Sample ID: W-34-285-SP15
Purge Start Time: 11:45
Sample Time: 12:45
Final Turbidity (NTUs): 28
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400 2L/5min
Purge Rate d/sampling (ml/min): 240
Sample Analyses: VOCs, Ni
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.50	2	6.53	12.42	350	13.1	2.71	20.8	-	
11.55	4	6.40	12.63	513	16.6	1.94	19.7	-	
12.00	6	6.31	12.81	482	1193	1.24	28.7	-	
12.05	8	6.29	12.86	739	1193	0.70	35.5	-	
12.10	10	6.31	12.82	744	1193	0.47	37.3	-	
12.15	12	6.33	12.92	774	256	0.31	39.4	-	
12.20	14	6.32	12.36	813	85	0.51	52.4	-	
12.25	16	6.17	12.39	850	39.3	0.23	50.2	-	
12.30	18	6.11	12.37	880	30.5	0.18	51.7	-	
12.35	20	6.10	12.31	886	29.6	0.16	52.7	-	
12.40	22	6.15	12.39	885	28.7	0.14	52.9	-	
12.45	24	-	-	-	-	-	-	-	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: W-36-390
Sample Date: 3/27/2015
Sampling Device: Marschalk
Well Depth (feet TOIC): 390
Screen Interval (feet TOIC): 380-390
Initial Water Level (Feet TOIC): 46.15
Final Water Level (feet TOIC): 46.54
Casing Type: **PVC** Steel (circle one)
Personnel: A.Z. L.R.

Sample ID: MW-36-390-SP15
Purge Start Time: 9:30
Sample Time: 10:50
Final Turbidity (NTUs): 19.2
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: **VOCs**

2x Pump System Volume (liters): 9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
9.50	8	6.62	12.31	642	70.4	1.62	127	46.51	
10.00	12	6.61	12.31	640	69.2	1.7	126	46.51	
10.15	15	6.39	11.23	638	34.3	1.76	140	46.59	200 ml/min
10.30	18	6.39	10.78	638	19.4	1.90	144	46.59	
10.35	19	6.35	10.74	637	19.0	1.96	147	46.59	
10.40	20	6.43	10.95	637	19.2	2.02	143	46.59	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log **DUP: MW-914-SP15**

Site: Sylvania Corning FUSRAP
Well No.: W-36-448
Sample Date: 3/27/2015
Sampling Device: Marschalk
Well Depth (feet TOIC): 448
Screen Interval (feet TOIC): 438-448
Initial Water Level (Feet TOIC): 46.25
Final Water Level (feet TOIC): 46.71
Casing Type: PVC **Steel** (circle one)
Personnel: L.R. A.Z.

Sample ID: W-36-448-SP15
Purge Start Time: 9:00
Sample Time: 14:50
Final Turbidity (NTUs): 114
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 350
Purge Rate d/sampling (ml/min): 100
Sample Analyses: **VOCs**

2x Pump System Volume (liters): 10

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
09.10	3.5	6.23	11.90	672	146	4.47	84	46.51	
09.20	7.0	6.37	12.07	669	83.1	2.87	85	46.51	
09.30	10.5	6.39	11.85	668	56.0	2.64	83	46.59	
09.50	17.5	6.38	12.24	653	96.5	3.55	77	46.59	
10.00	21.0	6.37	12.26	650	106	3.52	77	46.59	
10.15	24.0	6.37	11.63	639	108.2	3.22	75	46.71	
11.00	33.0	6.30	11.56	606	60	3.02	80	46.71	
11.10	35.0	6.35	11.59	609	82	3.07	82	46.71	
13.10	56.0	6.18	9.58	570	99.2	2.37	91.0	46.71	
14.10	62.0	6.21	10.28	568	144	2.46	88	46.71	
14.40	65.0	6.22	10.48	567	114	2.45	90	46.71	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log **DUP: MW-909-SP15**

Site: Sylvania Corning FUSRAP
Well No.: W-37-385
Sample Date: 3/25/2015
Sampling Device: Marschalk
Well Depth (feet TOIC): 385
Screen Interval (feet TOIC): 375-385
Initial Water Level (Feet TOIC): 51.10
Final Water Level (feet TOIC): 51.10
Casing Type: PVC **Steel** (circle one)
Personnel: A.Z.

Sample ID: W-37-385-SP15
Purge Start Time: 10:00 set up, 11:15 purge time
Sample Time: 11:45
Final Turbidity (NTUs): 0.6
Casing Inner Diameter (inches): 2
Purge Rate (ml/min) 200
Purge Rate d/sampling (ml/min):
Sample Analyses: **VOCs**
Total Uranium (ASTM-D5174)
2x Pump System Volume (liters): 9

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
11.00	6*	5.80	13.92	332	19.1	7.27	356	51.10	
11.15	9	5.85	13.38	325	5.3	5.80	38	51.10	
11.20	10	5.80	13.19	322	2.8	4.62	33.5	51.10	
11.25	11	5.80	13.20	317	1.9	4.10	32.7	51.10	
11.30	12	5.78	13.43	313	2.3	4.28	34.0	51.10	
11.35	13	5.78	13.41	309	0.6	4.24	34.9	51.10	

Key:
BGS = Below ground surface.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-58-75
Sample Date: 04/12/2016
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 66.49
Final Water Level (feet TOIC): 66.49
Casing Type: **PVC** Steel (circle one)
Personnel: Stephanie Kromhout and Eric Lambert

Sample ID: MW-58-75-SP16
Purge Start Time: 1715
Sample Time: 1825
Final Turbidity (NTUs) : 10.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260), Ni, U

2x Purge System Volume #: 3.16 L/0.84 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1725	1	6.52	14.16	1.18	9.3	6.22	143.1	66.49	
1730	2.5	6.49	14.55	1.368	340.7	5.59	145.9	66.49	
1735	4.5	6.43	14.60	1.6	243.5	5.56	149.8	66.49	
1740	6.0	6.42	14.61	1.639	160.1	5.53	150.1	66.49	
1745	7.0	6.42	14.64	1.647	91.5	5.52	151.0	66.49	
1750	8.0	6.42	14.63	1.653	62.3	5.51	151.8	66.49	
1755	9.0	6.42	14.65	1.650	37.2	5.46	152.8	66.49	
1800	10.0	6.42	14.63	1.690	26.2	5.45	153.6	66.49	
1805	11.0	6.42	14.63	1.702	17.4	5.40	154.3	66.49	
1810	12.0	6.42	14.63	1.703	10.5	5.40	154.8	66.49	
1815	13.0	6.42	14.60	1.702	10.3	5.34	155.6	66.49	
1820	14.0	6.42	14.60	1.701	10.1	5.31	156.0	66.49	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-59-75
Sample Date: 04/12/2016
Sampling Device:Dedicated Bladder Pump
Well Depth (feet TOIC): 75
Screen Interval (feet TOIC): 65-75
Initial Water Level (Feet TOIC): 64.80
Final Water Level (feet TOIC): 64.80
Casing Type: **PVC** Steel (circle one)
Personnel: Eric Lambert & Stephanie Kromhout

Sample ID: MW-59-75-SP16 (MW-400-SP16 & MSMSD)
Purge Start Time: 1350
Sample Time: 1525
Final Turbidity (NTUs) : 0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 220
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260), Ni, U

2x Purge System Volume #: 3.23 L/0.85 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1405	1.0	8.47	14.14	0.129	85.9	9.33	85.1	64.80	
1410	1.5	7.99	14.63	0.119	108.6	8.98	82.8	64.80	
1415	2.5	7.67	14.72	0.110	107.3	9.03	82.7	64.80	
1420	3.75	7.44	14.76	0.109	77.4	9.12	83.6	64.80	
1425	4.75	7.34	14.81	0.109	62.6	9.11	84.6	64.80	
1430	5.90	7.24	14.81	0.104	48.2	9.18	85.4	64.80	
1435	6.75	7.11	14.92	0.100	57.3	9.19	86.3	64.80	
1440	7.75	6.98	14.94	0.101	63.4	9.14	87.8	64.80	
1445	8.5	6.93	14.98	0.097	51.3	9.13	89.1	64.80	
1450	9.5	6.86	15.07	0.095	31.4	9.15	90.4	64.80	
1455	10.5	6.80	15.13	0.093	33.7	9.13	91.8	64.80	
1500	11.5	6.74	15.21	0.089	10.4	9.15	93.0	64.80	
1505	12.5	6.67	15.41	0.085	3.1	9.19	94.6	64.80	
1510	13.5	6.60	15.46	0.083	0	9.21	96.7	64.80	
1515	14.5	6.54	15.47	0.080	0	9.27	98.3	64.80	
1520	15.5	6.50	15.61	0.080	0	9.28	99.4	64.80	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-110-355
Sample Date: 04/13/2016
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 355
Screen Interval (feet TOIC): 345-355
Initial Water Level (Feet TOIC): 48.74
Final Water Level (feet TOIC): 49.19
Casing Type: **PVC** Steel (circle one)
Personnel: Larry Roedl

Sample ID: MW-110-355-SP16
Purge Start Time: 0950
Sample Time: 1055
Final Turbidity (NTUs) : 9.1
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 11.0 L/2.9 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0950	0	5.85	12.35	289	11.4	3.55	150.9	49.06	
0955	1.75	5.91	12.34	286	217	3.50	150.6	49.20	
1000	3.50	5.88	12.33	282	350.2	3.60	150.3	49.31	
1005	4.5	5.84	12.97	280	25.4	3.00	130.1	49.19	Adjusted flow rate to 200 ml/min
1010	5.5	5.83	12.99	279	31.6	2.22	127.6	49.19	
1015	6.5	5.84	13.93	280	17.0	2.03	128.7	49.19	
1020	7.5	5.79	14.87	280	14.2	1.98	130.8	49.19	
1025	8.5	5.80	14.55	280	10.3	2.01	132.6	49.19	
1030	9.5	5.81	14.47	280	11.6	2.04	134.2	49.19	
1035	10.5	5.82	14.23	279	8.6	1.93	141.7	49.19	
1040	11.5	5.81	14.27	279	9.0	1.89	142.2	49.19	
1045	12.5	5.82	14.28	279	9.1	1.81	139.1	49.19	
1050	13.5	5.82	14.28	279	9.2	1.82	135.2	49.19	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-110-440
Sample Date: 04/13/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 440
Screen Interval (feet TOIC): 430-440
Initial Water Level (Feet TOIC): 49.08
Final Water Level (feet TOIC): 49.20
Casing Type: **PVC** Steel (circle one)
Personnel: Tim Dillon

Sample ID: MW-110-440-SP16
Purge Start Time: 0945
Sample Time: 1055
Final Turbidity (NTUs) : 1.6
Casing Inner Diameter (inches): 4.0
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 11.7 L/3.1 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0955	2.0	6.13	11.83	432	5.0	5.01	156.8	49.2	
1000	3.5	6.22	12.10	454	8.7	4.28	98.4	49.2	
1005	4.0	6.23	12.20	446	7.8	3.19	90.4	49.2	
1010	6.0	6.13	12.46	435	3.9	2.52	106.7	49.2	
1015	7.0	6.08	12.61	431	3.6	2.44	119.1	49.2	
1020	8.0	5.99	12.62	426	2.5	2.65	130.4	49.2	
1025	9.0	5.95	12.67	423	2.3	2.95	139.7	49.2	
1030	10.0	5.90	12.71	421	2.0	3.22	148.7	49.2	
1035	11.0	5.88	12.53	419	2.4	3.32	153.4	49.2	
1040	12.0	5.86	12.58	418	1.7	3.41	156.3	49.2	
1045	13.0	5.85	12.47	416	2.6	3.54	158.6	49.2	
1050	14.0	5.86	12.50	415	1.6	3.57	159.6	49.2	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-215-395
Sample Date: 04/14/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 395
Screen Interval (feet TOIC): 385-395
Initial Water Level (Feet TOIC): 37.99
Final Water Level (feet TOIC): 37.99
Casing Type: **PVC** Steel (circle one)
Personnel: Tim Dillon

Sample ID: MW-215-395-SP16
Purge Start Time: 1418
Sample Time: 1505
Final Turbidity (NTUs) : 0.1
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 900
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 17.8 L/2.35 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1420	1.5	7.10	13.95	260	2.1	1.72	52.8	37.99	
1425	7.5	6.31	13.42	244	15.3	1.35	74.8	37.99	
1430	10.5	5.81	13.34	225	12.0	1.56	80.5	37.99	
1435	14	5.57	13.27	206	5.4	1.65	86.8	37.99	
1440	20	5.45	13.25	199	3.1	1.65	92.1	37.99	
1445	25	5.29	13.20	192	4.2	1.60	100.7	37.99	
1450	28	5.31	13.56	191	0.5	1.56	104.9	37.99	Reduced purge rate to 200 ml/min
1455	29	5.33	13.65	191	0.0	1.56	105.8	37.99	
1500	29.5	5.31	13.67	191	0.1	1.56	109.4	37.99	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-216-510
Sample Date: 04/13/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 510
Screen Interval (feet TOIC): 485-510
Initial Water Level (Feet TOIC): 41.42
Final Water Level (feet TOIC): 42.13
Casing Type: **PVC** Steel (circle one)
Personnel: Eric Lambert

Sample ID: MW-216-510-SP16
Purge Start Time: 1015
Sample Time: 1415
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 140
Purge Rate d/sampling (ml/min): 100
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 20.6 L/5.44 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1015	0.5	3.92	12.32	0.576	48.0	1.20	15.2	41.79	
1030	2.0	9.14	12.68	0.573	11.6	0.45	-46.4	42.24	
1045	4.0	9.30	13.13	0.564	12.2	0.28	-144.3	42.24	
1100	5.9	9.37	13.11	0.551	46.3	0.21	-179.9	42.09	
1115	7.8	9.04	13.31	0.494	62.0	0.10	-235.4	42.09	
1130	10.0	8.21	13.35	0.469	18.4	0.25	-227.0	42.09	
1145	11.5	7.87	13.71	0.472	9.1	0.31	-206.2	42.09	
1200	13.5	7.72	14.07	0.475	1.7	0.34	-192.3	42.09	
1215	14.9	7.62	14.54	0.478	0	0.35	-182.1	42.09	
1230	16.2	7.52	14.61	0.481	0	0.35	-170.9	42.09	
1245	17.9	7.47	14.48	0.480	0	0.37	-163.2	42.09	
1300	20.0	7.45	14.45	0.479	0	0.37	-160.4	42.13	
1315	21.1	7.41	14.53	0.486	0	0.38	-154.7	42.13	
1330	23.0	7.40	14.83	0.497	0	0.39	-147.6	42.13	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-217-490
Sample Date: 04/14/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 490
Screen Interval (feet TOIC): 465-490
Initial Water Level (Feet TOIC): 43.49
Final Water Level (feet TOIC): 43.62
Casing Type: **PVC** Steel (circle one)
Personnel: Stephanie Kromhout

Sample ID: MW-217-490-SP16
Purge Start Time: 1014
Sample Time: 1148
Final Turbidity (NTUs) : 22.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 230/300
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 19.77 L/5.22 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1018	0.5	6.16	13.54	0.076	50.6	1.17	70.4	43.62	
1023	1.5	6.67	14.38	0.068	26.4	0.48	-54.3	43.62	
1028	2.75	7.35	14.83	0.055	11.8	0.15	-180.9	43.62	
1033	4.25	7.65	14.89	0.054	9.1	0.09	-231.8	43.62	
1038	5.75	7.87	14.80	0.054	7.2	0.07	-250.69	43.62	
1043	6.50	7.90	14.91	0.054	6.9	0.07	-249.0	43.62	Purge rate dropped to 200 ml/min
1048	7.75	7.93	14.98	0.056	7.6	0.06	-243.4	43.62	
1053	8.5	7.89	15.04	0.060	12.2	0.06	-230.5	43.62	
1058	9.25	7.74	14.97	0.068	37.6	0.07	-203.0	43.62	Increased purge rate to 300 ml/min
1103	11.0	7.62	14.94	0.072	24.6	0.09	-168.3	43.62	
1108	12.25	7.40	14.97	0.067	22.6	0.18	-101.4	43.62	
1113	13.25	7.22	15.02	0.061	23.0	0.28	-56.8	43.62	
1118	14.25	7.06	14.92	0.056	22.0	0.38	-21.4	43.62	
1123	15.5	6.94	14.93	0.054	21.5	0.45	-2.2	43.62	
1128	17.0	6.79	14.77	0.051	21.5	0.54	20.2	43.62	
1133	18.25	6.56	14.89	0.048	21.4	0.62	43.4	43.62	
1138	19.5	6.56	14.55	0.048	23.0	0.63	45.1	43.62	
1143	20.75	6.48	15.23	0.045	22.9	0.68	53.0	43.62	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-218-95
Sample Date: 04/12/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 95
Screen Interval (feet TOIC): 85-95
Initial Water Level (Feet TOIC): 61.38
Final Water Level (feet TOIC): 61.67
Casing Type: **PVC** Steel (circle one)
Personnel: Stephanie Kromhout and Eric Lambert

Sample ID: MW-218-95-SP16
Purge Start Time: 1020
Sample Time: 1131
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 380
Purge Rate d/sampling (ml/min): 150
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 4.12 L/1.086 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1101	2.5	7.04	13.52	0.244	0	11.53	86.9	61.67	
1106	4.25	8.33	13.63	0.240	0	11.92	86.7	61.67	
1111	5.5	8.61	13.65	0.239	0	11.62	87.1	61.67	
1116	7.0	8.67	13.62	0.238	0	11.48	87.2	61.67	
1121	9.0	8.41	13.63	0.235	0	11.57	87.0	61.67	
1126	10.0	8.12	13.64	0.231	0	11.43	87.0	61.67	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-219-560
Sample Date: 04/13/2016
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 560
Screen Interval (feet TOIC): 535-560
Initial Water Level (Feet TOIC): 46.48
Final Water Level (feet TOIC): 47.46
Casing Type: **PVC** Steel (circle one)
Personnel: Stephanie Kromhout

Sample ID: MW-219-560-SP16
Purge Start Time: 1149
Sample Time: 1438
Final Turbidity (NTUs) : 2.3
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 110/310
Purge Rate d/sampling (ml/min): 250
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 19.46 L/5.135 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1213	0.75	7.72	13.47	0.250	9.7	0.38	145.2	46.85	
1218	1.25	8.19	14.04	0.242	2.2	0.23	127.8	46.80	
1223	1.75	8.50	14.23	0.235	0.7	0.13	85.6	46.99	
1228	2.0	8.56	14.15	0.234	0.8	0.11	34.6	47.02	
1233	2.5	8.71	14.09	0.234	0	0.10	-59.1	47.15	Spoke with D.Kennedy – increase purge rate to 310 m/min
1238	3.5	8.94	13.96	0.229	0	0.06	-105.3	47.28	
1243	5.0	9.13	14.04	0.226	0.4	0.05	-133.9	47.28	
1248	6.25	9.26	14.00	0.227	0	0.04	-157.9	47.28	
1253	7.25	9.26	13.94	0.229	0	0.04	-157.0	47.37	
1258	8.25	8.92	13.93	0.245	2.2	0.05	-124.4	47.37	
1303	9.25	7.90	13.94	0.280	20.6	0.09	-20.5	47.36	
1308	1.5	7.64	13.94	0.281	21.5	0.10	2.0	47.46	Start counting purge volume
1313	3.0	7.23	13.85	0.280	17.9	0.12	25.3	47.46	
1318	4.5	6.91	13.90	0.278	14.0	0.13	36.2	47.46	
1323	6.0	6.64	13.99	0.276	9.9	0.14	49.3	47.46	
1328	7.5	6.52	13.93	0.274	9.5	0.15	56.2	47.46	
1333	8.5	6.43	13.91	0.273	9.6	0.15	62.7	47.46	
1338	9.5	6.33	14.03	0.271	9.1	0.16	70.0	47.46	
1343	10.5	6.24	13.89	0.272	6.7	0.16	76.8	47.46	
1348	11.5	6.22	13.89	0.271	6.1	0.17	80.3	47.46	
1353	12.5	6.17	13.96	0.271	4.6	0.17	85.4	47.46	
1358	13.5	6.15	13.95	0.271	4.2	0.17	88.0	47.46	
1403	14.5	6.14	14.00	0.271	3.8	0.18	89.5	47.46	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-219-560 **Date:** 4/13/16

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1408	15.5	6.12	13.95	0.271	3.6	0.18	92.5	47.46	
1413	16.5	6.11	13.97	0.271	3.3	0.18	95.0	47.46	
1418	17.5	6.10	13.88	0.270	2.4	0.18	98.4	47.46	
1423	18.5	6.10	13.84	0.270	2.8	0.19	99.2	47.46	
1428	19.5	6.10	13.78	0.270	2.3	0.19	100.7	47.46	
1433	20.5	6.09	13.78	0.270	2.3	0.20	102.8	47.46	

Key:

BGS = Below ground
surface.NTU = Nephelometric turbidity unit.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-220-325
Sample Date: 04/14/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC): 315-325
Initial Water Level (Feet TOIC): 44.43
Final Water Level (feet TOIC): 44.74
Casing Type: **PVC** Steel (circle one)
Personnel: Tim Dillon

Sample ID: MW-220-325-SP16
Purge Start Time: 0910
Sample Time: 1020
Final Turbidity (NTUs) : 0.0
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 450
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 15.0 L/1.975 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0912	1	8.06	12.97	292	4.7	1.68	-299.1	44.74	Sulfur odor
0917	3.5	8.80	13.10	240	6.0	0.66	-317.0	44.74	
0922	6	6.70	13.12	322	6.0	0.50	-222.5	44.74	
0927	7.5	6.20	13.14	332	3.0	0.59	-187.8	44.74	
0932	9	5.95	13.15	332	1.7	0.48	-144.6	44.74	
0937	11	5.76	13.20	331	1.0	0.45	-112.6	44.74	
0942	14	5.68	13.27	331	1.5	0.53	-92.4	44.74	
0947	15.5	5.60	13.27	330	0.7	0.56	-73.9	44.74	
0952	17.5	5.54	13.29	330	1.0	0.43	-59.2	44.74	
0957	19.5	5.52	13.35	329	0.8	0.49	-53.9	44.74	
1002	22	5.50	13.41	328	0.5	0.46	-45.7	44.74	
1007	24	5.48	13.45	328	0.0	0.42	-38.4	44.74	
1012	25.5	5.47	13.45	327	0.0	0.43	-36.9	44.74	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-221-320
Sample Date: 04/13/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 320
Screen Interval (feet TOIC): 310-320
Initial Water Level (Feet TOIC): 49.50
Final Water Level (feet TOIC): 49.62
Casing Type: **PVC** Steel (circle one)
Personnel: Tim Dillon

Sample ID: MW-221-320-SP16
Purge Start Time: 1350
Sample Time: 1450
Final Turbidity (NTUs) : 6.6
Casing Inner Diameter (inches): 2.5
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 14.60 L/3.85 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1400	2.0	6.81	14.53	209	18.0	6.43	-14.6	49.62	
1405	4.0	6.57	14.62	271	50.8	2.48	-30.8	49.62	
1420	7.0	6.28	14.93	358	22.1	4.02	-82.5	49.62	Fixing air bubbles
1425	8.0	6.25	14.71	327	680.8	1.16	-88.9	49.62	Turbidity sensor no reading correctly
1430	9.0	6.20	14.71	360	7.9	1.01	-82.2	49.62	Adjusted purge valve
1435	15.0	6.40	14.68	364	8.3	1.13	-115.3	49.62	
1440	17.0	6.47	14.66	372	4.6	1.06	-117.7	49.62	
1445	19.0	6.46	14.64	374	6.6	1.05	-115.2	49.62	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-222-340
Sample Date: 04/13/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 340
Screen Interval (feet TOIC): 330-340
Initial Water Level (Feet TOIC): 49.56
Final Water Level (feet TOIC): 49.59
Casing Type: **PVC** Steel (circle one)
Personnel: Larry Roedl

Sample ID: MW-220-340-SP16
Purge Start Time: 1320
Sample Time: 1744
Final Turbidity (NTUs) : 44.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 250
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 13.63 L/3.6 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1330	0.1	8.15	15.00	182	94.2	3.11	27.1	49.64	
1335	1.35	8.06	15.10	254	173.3	2.56	-65.1	49.64	
1340	2.6	7.95	15.18	267	144.9	2.59	-82.4	49.64	
1345	5.1	7.68	15.17	310	117.7	2.31	-99.8	49.64	Dead car battery
1440	6.1	7.15	13.32	325	610	2.88	-100.1	49.59	200 ml/min
1445	7.1	7.05	14.76	335	638.9	2.64	-107.3	49.59	
1450	8.1	7.05	15.20	338	142.9	2.78	-110.4	49.59	Cleaned flow-thru cell
1455	9.1	7.03	14.94	337	259.1	2.47	-119.7	49.59	
1500	10.1	7.02	14.94	337	230.7	2.27	-123.2	49.59	
1505	11.1	7.01	14.97	337	227.2	2.00	-126.4	49.59	
1510	12.1	6.99	14.90	337	151.2	1.49	-136.8	49.59	
1515	13.1	6.96	14.79	340	418.6	1.13	-141.3	49.59	
1520	14.1	6.96	14.77	340	400.1	1.11	-141.8	49.59	
1525	15.1	6.97	14.76	341	389.1	1.09	-140.7	49.59	
1530	16.1	6.94	14.03	336	237.4	6.63	-85.9	49.59	
1535	17.1	6.93	14.28	344	310.1	6.45	-89.4	49.59	
1540	18.1	6.89	14.73	351	318.4	4.55	-110.9	49.59	
1545	19.1	6.83	14.82	357	288.8	1.27	-126.7	49.59	
1550	20.1	6.78	14.88	362	265.1	1.01	-136.4	49.59	Cleaned flow-thru cell, milky white in color
1555	21.1	6.74	14.89	366	270.1	0.88	-140.5	49.59	
1600	22.1	6.73	14.89	369	250.8	0.78	-140.9	49.59	
1605	23.1	6.67	14.73	374	188.5	0.77	-141.7	49.59	
1610	24.1	6.63	14.67	378	153.2	0.75	-141.1	49.59	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-222-340 **Date:** 4/13/16

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1615	25.1	6.61	14.66	379	130.1	0.58	-142.2	49.59	
1620	26.1	6.57	14.68	382	108.2	0.71	-142.2	49.59	
1625	27.1	6.54	14.64	383	93.2	0.71	-140.2	49.59	
1630	28.1	6.53	14.62	385	83.8	0.72	-141.3	49.59	
1635	29.1	6.52	14.60	386	71.0	0.72	-140.7	49.59	
1640	30.1	6.49	14.58	386	64.1	0.72	-140.6	49.59	
1645	31.1	6.44	14.58	386	68.2	0.72	-137.2	49.59	
1650	32.1	6.43	14.52	386	71.0	0.72	-136.4	49.59	
1655	33.1	6.42	14.50	386	63.1	0.71	-137.2	49.59	
1700	34.1	6.42	14.49	386	59.1	0.70	-135.1	49.59	
1705	35.1	6.42	14.48	386	55.9	0.71	-133.2	49.59	
1710	36.1	6.39	14.47	387	55.6	0.68	-134.1	49.59	
1715	37.1	6.37	14.47	387	50.9	0.67	-133.4	49.59	
1720	38.1	6.37	14.47	387	48.7	0.66	-133.2	49.59	
1725	39.1	6.37	14.47	387	47.2	0.67	-133.1	49.59	
1730	40.1	6.37	14.47	387	46.9	0.66	-133.4	49.59	
1735	41.1	6.37	14.47	387	45.1	0.66	-133.2	49.59	
1740	42.1	6.37	14.47	387	44.9	0.67	-133.6	49.59	

Key:

BGS = Below ground
surface.NTU = Nephelometric turbidity unit.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-223-580
Sample Date: 04/15/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 580
Screen Interval (feet TOIC): 555-580
Initial Water Level (Feet TOIC): 43.46
Final Water Level (feet TOIC): 43.99
Casing Type: **PVC** Steel (circle one)
Personnel: Larry Roedl

Sample ID: MW-223-580-SP16
Purge Start Time: 0845
Sample Time: 1145
Final Turbidity (NTUs) : 1646.9
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 225
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 23.09 L/3.0 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
0845	1.0	7.08	13.20	255	1641.7	1.74	-47.0	44.05	
0850	2.125	7.10	13.22	255	1641.7	1.97	-136.3	44.00	
0855	3.25	7.18	13.22	254	1642.1	0.99	-137.9	44.10	
0900	4.375	7.16	13.25	253	1641.2	0.67	-138.6	44.11	
0905	5.5	7.25	13.30	253	1641.8	0.43	-137.2	44.05	
0910	6.1	7.61	13.28	252	1640.3	0.03	-198.2	43.89	Dirt in water line, adjusted flow rate to 200 ml/min
0915	7.1	7.61	13.21	252	1640.1	0.04	-199.1	43.90	
0920	8.1	7.61	13.20	252	1640.0	0.05	-211.2	43.85	
0925	9.1	7.63	13.19	251	1640.1	0.01	-215.3	43.89	
0930	10.1	7.63	13.20	250	1642.1	0.01	-220.1	43.85	
0935	11.1	7.62	13.36	250	1643.2	0.05	-207.6	43.70	
0940	12.1	7.62	13.44	245	1642.6	0.04	-216.5	43.81	
0945	13.1	7.58	13.39	229	1642.7	0.02	-226.4	43.89	
0950	14.1	7.57	13.31	229	1641.4	0.01	-226.8	43.90	
0955	15.1	7.58	13.29	228	1640.1	0.05	-229.4	43.98	
1000	16.1	7.74	13.76	230	1641.6	0.01	-244.3	43.99	
1005	17.1	7.76	13.28	231	1642.1	0.00	-245.9	43.99	
1010	18.1	7.79	13.35	232	1642.1	0.06	-243.4	43.99	Cleaned flow cell
1015	19.1	7.80	13.35	233	1642.4	0.10	-245.2	43.99	
1020	20.1	7.84	13.36	233	1642.1	0.16	-249.1	43.99	
1025	21.1	7.86	13.36	233	1643.9	0.03	-255.8	43.99	
1030	22.1	7.88	13.45	233	1646.1	0.00	-258.4	43.99	
1035	23.1	7.88	13.62	232	1647.4	0.01	-257.2	43.99	
1040	24.1	7.88	13.64	231	1646.2	0.00	-256.4	43.99	
1045	25.1	7.88	13.66	231	1646.0	0.01	-254.2	43.99	
1050	26.1	7.86	13.86	229	1649.5	0.01	-250.7	43.99	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log
Well No.: MW-223-580 **Date:** 4/15/2016

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1055	27.1	7.85	13.84	227	1648.6	0.03	-248.8	43.99	
1100	28.1	7.82	13.72	225	1647.2	0.01	-265.2	43.99	
1105	29.1	7.80	13.59	224	1645.5	0.00	-260.2	43.99	
1110	30.1	7.78	13.56	222	1644.2	0.01	-263.4	43.99	
1115	31.1	7.76	13.56	221	1644.4	0.01	-265.3	43.99	
1120	32.1	7.74	13.57	219	1646.0	0.01	-265.1	43.99	
1125	33.1	7.74	13.58	219	1646.0	0.01	-270.1	43.99	Cleaned flow cell
1130	34.1	7.68	13.61	218	1646.3	0.01	-274.1	43.99	
1135	35.1	7.67	13.59	218	1646.1	0.01	-271.2	43.99	
1140	36.1	7.66	13.61	219	1646.9	0.01	-271.2	43.99	

Key:
BGS = Below ground
surface.NTU = Nephelometric turbidity unit.
°C = Degrees centigrade.
DO = Dissolved oxygen.
mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing.

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-224-330
Sample Date: 04/13/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 330
Screen Interval (feet TOIC): 320-330
Initial Water Level (Feet TOIC): 70.31
Final Water Level (feet TOIC): 70.31
Casing Type: **PVC** Steel (circle one)
Personnel: Tim Dillon

Sample ID: MW-224-330-SP16
Purge Start Time: 1555
Sample Time: 1700
Final Turbidity (NTUs) : 17.7
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 350
Purge Rate d/sampling (ml/min): 220
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 14.95 L/3.95 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1600	1.0	6.83	13.89	113	20.6	5.61	1.1	70.31	
1610	4.0	6.49	13.93	124	24.5	3.21	3.6	70.31	
1615	6.0	6.10	13.93	151	28.0	3.34	13.4	70.31	
1620	7.5	6.01	13.75	157	20.6	3.53	13.4	70.31	
1625	9.0	5.93	13.83	158	48.0	3.66	9.3	70.31	
1630	10.5	5.93	13.76	157	34.0	3.83	3.1	70.31	
1635	12.0	5.94	13.85	159	24.2	3.87	-3.4	70.31	
1640	13.5	5.91	13.81	158	27.8	3.94	-4.9	70.31	
1645	15.0	5.92	13.84	157	18.8	3.72	-6.0	70.31	
1650	16.5	5.88	13.76	157	17.4	3.93	-5.2	70.31	
1655	18.0	5.86	13.87	158	17.7	3.46	-8.1	70.31	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: MW-225-330
Sample Date: 04/14/2016
Sampling Device: Dedicated Bladder Pump
Well Depth (feet TOIC): 330
Screen Interval (feet TOIC): 305-330
Initial Water Level (Feet TOIC): 62.68
Final Water Level (feet TOIC): 62.80
Casing Type: **PVC** Steel (circle one)
Personnel: Eric Lambert

Sample ID: MW-225-330-SP16 (Duplicate: MW-401-SP16)
Purge Start Time: 1130
Sample Time: 1335
Final Turbidity (NTUs) : 23.6
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 180
Purge Rate d/sampling (ml/min): 210
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 12.96 L/3.42 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1130	0	6.97	15.01	0.147	6.3	4.12	-30.9	62.80	
1135	0.5	6.95	14.65	0.168	8.8	2.86	-43.5	62.80	
1140	1.5	6.87	14.58	0.192	19.7	2.71	-48.6	62.80	
1145	2.0	6.74	14.57	0.227	26.2	1.54	-53.8	62.80	
1150	3.0	6.60	14.55	0.239	32.7	1.26	-52.1	62.80	
1155	4.0	6.54	14.56	0.249	257.3	1.12	-51.6	62.80	
1200	5.0	6.44	14.51	0.265	1747.3	1.02	-45.4	62.80	
1215	7.5	6.30	14.98	0.265	683	0.85	-33.9	62.80	
1230	10.0	6.25	14.79	0.262	86.8	0.83	-25.8	62.80	
1245	12.0	6.22	14.84	0.264	38.5	0.82	-21.5	62.80	
1300	13.0	6.24	15.74	0.265	45.1	0.81	-20.5	62.80	
1315	14.0	6.19	14.71	0.266	23.9	0.88	-16.4	62.80	
1320	14.5	6.19	14.55	0.267	23.6	0.87	-16.3	62.80	
1325	15.0	6.19	14.56	0.268	23.7	0.88	-16.1	62.80	
1330	15.5	6.18	14.65	0.268	23.6	0.88	-16.2	62.80	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-325
Sample Date: 04/12/2016
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 325
Screen Interval (feet TOIC): 285-325
Initial Water Level (Feet TOIC): 49.80
Final Water Level (feet TOIC): 49.80
Casing Type: **PVC** Steel (circle one)
Personnel: Larry Roedl and Tim Dillon

Sample ID: S-1-325-SP16
Purge Start Time: 1205
Sample Time: 1515
Final Turbidity (NTUs) : 44.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 300
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 9.1 L/2.4 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1215	0.5	6.56	10.56	408	153	6.03	-47.0	49.80	
1220	3.0	5.71	11.71	375	1084.6	3.51	92.8	49.80	
1230	5.5	5.63	12.19	374	617.2	2.95	104.9	49.80	
1240	6.5	5.62	12.11	374	326.4	2.84	106.3	49.80	
1250	8.0	5.59	12.14	372	241.4	2.86	114.4	49.80	
1255	10.0	5.53	12.33	371	191.9	2.92	126.2	49.80	
1300	12.0	5.48	12.18	371	135.1	2.95	135.0	49.80	400 ml/min
1305	14.0	5.48	12.24	370	114.2	2.43	136.8	49.80	
1310	16.0	5.48	12.40	371	251.3	2.97	138.9	49.80	
1315	17.5	5.48	12.37	371	1055.2	2.97	139.3	49.80	Cleaned flow-thru cell
1325	18.0	5.46	12.17	369	64.6	4.05	144.4	49.80	
1330	20.0	5.50	12.34	371	64.3	3.12	143.3	49.80	
1335	22.0	5.49	12.37	372	65.2	3.04	145.9	49.80	
1340	24.0	5.45	12.17	372	62.1	3.15	148.6	49.80	
1345	24.0	5.45	12.46	372	64.6	3.00	148.4	49.80	
1350	25.0	5.47	12.40	372	69.7	2.98	147.5	49.80	
1400	26.0	5.45	12.56	372	84.2	2.99	151.1	49.80	
1405	27.0	5.46	12.60	372	72.8	2.99	150.7	49.80	
1415	28.5	5.45	12.74	372	77.2	2.94	150.9	49.80	
1420	30.0	5.45	12.66	372	74.9	2.93	152.0	49.80	
1425	31.5	5.44	12.58	373	85.1	2.90	151.7	49.80	
1435	34.5	5.48	12.90	373	67.9	3.40	149.7	49.80	
1445	37.5	5.49	13.03	374	70.9	2.94	148.9	49.80	
1450	40.5	5.48	13.00	374	52.1	2.94	150.2	49.80	
1455	43.5	5.48	13.01	374	47.1	2.94	150.9	49.80	
1500	46.5	5.48	13.00	375	45.2	2.94	151.9	49.80	
1505	49.5	5.48	13.02	374	44.1	2.94	151.	49.80	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

Groundwater Sample Log

Site: Sylvania Corning FUSRAP
Well No.: S-1-450
Sample Date: 04/12/2016
Sampling Device: Bladder Pump
Well Depth (feet TOIC): 450
Screen Interval (feet TOIC): 410-450
Initial Water Level (Feet TOIC): 49.89
Final Water Level (feet TOIC): 49.95
Casing Type: **PVC** Steel (circle one)
Personnel: Larry Roedl

Sample ID: S-1-450-SP16
Purge Start Time: 1250
Sample Time: 1515
Final Turbidity (NTUs) : 43.1
Casing Inner Diameter (inches): 2.0
Purge Rate (ml/min): 400
Purge Rate d/sampling (ml/min): 200
Sample Analyses: VOCs (SW8260)

2x Purge System Volume #: 11.92 L/1.58 gal

Time	Purge Volume (L)	pH	Temperature (°C)	Conductivity (µs/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	Water Level (ft TOIC)	Comments
1250	0.5	5.20	9.81	205	26.8	12.73	174.4	49.89	
1255	1.0	5.77	11.21	153	125.4	10.15	171.9	49.95	
1300	3.0	7.33	12.04	158	272.2	4.40	22.3	49.95	
1305	5.0	6.45	12.33	206	162.7	5.64	43.8	49.95	
1310	7.0	6.13	12.34	205	134.2	5.96	90.2	49.95	
1315	9.0	5.92	12.32	204	117.3	6.27	102.4	49.95	
1320	11.0	5.82	12.27	199	81.7	6.38	110.0	49.95	
1325	13.0	5.81	12.31	202	90.1	6.23	112.4	49.95	
1330	15.0	5.76	12.42	203	104.1	6.24	117.5	49.95	
1335	17.0	5.73	12.47	204	110.1	6.33	122.7	49.95	
1340	19.0	5.70	12.72	205	82.5	6.34	124.6	49.95	
1345	21.0	5.67	12.80	206	83.4	6.43	135.9	49.95	
1350	23.0	5.64	12.75	207	64.2	6.50	144.4	49.95	
1355	25.0	5.63	12.73	207	64.4	6.53	146.8	49.95	
1400	27.0	5.61	12.65	207	69.2	6.56	148.7	49.95	
1405	29.0	5.61	12.66	207	54.2	6.52	150.2	49.95	
1410	31.0	5.60	12.88	208	59.8	6.56	155.4	49.95	
1415	33.0	5.61	12.87	208	57.1	6.55	155.6	49.95	
1420	35.0	5.59	12.84	208	55.8	6.54	155.7	49.95	
1425	37.0	5.59	12.87	208	49.2	6.53	155.8	49.95	
1430	39.0	5.57	12.86	208	51.6	6.55	155.9	49.95	
1435	41.0	5.58	12.88	208	56.1	6.55	156.7	49.95	
1440	43.0	5.58	12.89	208	45.2	6.55	157.2	49.95	
1445	45.0	5.58	12.88	208	46.1	6.55	156.8	49.95	
1450	47.0	5.58	12.89	208	44.2	6.56	157.2	49.95	
1455	49.0	5.58	12.88	208	43.1	6.55	158.1	49.95	

mg/L = Milligrams per liter
mV = Millivolts.
NTU = Nephelometric turbidity unit.
ORP = Redox potential.
ppm = Parts per million.
PVC = Polyvinyl chloride.
TOIC = Top of inner (PVC) casing

REMEDIAL INVESTIGATION REPORT

APPENDIX E

New York Natural Heritage Program Letter

Sylvania Corning FUSRAP Site

Hicksville, Nassau County, New York

Prepared for:
UNITED STATES ARMY CORPS OF ENGINEERS
Kansas City District
And
New York District

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 SMITH ROAD
SHIRLEY, NY 11967
PHONE: (631)286-0485 FAX: (631)286-4003

Consultation Code: 05E1LI00-2015-SLI-0075 March 04, 2015
Event Code: 05E1LI00-2015-E-00075
Project Name: Sylvania Corning Fusrap Site

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Sylvania Corning Fusrap Site

Official Species List

Provided by:

Long Island Ecological Services Field Office
340 SMITH ROAD
SHIRLEY, NY 11967
(631) 286-0485

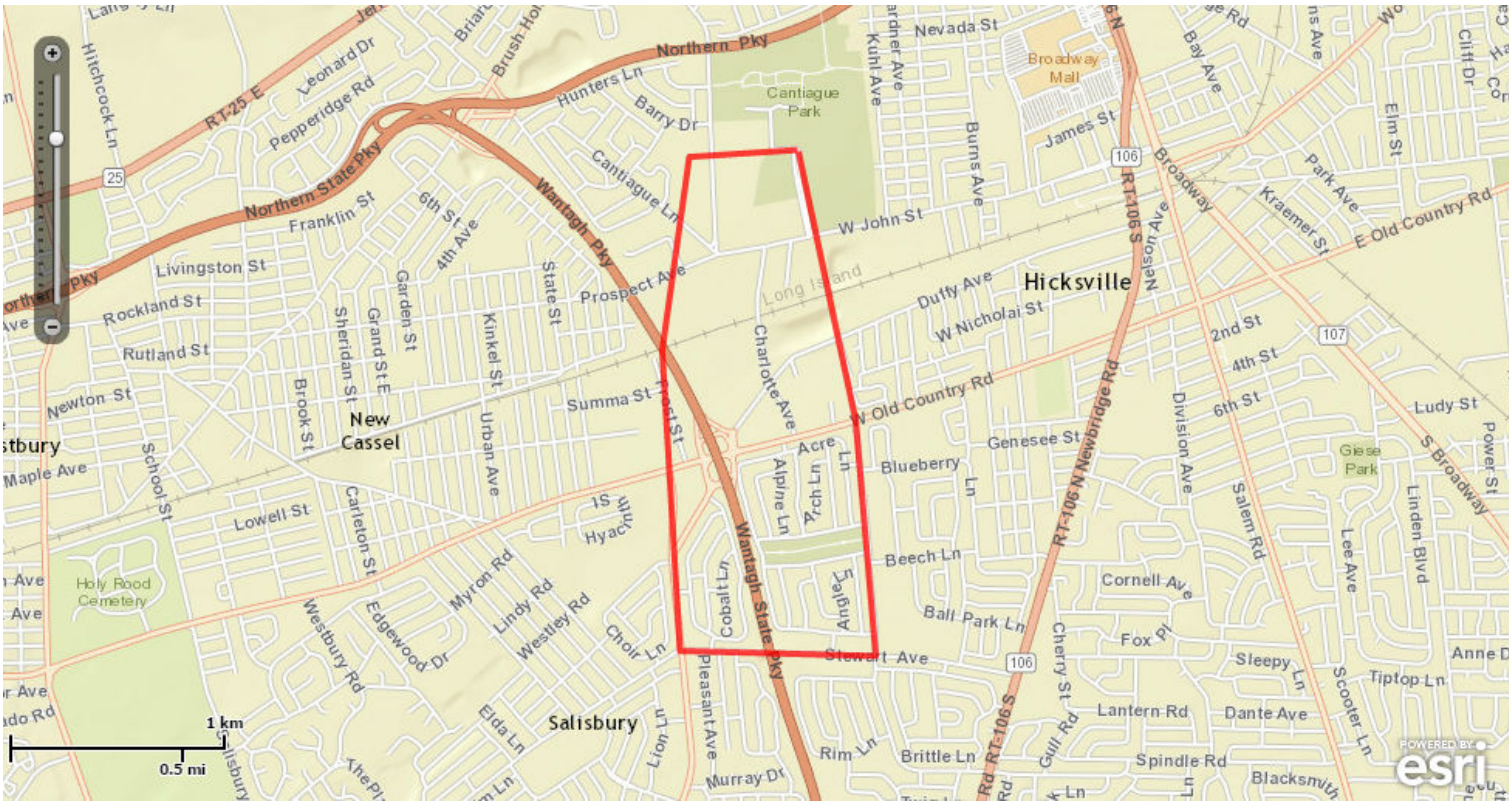
Consultation Code: 05E1LI00-2015-SLI-0075
Event Code: 05E1LI00-2015-E-00075

Project Type: Land - Management Plans

Project Name: Sylvania Corning Fusrap Site
Project Description: The Louis Berger Group has been contracted by the United States Army Corps of Engineers (USACE) to update and ecological risk assessment for chemical contaminants at the Sylvania Corning Formerly Utilized Sties Remedial Action Program (FUSRAP) site, Hicksville, Nassau County, New York.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-73.5519603 40.7690394, -73.5534591 40.7609316, -73.5524751 40.7483376, -73.5416649 40.7481223, -73.5427715 40.7580021, -73.5459458 40.7692796, -73.5459464 40.7692874, -73.5459439 40.7692948, -73.5459389 40.7693007, -73.5459319 40.7693043, -73.5459241 40.7693049, -73.5459167 40.7693024, -73.5459108 40.7692974, -73.5459072 40.7692904, -73.5427325 40.7580113, -73.5427319 40.7580081, -73.5416226 40.748104, -73.5416235 40.7480956, -73.5416277 40.7480883, -73.5416346 40.7480834, -73.5416429 40.7480818, -73.552494 40.748298, -73.5525012 40.7482995, -73.5525073 40.7483035, -73.5525116 40.7483094, -73.5525135 40.7483164, -73.5534991 40.7609311, -73.5534989 40.7609363, -73.5519968 40.7690622, -73.5519933 40.7690704, -73.5519866 40.7690762, -73.5519781 40.7690786, -73.54597 40.7693712, -73.5459623 40.76937, -73.5459556 40.769366, -73.5459509 40.7693597, -73.545949 40.7693522, -73.5459502 40.7693445, -73.5459542 40.7693378, -73.5459605 40.7693331, -73.545968 40.7693312, -73.5519603 40.7690394)))

Project Counties: Nassau, NY

Endangered Species Act Species List

There are a total of 6 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	**Status**	**Has Critical Habitat**	**Condition(s)**
Piping Plover *(Charadrius melodus)* Population: except Great Lakes watershed	Threatened	Final designated	
Red Knot *(Calidris canutus rufa)*	Threatened		
Roseate tern *(Sterna dougallii dougallii)* Population: northeast U.S. nesting pop.	Endangered		
Flowering Plants			
Sandplain gerardia *(Agalinis acuta)*	Endangered		
Seabeach amaranth *(Amaranthus pumilus)*	Threatened		
Mammals			
northern long-eared Bat *(Myotis septentrionalis)*	Proposed Endangered		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

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REMEDIAL INVESTIGATION REPORT

APPENDIX F

Aerial Photos

Sylvania Corning FUSRAP Site

Hicksville, Nassau County, New York

Prepared for:
UNITED STATES ARMY CORPS OF ENGINEERS
Kansas City District
And
New York District

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APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – AUGUST 3, 1938

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 1



APPROXIMATE SCALE IN FEET

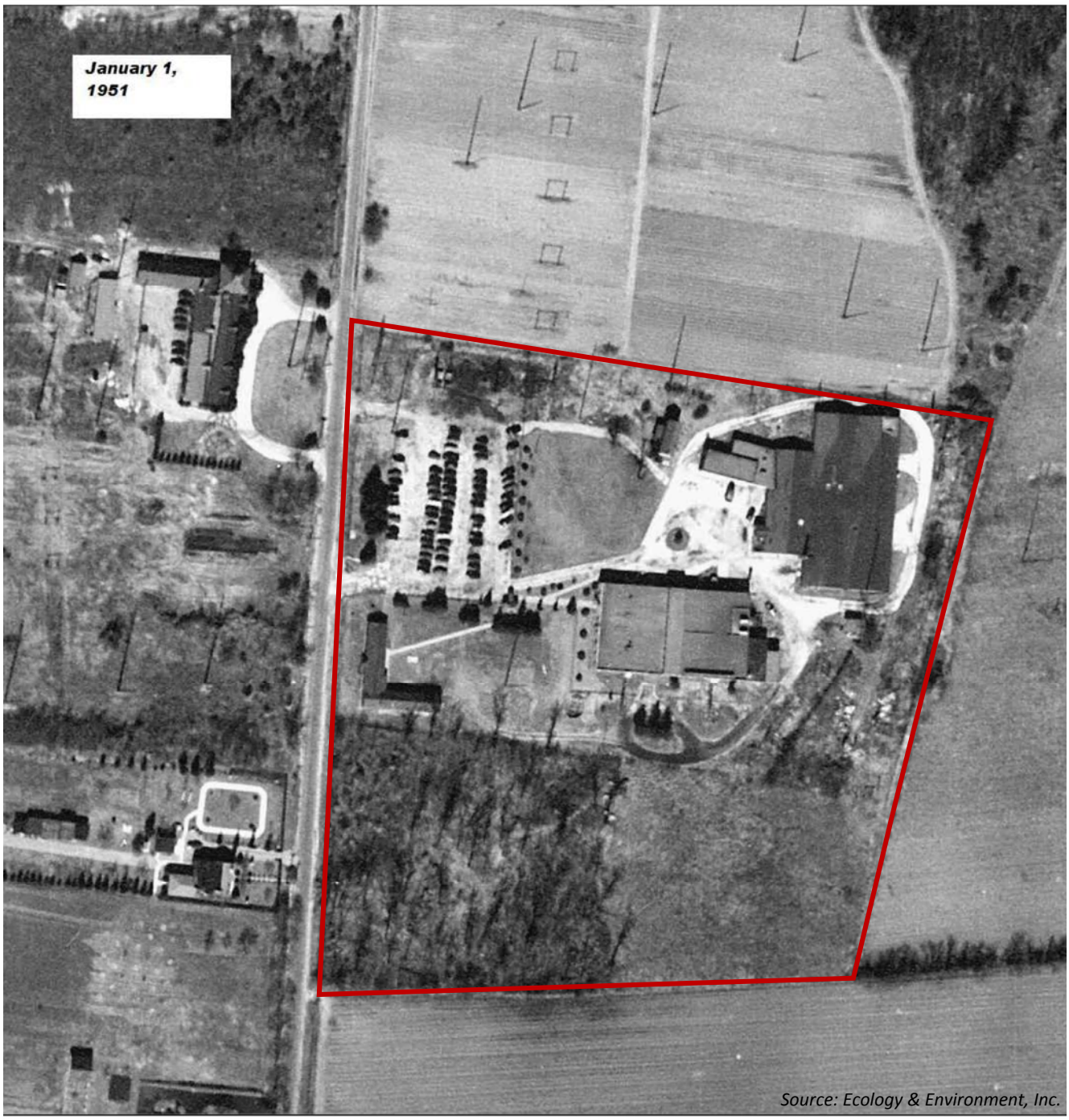
0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – SEPTEMBER 1, 1947

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 2



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – JANUARY 1, 1951

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 3



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – JANUARY 2, 1953

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 4



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – JANUARY 24, 1957

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 5



APPROXIMATE SCALE IN FEET

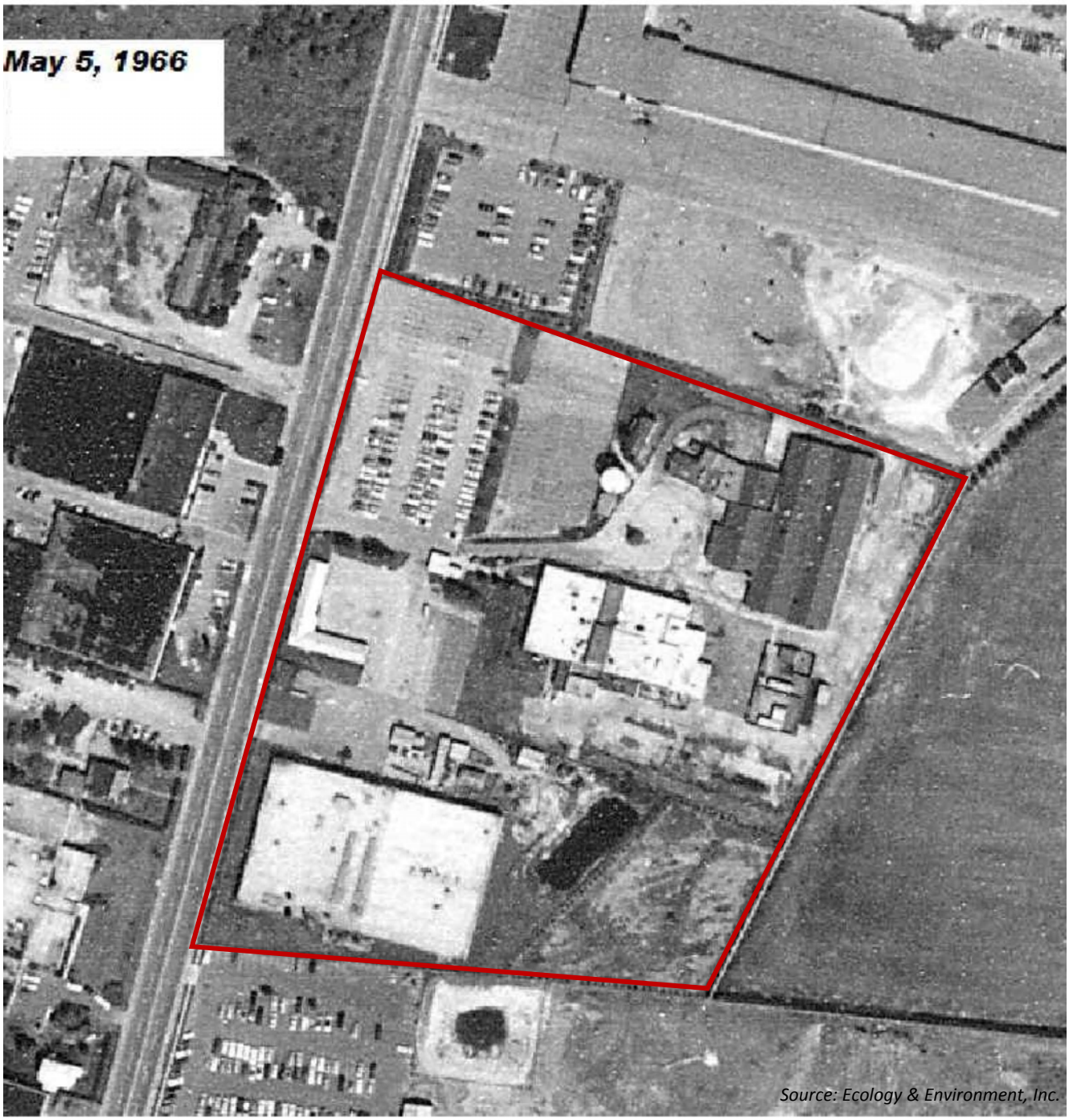
0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – MARCH 18, 1962

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 6



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – MAY 5, 1966

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 7



APPROXIMATE SCALE IN FEET

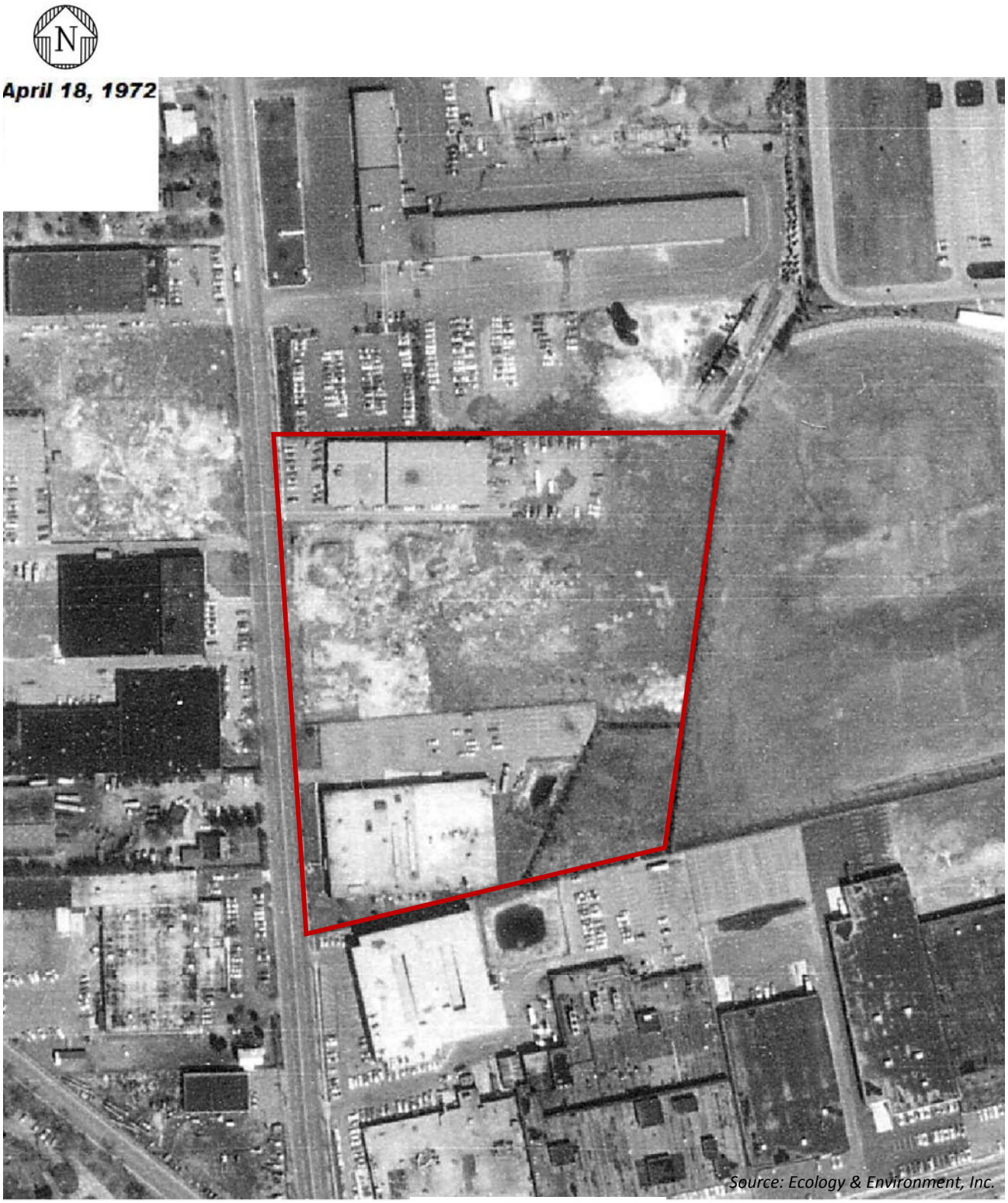
0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – APRIL 11, 1969

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 8



APPROXIMATE SCALE IN FEET

0 200 400 600

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – APRIL 18, 1978

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 9



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – MARCH 29, 1976

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 10



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – APRIL 6, 1980

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 11



APPROXIMATE SCALE IN FEET

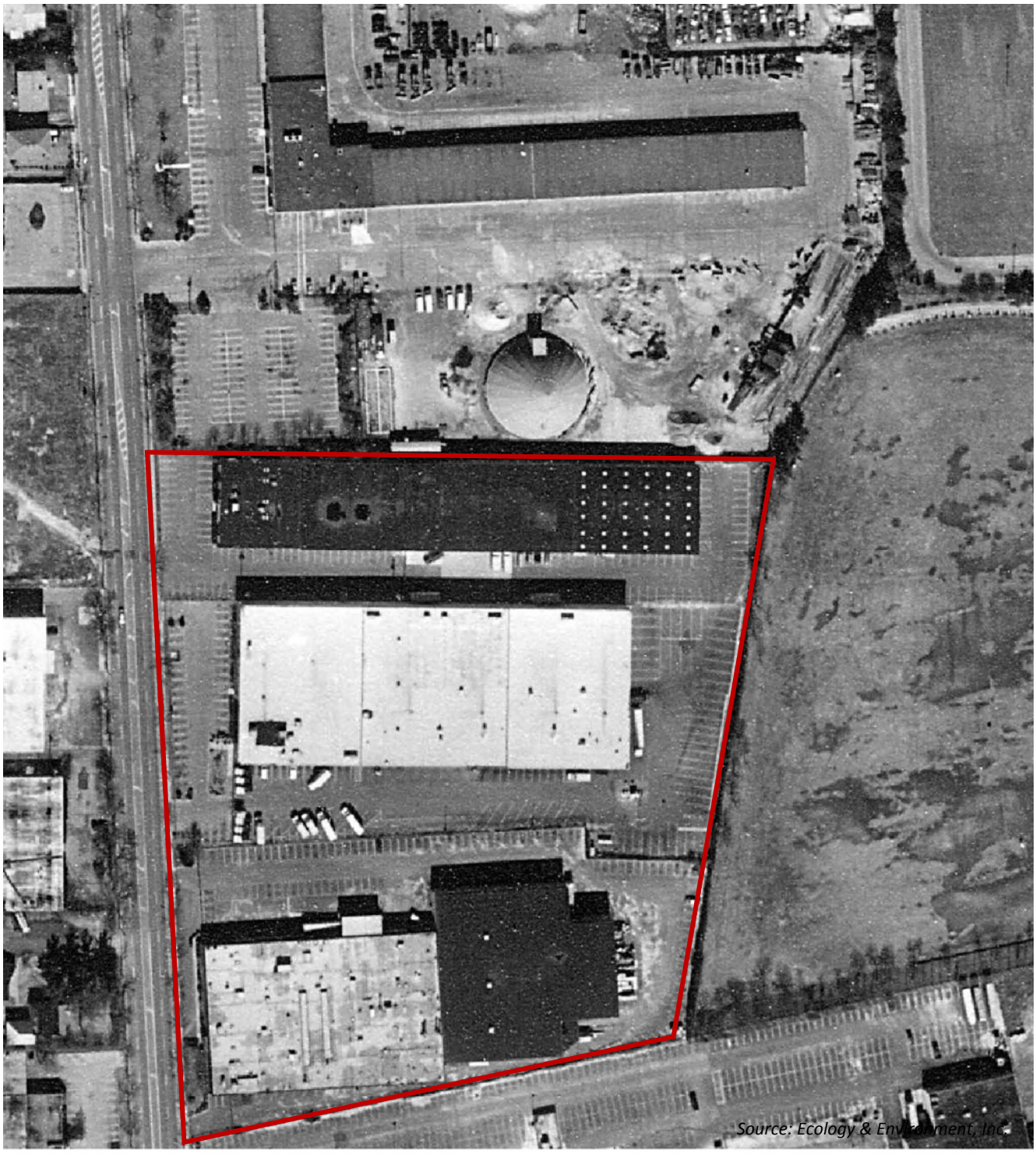
0 300 600 900

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – MARCH 8, 1982

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 12



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – MARCH 4, 1990

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 13



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – APRIL, 2007

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 14



APPROXIMATE SCALE IN FEET

0 150 300 450

SYLVANIA CORNING FUSRAP SITE

AERIAL PHOTO – 2011

TOWN OF HICKSVILLE, NEW YORK

2016
FIGURE 15

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REMEDIAL INVESTIGATION REPORT

APPENDIX G

Quality Control Summary Reports

Sylvania Corning FUSRAP Site

Hicksville, Nassau County, New York

Prepared for:
UNITED STATES ARMY CORPS OF ENGINEERS
Kansas City District
And
New York District

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Quality Control Summary Report for the Sylvania Corning FUSRAP Site Hicksville, County of Nassau, New York

July 2010

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
Kansas City District
601 East 12th Street
Kansas City, Missouri 64106

Prepared by:

ECOLOGY AND ENVIRONMENT, INC.
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Certificate of Compliance

On behalf of Ecology and Environment, Inc. (E & E), the undersigned certify that the document listed below was developed in conformance with E & E's Quality Control Plan, and further, that the work was performed in accordance with acceptable standards of engineering and scientific practice.

Quality Control Summary Report
for the Sylvania Corning FUSRAP Site
Hicksville, New York

Dated: July 2010

Contract Number: W912DQ-06-D-0008-0003

Prepared for:

U.S. Army Corps of Engineers
Kansas City District
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List of Abbreviations and Acronyms

ADR	Automated Data Review
COC	chain-of-custody
DQOs	data quality objectives
DVM	Data Validation Memorandum
E & E	Ecology and Environment, Inc.
EDD	electronic data deliverable
EDMS	Environmental Data Management System
EPA	Environmental Protection Agency
ESN	ESN Rocky Mountain
FUSRAP	Formerly Utilized Sites Remedial Action Program
g/cc	grams per cubic centimeter
IDL	instrument detection limit
IDW	investigation derived waste
LCS	laboratory control sample
MDC	Minimum Detectable Concentration
MDL	Method Detection Limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
µg/kg	micrograms per kilogram
µg/L	micrograms per liter

List of Abbreviations and Acronyms (cont.)

pCi/g	picocuries per gram
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
QC	quality control
QCP	Quality Control Plan
QCSR	Quality Control Summary Report
RER	reported error ratio
RI	Remedial Investigation
RPD	relative percent difference
SDG	sample delivery group
USACE	United States Army Corps of Engineers
WP	Work Plan

Introduction

Ecology and Environment, Inc., (E & E) under contract (W912DQ-06-D-0008-0003) to the United States Army Corps of Engineers (USACE), Kansas City District, has been tasked to perform a Remedial Investigation (RI) for the Sylvania Corning Formerly Utilized Sites Remedial Action Program (FUSRAP) site (Sylvania site) located in Hicksville, Nassau County, New York. The RI objectives are to:

- Fill remaining data gaps, determine source areas, and define the nature and extent of on-site contamination, including the vertical and aerial extent of the soil and groundwater contamination;
- Examine the possible exposures associated with the contamination; and
- Provide information for evaluation of alternatives available for potential future remediation of the site.

This quality control summary report (QCSR) presents the results of the sampling and analytical program and provides an opportunity to review the completeness and quality of the data collected.

The purpose of this QCSR is to:

- Summarize sample collection, handling, and analytical procedures for the sampling investigation conducted at each site (see Section 1);
- Identify any deviations from the proposed sampling and analysis procedures (see Sections 1 and 2);
- Present the analytical results for the field samples collected (see Section 3);
- Report on any inspections or audits performed and any findings that that may impact the project data (see Section 4); and
- Discuss the results of the data quality evaluation associated with the sampling events (see Sections 2 and 5).

Evaluation of any contaminants detected will be provided in separate letter reports and the RI Report. The letter reports also will contain maps of sample locations and summary tables of positive results.

Supporting information is included in appendices to the QCSR. (Note that Appendix B is available only by request due to its large size). The appendices are located on the attached DVD and include:

- Appendix A – Data Validation Memoranda (DVM) – The data validation memorandum prepared for each sample delivery group (SDG) in PDF format.

- Appendix B – Analytical Data – All laboratory reports in PDF format which include case narratives and quality control (QC) sample results. The compact disc also will include a database of the final validated data in Electronic Data Management System (EDMS) format.

- Appendix C – Sample Collection Documentation – Sample chain-of-custody (COC), daily activity summary reports, and field adjustment forms which document deviations from the planned activities. This appendix also will include any audits performed.

- Appendix D – GTEOSI Data Validation and Data Management Summary Report.

- Appendix E – CDM Data Usability Assessment Report (Phase IIIb).

1 Data Collection

Environmental samples were collected as part of the field investigation in accordance with the final RI Phase I and II Work Plan (WP) and Quality Assurance Project Plan (QAPP) for the Sylvania Corning FUSRAP site (E & E March 2007). The WP and QAPP were drafted originally for the Phase I activities, and then updated for the Phase II activities. Methodologies used for field notebooks; sample labeling, packaging, and custody; equipment decontamination; containerization of investigation-derived waste (IDW); and site surveying were performed in accordance with the WP, QAPP, and documents referenced therein. All field QC activities were carried out in accordance with the final Quality Control Plan (QCP) (E & E 2007). Field data collection activities for each phase are summarized below. Audits were performed for each phase as described in Section 4.

Quality assurance/quality control (QA/QC) samples were collected on a sitewide basis according to the criteria established in the QAPP. The field QA/QC sample requirements are as follows:

- Field QC duplicates collected at a frequency of 10% of the number of field samples collected;
- Rinsates collected at a frequency of 10% of the number of field samples collected if non-dedicated equipment was used;
- Matrix spike/matrix spike duplicate (MS/MSDs) for laboratory QC collected at a frequency of 5% of the sample collected; and
- Trip blanks sent one per shipment for each cooler in which water samples for volatile analysis were shipped. Trip blanks were analyzed for all volatile methods designated for the samples.

Any minor variances in field methodologies that occurred during the investigation are noted on the daily activity summary reports or in the field logbook. Deviations from the WP were noted on field adjustment forms. Copies of these reports and forms are provided in Appendix C. The following sections summarize the deviations and fieldwork activities for each phase of fieldwork.

1.1 Phase I Data Collection

This section of the QCSR summarizes the sampling results for:

- Phase I including: soil gas survey, indoor air and sub-slab sampling, and transformer pad sampling; and

- Phase IIa including: soil characterization at data gap borings for Building 140, Building 100, and Building 70; concrete core sampling; leach pool/drains/ drywells sampling; and test pit excavations.

Phase IIb sampling activities and additional groundwater and off-site investigations expected to be performed at a later date will be added to the QCSR as an addendum.

1.1.1 Sampling Procedures

The USACE Team performed Phase I investigations in September and November 2006. For Phase I, deviations are presented in Appendix C, summarized in the associated letter report, and listed below:

- The monitoring of concrete/soil dust and cuttings for radioactivity during installation of the active soil gas probes in Building 70 was added to aid in determining handling and disposal measures;

- Passive soil gas samplers were installed at 15 to 18 inches below asphalt/paved surfaces and maximum of 6 inches in grassy non-paved areas as per manufacturer's instructions. A 2-inch drill bit was used to install a sampler that is within manufacturer's recommended borehole size;

- Liquid crack sealer was used to backfill sub-slab sample boreholes rather than the proposed sand, providing an impermeable seal; and

- The passive soil gas network was expanded by three locations/samplers (from 86 to 89). During installation of the network, it was noted that spacing in the pre-determined grid left an almost 50-foot area without coverage on the western side (front) of Building 100. The expansion provided samples from a new location in grassy areas located along Building 100.

1.1.2 Sample Handling and Sample Custody

Field samples were collected, preserved, and transported to the appropriated laboratory according to the procedures described in the WP.

There were no deviations from the WP with regards to sample handling or sample custody.

All COC documentation associated with the collection of samples is included in Appendix C.

1.1.3 Equipment Calibration and Maintenance

Calibration procedures for the field and laboratory instruments are presented in E & E's QAPP.

There were no deviations from the QAPP with regards to equipment calibration and maintenance.

1.1.4 Analytical Procedures

Samples were shipped to approve laboratories for analysis. Analytical methods in support of RI activities are referenced in the QAPP. VaporTec soil gas modules were provided and analyzed (modified SW-8260B) by ESN Rocky Mountain (ESN) of Golden, Colorado. Indoor air canisters were provided and analyzed by TestAmerica Laboratories, Inc. formerly known as STL Burlington of Burlington, Vermont. The indoor air laboratory also performed the polychlorinated biphenyl (PCB) analysis. Table 1-1 lists all of the analyses performed and the number of samples collected for methods for the Phase I investigation. Any deviations were evaluated as part of the data review process and are described in Section 2.

Table 1-1 Summary of Analytical Methods and Samples Collected for RI Phase I, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Soil Gas	SW8260-Modified	Volatile Organic Compounds in Vapor Matrix by Ion Trap GC/MS	89
Indoor Air	TO-15 Low Level	Low Concentration Volatile Organic Compounds in Air by GC/MS	12
Sub-slab Air	TO-15	Volatile Organic Compounds in Air by GC/MS	20
Soil	SW8082	Method 8082 – PCB Aroclors	5

1.2 Phase IIa Data Collection

This section of the QCSR summarizes the sampling results for Phase IIa including: soil characterization at data gap borings for Building 140, Building 100, and Building 70; concrete core sampling; leach pool/drains/drywells sampling; and test pit excavations.

Phase IIb sampling activities and additional groundwater and off-site investigations expected to be performed at a later date will be added to QCSR as an addendum.

1.2.1 Sampling Procedures

The USACE team performed Phase IIa field investigations in May and June 2007. For Phase IIa, deviations are presented in Appendix C, summarized on Table 1 of the associated letter report, and listed below:

- The use of 5-foot samplers was implemented as opposed to 4-foot samplers that were in the WP. At the time the WP was written, the subcontractors were not on board. Each subcontractor has slightly different nominal sizes in their stock equipment (i.e., both 4-foot and 5-foot samplers are standard equipment). However, sample intervals remained at 0 to 8 feet, 8 to 16 feet, etc. as per the WP, regardless of the sampler length, except for two borings drilled on the first day of the field program.

- Early refusal and contaminated soils at the bottom of the borehole requiring additional drilling at a later date at several locations. This situation was relatively unavoidable as the depth of penetration was limited by the formation/fill material and capabilities of the Geoprobe equipment. Furthermore, the limited rig access also contributed to the early refusal because small hand-held units had to be used at many locations.

- Archiving the top 2 feet of soils for potential future radionuclide analyses was implemented at the start of field work to avoid the potential for any future data gaps if surface contamination needed to be assessed.

- Backfilling with grout rather than bentonite was implemented due to natural radiation levels of the bentonite. The materials potentially used for backfilling (i.e., bentonite, grout, and sand) were screened with radiation-measuring instruments, and the use of the material exhibiting the lowest radiation levels (grout) was recommended to USACE.

- Gamma spectroscopy was added to sample analyses for the concrete samples because radiological screening indicated different ratios of beta and gamma readings on different contaminated concrete samples. The use of gamma spectroscopy would more definitely eliminate (or identify) any other contaminants in the concrete.

- Fewer samples per borehole were collected than planned due to poor recovery and/or poor penetration depth.

- Locations of some shallow boreholes were adjusted based on field conditions.

- Locations of some deep borings were adjusted based on field conditions and accessibility of the actual drilling equipment.

- One boring was added at a potential sump in Building 70.

- No downhole gamma logging was performed at location DR-M because the drill rod became stuck in the borehole.

- Borehole lines were switched from 2-inch polyvinyl chloride (PVC) pipe to 1.5-inch PVC after determining in the field that 1.5-inch was sufficient to fa-

cilitate downhole gamma logging. The 2-inch PVC pipe was originally planned to ensure sufficient diameter for the downhole gamma equipment. The switch was made to the smaller diameter to improve depth of penetration and save costs.

- Rinsates were not originally planned because all the field equipment was disposable or dedicated to each sample. After review of the field procedures, it was determined that a small portion of the drilling equipment (e.g., shoe of the macro-core sampler) was decontaminated and reused and could potentially touch the sample core. Collection of one rinsate per 10 borings as opposed to one sample per 10 samples was added to evaluate the potential for cross contamination from this equipment.

1.2.2 Sample Handling and Sample Custody

Field samples were collected, preserved, and transported to the appropriate laboratory according to the procedures described in the WP. There were no deviations from the WP with regards to sample handling or custody except for the following:

- Archived samples were collected for potential future radiological analysis as noted above. The archived samples are in custody-sealed coolers under lock and key in the field office.

- The preservatives indicated on Worksheet 19 of the QAPP were incorrect for waters and soils for the metals and radiological samples. The corrections were made in the field copy. Metals and radiological water samples are preserved with nitric acid to pH of <2, not soil samples. No cooling is required for metals or radiological samples.

All COC documentation is included in Appendix C.

1.2.3 Equipment Calibration and Maintenance

Calibration procedures for the field and laboratory instruments are presented in E & E's QAPP. There were no deviations from the QAPP with regards to equipment calibration and maintenance.

1.2.4 Analytical Procedures

Samples were shipped to approved laboratories for analysis. Analytical methods in support of RI activities are referenced in the QAPP. TestAmerica Laboratories, Inc. of St. Louis, Missouri provided all laboratory analyses for Phase IIa. Table 1-2 lists all of the analyses performed and the number of samples collected for methods for the Phase IIa investigation. Any deviations were evaluated as part of the data review process and are described in Section 2.

Table 1-2 Summary of Analytical Methods and Samples Collected for RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Water	6010B	Method 6010B - Low Level Nickel in Water	18
Water	8260B	Method 8260B - Volatile Organic Compounds by GC/MS in Water	26
Water	9315 MOD	Radium 226/228 in Water by Alpha Emission	18
Water	DOE A-01-R Th	Thorium in Water Alpha Spectroscopy	18
Water	DOE A-01-R Ur	Uranium in Water by Alpha Spectroscopy	18
Water	RA-06-RC MOD	Radium-228 in Water by Alpha Spectroscopy	18
Soil	6010B	Method 6010B - Low Level Nickel in Soil	401
Soil	8082	Method 8082 - PCB Aroclors in Soil	7
Soil	8260B	Method 8260B - Volatile Organic Compounds by GC/MS in Soil	404
Concrete	9315 MOD	Radium by Alpha Spectroscopy	1
Concrete	9320 MOD	Radium-228 by Actinium-228 Beta Counting	1
Soil and Concrete	DOE A-01-R Th	Thorium in Soil by Alpha Spectroscopy	404
Soil and Concrete	DOE A-01-R Ur	Uranium in Soil by Alpha Spectroscopy	404
Soil and Concrete	DOE GA-01-R	Radium by Gamma Spectroscopy	403

1.3 Phase IIb Data Collection

This section of the QCSR summarizes the sampling results for Phase IIb including: soil characterization at data gap borings for Building 140, Building 100, and Building 70; leach pool/drains/drywells sampling of those not previously investigated; confirmatory borings; and test trenches.

1.3.1 Sampling Procedures

The USACE team performed Phase IIb field investigations in October and November 2007. For Phase IIb, deviations are presented in Appendix C and listed below:

- Backfilling with clean soil instead of grout was implemented at borings where drilling went through the remediation cells to obtain soil samples beneath previously excavated cells. Grout was used to top-off the borehole.

- Based on elevated field screening results and early refusal in some borings drilled during the Phase IIa investigation, it was recommended that additional drilling to deeper depths be performed during Phase IIb using different Geoprobe or drilling methods. However, after evaluating Phase IIa sample analytical data, it was determined that some of the borings with elevated PID readings had little to no VOCs, therefore, additional drilling is not warranted. In addition, based on other Phase IIa results, additional changes to the Phase

IIb scope of work have also been approved by USACE. A summary of all changes to the Phase IIb program is provided below:

- Test pits were added at the following Phase I geophysical anomaly locations: EM-1, 8 and 9 combined, 11, 13, 16, 28, 30, 31, 34, 35, and GPR-B and –C (test pits EM-1 and GPR-B were later omitted from the program as described on the next page);
- Carpet was removed from areas in B70 predominantly where carpet was installed directly on top of the concrete slab (i.e., some carpet installed over the former tile floor was inadvertently removed); and borings were drilled next to the newly discovered drains;
- Additional drilling was eliminated at SU10-02, SU-10-10, SU11-15, SU11-21, SU11-22, DR-C, DR-E, DR-R1/R2, 100-01, 100-02, 100-03, 140-01, and 140-09;
- Replaced deep drilling at SU-13 (originally planned to replace deep drilling at SU11-17/D) with deep drilling at SU11-16; and
- Additional drilling was performed at DR-J, DRH-A2, and 100-11.

■ Based on the potential to pull contaminated soils up through the clean backfill in borings C4-01/D, C6-02/D, C9-02/D, C9-03/D, and C9-04/D, it was determined to use a combination of augering and geoprobe to complete borings at these confirmatory boring locations. This was done by augering to the bottom of the excavation cell and then using the geoprobe to collect soil samples through the hollow-stem auger flights. Soil collection began from the bottom of the auger flights.

■ Some excavation cells depths varied greatly within each cell (by as much as 24 feet). Based on a review of excavation cell depths it was determined that six confirmatory borings (C1-01, C1-03, C3-01, C5-01, C5-02, and C6-03) were scheduled to be sampled well below the subcell excavation depth that these borings are to be completed in. After a discussion with USACE, it was determined that these scheduled sampling depths were too conservative for these six borings and samples collected from closer to the clean fill/native soil boundary would be more beneficial to the investigation. Collection of the continuous split-spoon samples began at 4 feet above the maximum subcell depth that the boring was to be completed in order to identify the clean fill/native soil boundary. After the field geologist identified this boundary, the confirmatory sample was collected 5 to 10 feet below that depth.

■ Test pits EM-1 and GPR-B were not excavated because it was determined that a 36-inch stormwater pipe was located at EM-1 and GPR-B is located within Cell 12, which was previously excavated and backfilled. EM-7 was added to the list on Phase IIb Field Adjustment Form 2 to provide general area coverage.

■ After completing the carpet removal task that was added to the scope of work and described in Phase IIb Field Adjustment Form 2, seven shallow borings

were completed next to eight (one co-located pair) newly identified drains (DR). These borings are termed DR-W through DR-Z, and DR-AA through DR-CC. These borings supplement the existing Leach Pool/Drain/Dry Well investigation described in Section 3.3.1 of the RI/FS Work Plan.

- Access to drain DR-Z was limited (within a small office) and could only be accessed with a jackhammer to drive geoprobe rods. The initial attempt to complete this boring on November 9 resulted in a refusal at 2 feet BGS on an apparent concrete footer. A second attempt to complete this boring deeper in an adjacent location could not be performed due to time constraints. Therefore, a sample was collected from 0 to 2 feet and sent for analysis on this day (DR-Z-Z1). This boring was again attempted on November 15 with refusal at 8 feet on natural soils. Low-level PID hits were noted in this boring, so an additional sample (DR-Z-Z1A) was collected for laboratory analysis. As a result, two samples were collected from the first 8-foot interval or zone.

1.3.2 Sample Handling and Sample Custody

Field samples were collected, preserved, and transported to the appropriate laboratory according to the procedures described in the WP. There were no deviations from the WP with regards to sample handling or custody except for the following:

- The preservatives indicated on Worksheet 19 of the QAPP were incorrect for waters and soils for the metals and radiological samples. The corrections were made in the field copy. Metals and radiological water samples are preserved with nitric acid to pH of <2, not soil samples. No cooling is required for metals or radiological samples.

All COC documentation is included in Appendix C.

1.3.3 Equipment Calibration and Maintenance

Calibration procedures for the field and laboratory instruments are presented in E & E's QAPP. There were no deviations from the QAPP with regards to equipment calibration and maintenance. Laboratory calibration issues in regard to density of gamma standard are being investigated after completion of sample analysis. Updated SOPs for on-site field gradation monitoring equipment were in use and were identified in the field audit.

1.3.4 Analytical Procedures

Samples were shipped to approved laboratories for analysis. Analytical methods in support of RI activities are referenced in the QAPP. TestAmerica Laboratories, Inc., of St. Louis, Missouri and Knoxville, Tennessee provided all laboratory analyses for Phase IIb. Table 1-3 lists all of the analyses performed and the number of samples collected for methods for the Phase IIb investigation. Any deviations were evaluated as part of the data review process and are described in Section 2.

Table 1-3 Summary of Analytical Methods and Samples Collected for RI Phase IIb, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Water	6010B	Method 6010B - Low Level Nickel in Water	20
	8260B	Method 8260B - Volatile Organic Compounds by GC/MS in Water	35
	9315 MOD	Radium 226/228 in Water by Alpha Emission	20
	DOE A-01-R Th	Thorium in Water Alpha Spectroscopy	20
	DOE A-01-R Ur	Uranium in Water by Alpha Spectroscopy	20
	RA-06-RC MOD	Radium-228 in Water by Alpha Spectroscopy	19
Soil	6010B	Method 6010B - Low Level Nickel in Soil	229
	8260B	Method 8260B - Volatile Organic Compounds by GC/MS in Soil	229
	DOE A-01-R Th	Thorium in Soil by Alpha Spectroscopy	229
	DOE A-01-R Ur	Uranium in Soil by Alpha Spectroscopy	229
	DOE GA-01-R	Radium by Gamma Spectroscopy	229

1.4 Phase IIIa Data Collection

This section of the QCSR summarizes the sampling results for Phase IIIa, including: vertical profile groundwater screening, soil core borings, and groundwater monitoring.

1.4.1 Sampling Procedures

The USACE team performed Phase IIIa field investigations in November 2008 through March 2009. For Phase IIIa, deviations are presented in Appendix C and listed below:

1.4.1.1 Drilling and Vertical Profile Sampling

- Using bentonite pellets in place of tremied bentonite slurry to provide monitoring well seal above the screen sand pack. Chips were poured at a slow enough rate so as not to bridge them and ensured the seal extends around the well.

- Due to high turbidity in the groundwater profile sample collected at MW-14D, radiation analysis could not be performed. This sample was replaced by one collected at MW-16D.

- Due to the presence of elevated radiation activity in the soils below the excavation cells in the area of MW-18S, samples for radiation analysis in addition to samples for VOC analysis were collected during profiling. Samples collected at MW-18S replaced scheduled samples at MW-31D.

- A shallow monitoring well (screened from 76-86 feet BGS) was installed at RI-P-39S due to elevated tetrachloroethene concentrations detected.

- During vertical profiling and well installation, the drilling exclusion zone, drill rods and soil cores were all monitored for radioactive contamination. If no contamination was detected, personnel monitoring was not required upon exiting the exclusion zone. Monitoring at routes of entry and exit to the exclusion zone was maintained. During groundwater well development and sampling, radioactive contamination monitoring was not performed.

1.4.4.2 Groundwater Sampling

- The modified water surge method (mechanically moving tubing with check valve and surge block up and down to pump out slugs of water) followed by an airlift method to remove the required water volume was used for development.. Nitrogen instead of compressed air was used for the airlift method. Additionally, a sample was collected before the introduction of nitrogen and at the end of development for quick turn VOC analysis to determine if nitrogen lift may have any impacts on GW quality.

1.4.2 Sample Handling and Sample Custody

Field samples were collected, preserved, and transported to the appropriate laboratory according to the procedures described in the WP. There were no deviations from the WP with regards to sample handling or custody except for the following:

1.4.2.1 Drilling and Vertical Profile Sampling

- Unpreserved samples were collected for Volatile Organic Analysis during the groundwater profiling. The hydrochloric acid used to preserve samples reacted with constituents in the groundwater preventing collection without zero headspace.

- Groundwater profile samples for metals analysis were collected unpreserved. Filtering of the samples was required due to the high turbidity (generally greater than 1,000 NTUs). Filtering through 0.45-micron filter, followed by preservation was performed at the American Analytical Laboratories.

- Groundwater profile samples for radiation analysis were filtered in the field using a high capacity 0.45-micron in-line filter and subsequent preservation prior to shipment. The change was added because the vertical profile samples were too turbid for analysis.

1.4.2.2 Groundwater Sampling

- All groundwater samples analyzed for radioactive constituents were filtered as a result of elevated turbidity.

- Samples MW-34D, MW-28 D, and MW-16D were filtered using a 0.45-micron filter when turbidity readings did not reduce below 50 NTUs after sta-

bilization. Unfiltered samples were also taken from these three locations and both filtered and unfiltered samples were analyzed.

1.4.3 Equipment Calibration and Maintenance

Calibration procedures for the field and laboratory instruments are presented in E & E's QAPP. There were no deviations from the QAPP with regard to equipment calibration and maintenance with the exception of monitoring for criteria established for pH/Conductivity, Temperature, Dissolved Oxygen (DO), Oxidation Reduction (REDOX), Meter, and Turbidity. The original values listed in the QAPP were not consistent with manufacturer recommendations. Worksheet 22 in the QAPP was updated to reflect the actual values.

1.4.4 Analytical Procedures

Samples were shipped to approved laboratories for analysis. Analytical methods in support of RI activities are referenced in the QAPP. American Analytical Laboratories (AAL) of Farmingdale, NY provided volatile and metals analysis for the vertical profiling samples. GEL Laboratories of Charleston, South Carolina provided all radiological sample analysis of soils and groundwater, all groundwater, groundwater volatile organic compounds and metals analysis, and all IDW sample analysis. Table 1-4 lists all of the analyses performed and the number of samples collected for methods for the Phase IIIa investigation. Any deviations were evaluated as part of the data review process and are described in Section 2.

Table 1-4 Summary of Analytical Methods and Samples Collected for RI Phase IIIa, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Soil	1010A	Method 1010A –Pensky-Martens Closed Cup Flash Point	2
	6010B	Method 6010B – Metals by ICP-AES	185
	7.3.3	Method 7.3.3 – Reactive Cyanide	4
	7470	Method 7470 – Mercury Analysis by Cold Vapor AA	5
	7471A	Method 7471A – Mercury Analysis by Cold Vapor AA	66
	8081A	Method 8081A – Organochlorine Pesticides by GC	5
	8082	Method 8082 – Polychlorinated Biphenyls by GC	4
	8151A	Method 8151A – Chlorinated Herbicides by GC	5
	8260B	Method 8260B – Volatile Organic Compounds by GC/MS	44
	8270C	Semivolatile Organic Compounds by GC/MS	2
	9045C/9045D	pH in Soil and Waste	2
	Ch. 7.3.4-TIT	Reactive Sulfide	4
	DOE A-01-R Th	AlphaSpec Thorium, Solid	40
	DOE A-01-R Ur	AlphaSpec Uranium, Solid	58
	DOE GA-01-R	Gamma Spec, Gamma, Solid	40
Water – VP	6010B	Method 6010B – Dissolved Metals	264

Table 1-4 Summary of Analytical Methods and Samples Collected for RI Phase IIIa, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
	7470A	Method 7470A – Dissolved Mercury by Cold Vapor AA	264
	8260B	Method 8260B – Volatile Organic Compounds by GC/MS in Water	411
	903.0	Total Alpha Radium	150
	DOE A-01-R Th	AlphaSpec Thorium, Liquid	150
	DOE A-01-R Ur	AlphaSpec Uranium, Liquid	150
	904.0	Radium-228 in Water by Alpha Spectroscopy	150
Groundwater	1010A	Method 1010A –Pensky-Martens Closed Cup Flash Point	3
	6010	Method 6010 – Total Metals by ICP-AES	59
	6010B	Method 6010B – Total Metals by ICP-AES	9
	7.3.3	Method 7.3.3 – Reactive Cyanide	3
	7470	Method 7470 – Total Mercury by Cold Vapor AA	33
	8081A	Method 8081A – Organochlorine Pesticides by GC	4
	8082	Method 8082 – Polychlorinated Biphenyls by GC	3
	8151A	Method 8151A – Chlorinated Herbicides by GC	3
	8260B (Low Level)	Volatile Organic Compounds by GC/MS	40
	8270C	Semivolatile Organic Compounds by GC/MS	4
	9040	pH – Electrometric Measurement	3
	9315 MOD	Method 9315 (modified) – Alpha Emitting Isotopes	153
	ASTM D5174	Method ASTM D5174 – Trace Uranium in Water by Phosphorimetry	32
	Ch. 7.3.4-TIT	Reactive Sulfide	3
	DOE A-01-R Th	AlphaSpec Thorium, Liquid	183
	DOE A-01-R Ur	AlphaSpec Uranium, Liquid	189
	EPA 900.0	Gross Alpha/Beta in Drinking Water	33
	EPA 901.1	Gamma Emitting Radionuclides in Drinking Water	29
	EPA 903.1	Radium-226 in Drinking Water by Radon Emanation	32
	EPA 904.0/EPA 9320	Radium-228 in Drinking Water	32
	RA-06-RC MOD	Radium-226 in Water	154

2 Data Analysis and Validation

Data quality evaluations focus on deviations from expected QC activities, problems encountered, and the acceptability of the methodologies used. Sample integrity is based on information provided on the cooler receipt form, COC documents, statements in the laboratory case narratives, and field notebooks. Laboratory activities were conducted in accordance with the QAPP. The target compounds, practical quantitation limits (PQLs), and QC limits for the project were entered into the Automated Data Review (ADR) software to create a project-specific library. The evaluation of the analytical data with respect to project and method-specific quality objectives was performed through the ADR software using the results of laboratory method blank analyses, laboratory control samples (LCS), MS/MSD analyses, and surrogate recoveries, where applicable. Field duplicate and blank data were used to evaluate the accuracy and precision of the analytical results and field sample collection methods. The final validated data was stored in an Electronic Data Management System (EDMS) format database.

E & E performed data review and validation of samples in accordance with the QAPP. The data review tasks completed for this project include:

- **ADR Set-up.** E & E set up the ADR software for all analytical parameters and QC criteria according to the QAPP. E & E provided the libraries to the project laboratory for pre-validation of their electronic data deliverable (EDD) submittals.

- **Completeness.** E & E performed a completeness check on all EDDs and compared the data to the hard copy deliverable to verify the data were reported consistently.

- **Compliance.** E & E processed EDDs using the ADR software to verify the data reported are compliant with the QAPP requirements. E & E performed an automated data validation of EDDs and generated reports of qualified data. Data that were not provided in ADR format were evaluated manually. E & E reviewed the ADR reports, checked the hard copy reports and case narratives, and verified the automated qualifiers assigned by the program. E & E reviewed calibration information and compound identification results in the raw data package and entered the ADR qualifiers. E & E reviewed the ADR

qualifiers against requirements of the current Kansas City District Data Validation guidelines as applicable (e.g., radiological only).

- **Reporting.** E & E assigned data qualifiers and flagged all reportable data. Results of the data review are summarized in the DVM in Appendix A. The DVM contains a summary of qualified data and a print out of all QC samples that did not meet control limits.

- **Data Management.** E & E developed a project-specific database with all validated data stored in EDMS format. E & E developed reporting tables in Microsoft Access format that accessed the final data in EDMS. E & E generated summary tables of final qualified data in Excel spreadsheets as shown in Section 3. Databases are provided in Appendix B.

QC samples were collected to assess the quality of the field sampling activities as described in Section 1. The evaluation of these samples was based on completeness of data, positive results of equipment and trip blank analysis, and relative percent differences (RPDs) of field duplicate results. ADR was used to evaluate field duplicates. Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DVM. The field duplicate QC criteria are 40% for aqueous samples, 70% for soil samples, and 50% for air and radiological samples. The RPD ratings are listed as "Good" if the RPD is less than field duplicate QC criteria and as "Poor" if the RPD exceeded the field duplicate QC criteria. The radiological soil and water sample results were evaluated using normalized absolute difference (NAD), which includes the uncertainty in the calculation, in addition to RPD. The NAD rating is listed as "Good" if the NAD is less than 1.96 and as "Poor" if the NAD is greater than 1.96. The NAD results are summarized in Table 4 (RAD NAD Summary Report) of the DVM. Data were qualified "J" as estimated based on the data reviewers overall evaluation of field precision and accuracy. The qualification of data because of field duplicates is discussed at the end of each DVM.

Field blanks were evaluated for each phase of sampling as described below. Field blanks were evaluated manually based on the associated samples and matrices and shipments.

The appropriate qualifiers were added to the data to indicate potential concerns with data usability. These qualifiers were transferred to the data presented on tables in Section 3. The following qualifiers were added:

J – This qualifier indicates an estimated value because the associated QC data indicated a potential laboratory or matrix problem or interference. In addition, J flags assigned by the laboratory to chemical data indicate the results are below the PQL but above the instrument detection limit (IDL) or method detection limit (MDL).

J+ – Results with a "+" have the potential for positive bias and are considered estimated.

J- – Results with a "-" have the potential for negative bias and are considered estimated.

R – The positive results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified. Negative radiochemical results with absolute values greater than their 2-sigma uncertainty were rejected in accordance with the USACE Kansas City guidance document.

U – The result is considered non-detect. The laboratory assigned this flag to analytes not present at detectable concentrations (above the IDL or MDL). The data validator assigned this flag when an analyte was considered non-detect as a result of blank contamination. If the result is above the PQL, the PQL is considered elevated.

UJ – The non-detect value is considered estimated.

UR – The non-detect results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified.

The following sections summarize the data evaluation for each phase of fieldwork.

2.1 Phase I Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DVM was generated for each SDG reported and a copy of the DVM is included in Appendix A. The results were checked for completeness and are included in Appendix B. An index of the samples and associated SDG is provided in the beginning of the Appendix A for cross reference. Tables 1 and 2 of the DVM summarize the samples and methods included for each SDG.

Sample Delivery Groups for Phase I	Laboratory for Phase I
NY116283	STL Burlington
NY116336	STL Burlington
NY117484	STL Burlington
NY117485	STL Burlington
ESN 0609028	ESN

2.1.1 Field Data Quality Evaluation

Table 2.1-1 provides a summary of the field QC samples and the associated field samples. Table 2.1-2 provides summaries of the sample collection frequency for the field QC samples by method.

Table 2.1-1 Field QC Associations for RI Phase I, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
SG-TB-01	SG-001 through SG-089	TB	0609028
SG-900	SG-015	FD	0609028
SG-901	SG-026	FD	0609028
SG-902	SG-028	FD	0609028
SG-903	SG-044	FD	0609028
SG-904	SG-062	FD	0609028
SG-905	SG-067	FD	0609028
SG-906	SG-068	FD	0609028
SG-907	SG-070	FD	0609028
SG-908	SG-077	FD	0609028
SSA-TB-01	B70-SSA-01 through B70-SSA-012	TB	NY116283
B70-SSA-090	B70-SSA-012	FD	NY116283
NS-90	NS-03	FD	NY116336
IA-TB-01	B70-SSA-01; B70-SSA-02; B70-SSA-03; B140-SSA-01; B140-SSA-02; B140-SSA-03; B100-SSA-01; B100-SSA-02; B100-SSA-03	TB	NY117484; NY117485
IA-TB-02	B100-IA-01; B100-IA-02; B100-IA-03; OA-01; OA-02; OA-03; B70-IA-01; B70-IA-02; B70-IA-03; B140-IA-01; B140-IA-02; B140-IA-03	TB	NY117484; NY117485
B70-IA-090	B70-IA-02	FD	NY117484
B70-SSA-092	B70-SSA-15	FD	NY117484; NY117485

Key:
TB = Trip Blank.
FD = Field Duplicate.

Table 2.1-2 Field QC Samples by Method for RI Phase I, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
8082	Soil	5	1	20%	NA	NA
8260B	AIR	89	9	10%	1	NA
TO-15 Full	AIR	32	3	10%	3	NA

Key:
NA = Not Applicable

2.1.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DVM. Field duplicate results are summarized on Table 4 of the DVM. Field duplicate results for the passive soil gas

analysis indicate a high level of variability for benzene, toluene, tetrachloroethene, and acetone. Samplers containing two sorbent wires provided by the laboratory were identified as the field duplicates. Sampling or sample handling procedures are not considered of concern because of the minimal handling by field personnel. Results indicate variability within the method. Results are considered estimated.

The field duplicate canister B70-SSA-092 was received at +0.2 Hg and results did not correspond to those of the parent sample B70-SSA-15. A canister leak was indicated. Results of this field duplicate were rejected and no qualification of the parent sample was made based on field duplicate results.

Field duplicate B70-SSA-090 results were poor, comparing better to other sample results than to those of the parent sample, B70-SSA-012. It was suspected that the canister may have been mislabeled or switched prior to analysis. An investigation of field and laboratory records did not substantiate the suspicion. Positive results for the parent and field duplicate samples are qualified as estimated.

Field duplicate results for sample B70-IA-090 show good precision. Three compounds cyclohexane, heptane, and hexane, showed a high level of variability. The non-polar nature of these solvents impacted reproducibility. Results for these compounds were qualified as estimated.

Field duplicate results for the PCB analysis indicate good precision.

2.1.1.2 Field Blanks

Field blanks were not collected because all samples were collected with disposable or dedicated equipment. Trip blanks arrived at the laboratory with the air samples. Several trace level contaminants were detected as indicated on Table 3.1-1. The associated sample results were qualified as noted in Section 2.1.2.

2.1.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DVM in Appendix A and summarized in a separate section for each analytical method described below.

Table 3 in the data validation memorandum provides a list of sample results qualified and the reason for data qualification.

2.1.2.1 Soil Gas Samples – Chemical Analysis

Method 8260B – Modified

1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,4-dichlorobenzene, acetone, benzene, styrene, tetrachloroethene, and toluene were detected in the passive soil gas trip blank. The contamination is the same as the method blank and, therefore, related to laboratory background instead of field conditions. The sample results were qualified for method blank contamination as noted below. Associated sample results were either qualified "U" at the reporting limit, "UJ" at the concentration detected if five times below the blank value (10 times below blank value for acetone), or "J" if the concentration was five times above the blank value (10 times above blank value for acetone).

1,2,4-Trichlorobenzene, 1,2,3-trichlorobenzene, acetone, the dichlorobenzene isomers, xylene, styrene, toluene, and tetrachloroethene were detected in the method blanks for the passive soil gas analysis. Associated sample results were qualified as "U" or "J" as estimated.

Acetone recoveries were low for two passive soil gas LCSs and tetrachloroethene recovery was high for one passive soil gas LCS. These are sporadic and marginal QC failures and do not indicate analytical concerns.

Matrix duplicates were analyzed for the passive soil gas analysis by Method SW8260-modified. Positive benzene, tetrachloroethene, toluene, and acetone results for the parent samples of laboratory duplicates were qualified as estimates based on high RPD values.

2.1.2.2 Indoor and Sub-slab Air – Chemical Analysis

Method TO-15

Acetone, benzene, chloroform, chloromethane, dichlorodifluoromethane, hexane, methyl ethyl ketone, methylene chloride, toluene, and trichloroethene were detected in the sub-slab trip blank, IA-TB-01. Associated positive sample results were qualified "U."

1,3,5-trimethylbenzene, 1,3-butadiene, hexane, heptane, and 1,4-dioxane recoveries were low for some EPA Method TO-15 control samples. Bromoform and hexachlorobutadiene recoveries were high for one EPA Method TO-15 LCS. These are sporadic and marginal QC failures and do not indicate analytical concerns.

LCS duplicate analysis was performed for EPA Method TO-15. RPD values were high for 3-chloropropene, chloromethane, and vinyl chloride for one LCSD. All other RPD values were within control limits.

2.1.2.3 Soil Samples – Chemical Analysis

Method 8082

Matrix spike analysis was performed for the Method 8082 analysis. The sample required analysis at a dilution and recovery control limits were not applied.

2.2 Phase IIa Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. The SDGs are listed below. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. A DVM was generated for each SDG reported and a copy of the DVM is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. Tables 1 and 2 of the DVM summarize the samples and methods included for each SDG.

Sample Delivery Groups for Phase IIa	Laboratory for Phase IIa
F7E160185	TestAmerica St. Louis
F7E170223	TestAmerica St. Louis
F7E170293	TestAmerica St. Louis
F7E170301	TestAmerica St. Louis
F7E180157	TestAmerica St. Louis
F7E180167	TestAmerica St. Louis
F7E190188	TestAmerica St. Louis
F7E190191	TestAmerica St. Louis
F7E220157	TestAmerica St. Louis
F7E230204	TestAmerica St. Louis
F7E240219	TestAmerica St. Louis
F7E250246	TestAmerica St. Louis
F7E260122	TestAmerica St. Louis
F7E300211	TestAmerica St. Louis
F7E310144	TestAmerica St. Louis
F7F010141	TestAmerica St. Louis
F7F020168	TestAmerica St. Louis
F7F050172	TestAmerica St. Louis
F7F060163	TestAmerica St. Louis
F7F070252	TestAmerica St. Louis
F7F080158	TestAmerica St. Louis
F7F120201	TestAmerica St. Louis
F7F120301	TestAmerica St. Louis
F7F130187	TestAmerica St. Louis
F7F140207	TestAmerica St. Louis
F7F150262	TestAmerica St. Louis
F7F160101	TestAmerica St. Louis
F7F190290	TestAmerica St. Louis

Sample Delivery Groups for Phase IIa	Laboratory for Phase IIa
F7F210161	TestAmerica St. Louis

2.2.1 Field Data Quality Evaluation

Table 2.2-1 provides a summary of the field QC samples and the associated field samples. Table 2.2-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.2-1 Field QC Associations for RI Phase IIa, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
SG-TB-01	SG-001 through SG-089	TB	0609028
SG-900	SG-015	FD	0609028
100-10-931-Z2	100-10-Z2	FD	F7F120301
100-10-931-Z2	100-10-Z2	FD	F7F160101
100-11-930	100-11-Z1	FD	F7F080158
100-932-Z1	100-01-Z1	FD	F7F140207
100-933-Z1	100-04-Z1	FD	F7F140207
140-11-920	140-11-Z1	FD	F7F080158
DR-L-964-Z1	DR-L-Z1	FD	F7F010141
DR-O-900-Z1	DR-O-Z1	FD	F7F050172
DRY-D-901	DRY-D-Z4	FD	F7F060163
DRYH-A-902	DRYH-A-Z1	FD	F7F060163
EM-5-SO-991	EM5-SO-01	FD	F7F150262
GPR-F-990	GPR-F-SO-01	FD	F7F130187
SMP-1-903-Z1	SMP-1-Z2	FD	F7F080158
SU08-09-972	SU08-09-Z1	FD	F7F070252
SU08-09-973	SU08-09-Z2	FD	F7F070252
SU08-13-974	SU08-13-Z1	FD	F7F070252
SU08-13-976	SU08-13-Z2	FD	F7F070252
SU08-978-Z1	SU08-01-Z1	FD	F7F130187
SU08-979-Z2	SU08-01-Z2	FD	F7F130187
SU09-950-Z1	SU09-08/D-Z5	FD	F7E160185
SU09-950-Z1	SU09-08/D-Z5	FD	F7E170293
SU09-951-Z1	SU09-10-Z5	FD	F7E180157
SU09-951-Z1	SU09-10-Z5	FD	F7E180167
SU09-952-Z1	SU09-06-Z2	FD	F7E220157
SU10-961-Z1	SU10-05-Z2	FD	F7E260122
SU10-963-Z1	SU10-12-Z1	FD	F7E310144
SU10-966-Z1	SU10-08-Z1	FD	F7E300211
SU10-967-Z1	SU10-17-Z1	FD	F7F050172
SU10-968-Z1	SU10-14-Z1	FD	F7F050172
SU10-977-Z1	SU10-03-Z1	FD	F7F120301
SU10-977-Z1	SU10-03-Z1	FD	F7F190290
SU11-965-Z1	SU11-17-Z2	FD	F7F060163
SU11-969-Z1	SU11-21-Z1	FD	F7F060163

Table 2.2-1 Field QC Associations for RI Phase IIa, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
SU11-970-Z1	SU11-10-Z1	FD	F7F060163
SU11-971-Z1	SU11-11-Z1	FD	F7F070252
SU11-975-Z1	SU11-05-Z1	FD	F7F070252
SU12-960-Z1	SU12-13-Z2	FD	F7E250246
SU12-962-Z1	SU12-15-Z1	FD	F7E300211
SU13-953-Z1	SU13-14-Z1	FD	F7E220157
SU13-955-Z1	SU13-04-Z1	FD	F7E230204
SU13-956-Z1	SU13-09-Z1	FD	F7E230204
SU14-954-Z1	SU14-17-Z1	FD	F7E230204
SU14-957-Z1	SU14-12-Z1	FD	F7E240219
SU14-958-Z1	SU14-20-Z1	FD	F7E240219
SU14-959-Z1	SU14-02-Z2	FD	F7E240219
TB-01	RB-01	TB	F7E220157
TB-02	RB-02	TB	F7E230204
TB-03	RB-03	TB	F7E250246
TB-04	RB-05	TB	F7E300211
TB-05	RB-06	TB	F7E310144
TB-06	RB-07 and RB-08	TB	F7F070252
TB-07	RB-09A and RB-10A	TB	F7F130187
TB-08	RB-11 and RB-12	TB	F7F120201
TB-09	RB-13 and RB-14	TB	F7F140207
TB-10	RB-15 and RB-16	TB	F7F160101
RB-01	All soil boring samples	EB	F7E220157
RB-02	All soil boring samples	EB	F7E230204
RB-03	All soil boring samples	EB	F7E250246
RB-04	All soil boring samples	EB	F7E250246
RB-05	All soil boring samples	EB	F7E300211
RB-06	All soil boring samples	EB	F7E310144
RB-07	All soil boring samples	EB	F7F070252
RB-08	All soil boring samples	EB	F7F070252
RB-09	All soil boring samples	EB	F7F120301
RB-09A	All soil boring samples	EB	F7F130187
RB-10	All soil boring samples	EB	F7F120301
RB-10A	All soil boring samples	EB	F7F130187
RB-11	All soil boring samples	EB	F7F120201
RB-12	All soil boring samples	EB	F7F120201
RB-13	All soil boring samples	EB	F7F140207
RB-14	All soil boring samples	EB	F7F140207
RB-15	All soil boring samples	EB	F7F160101
RB-16	All soil boring samples	EB	F7F160101

Key:
EB = Equipment Blank.
TB = Trip Blank.
FD = Field Duplicate.

Table 2.2-2 Field QC Samples by Method for RI Phase IIa, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
6010B	Soil	360	41	11%	NA	18
8082	Soil	8	1	13%	NA	NA
8260B	Soil	364	40	11%	10	16
9315 MOD	Soil	1	0	0%	NA	18
9320 MOD	Soil	1	0	0%	NA	NA
DOE A-01-R Th	Soil	363	41	11%	NA	18
DOE A-01-R Ur	Soil	363	41	11%	NA	18
DOE GA-01-R	Soil	362	41	11%	NA	18

Key:
NA = Not applicable.

2.2.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DVM. Field duplicate results are summarized on Table 4 of the DVM. Overall, field duplicate precision was good. RPD criteria were exceeded for five field duplicate samples. Nickel results for the parent and field duplicate samples were qualified as estimated. The tetrachloroethene RPD value for the field duplicate analysis of sample DRYH-A-Z1 was high. Results are qualified as estimated.

2.2.1.2 Field Blanks

Rinsate samples were collected at a rate of one every 10 boreholes. The bulk of the field collection equipment was disposable/dedicated equipment, however, small components of the system were decontaminated between boreholes. E & E did not anticipate collecting rinsate samples, however, during the initial sampling, the decontamination of the small component was identified. The rinsate requirement was modified to be per boring instead of per sample, due the limited exposure of the samples. Trip blanks were shipped with each set of rinsate blanks. Field blanks contained low levels of Ra-226, Ra-228, Th-230, Th-228, U-235/236, and U-238. Low levels of toluene, methylene chloride, chloromethane, and bromochloromethane were also detected. Acetone levels exceeding the calibration range were detected.

Toluene, methylene chloride, and Th-230 were consistently detected in the field blanks as noted for method blanks and are likely from a laboratory source. Acetone also was found at high levels in the later rinsates. The presence of trihalomethanes indicates a potential source of chlorinated water (possibly the water used to wash down the sampling equipment). The increase in contaminants detected in the rinsate (i.e., primarily acetone) change in concentration roughly coincides with a change in water source used for the rinsates. The water shipped from the laboratory or possibly the containers used to ship the water from the laboratory are likely the source of acetone in the rinsates not the field decontamination procedures. Acetone was not detected in the associated field samples and

was not used in the field as a decontamination agent. Deionized water used for field blanks and decontamination for the next sampling round shall be ultra pure blank water purchased from an environmental sampling supply company. The presence of these compounds in the samples should be considered potential suspect due to field or laboratory background.

2.2.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DVM in Appendix A and summarized in a separate section for each analytical method below.

Table 3 in the data validation memorandum provides a list of sample results qualified and the reason for data qualification.

2.2.2.1 Soil Samples – Chemical Analysis

Method 8260B

Toluene, methylene chloride, trichlorofluoromethane, styrene, the dichlorobenzene isomers, ethylbenzene, and xylenes were detected in method blanks at concentrations below the reporting limits. Toluene was consistently detected in the method blanks. Associated sample results were qualified "U" at the reporting limit.

Surrogate recovery was above the QC limit for most samples. Recovery was below QC limits for 18 samples. Of the 18 samples, DRH-A2-Z2, DRH-B-Z1, and SU12-21-Z2 yielded recovery for one surrogate that was below 10%. The laboratory stated recoveries outside of QC limits were a function of sample matrix effects, substantiated by reanalysis yielding similar recoveries. However, reanalysis were performed after hold time expired and raw data was not provided. Positive sample results associated with high and low recoveries were qualified "J." Non-detect results associated with low recoveries were qualified "UJ. Non-detect results associated with recoveries <10% were rejected "R."

Internal standard area responses were low for several samples. Associated positive sample results were qualified "J" and non-detect results were qualified "UJ." Responses for sample SU11-02-Z1, SU11-969-Z1 and DRH-A2-Z2 were below 10%. Results for these samples were rejected "R."

Laboratory control sample recoveries were low for chloroethane, 1,1,2,2-tetrachloroethane, 1,1-dichloroethene, carbon disulfide and 1,4-dioxane. Associated sample results were qualified "UJ." The majority of LCS outliers were due to high recovery or high LCS/LCSD RPD values.

Twenty samples were analyzed as MS/MSDs. All indicated matrix effects with recovery of several compounds outside of QC limits. Associated parent sample results were qualified based on high or low recoveries. 1,2,4-Trichlorobenzene and 1,2,3-trichlorobenzene results for SU11-04-Z1 were rejected based on no recovery.

Several sample results were qualified based on initial and/or continuing calibration criteria outliers. Non-detect results were qualified "UJ" if the calibration criteria indicated a low bias. Associated positive results were qualified "J."

Results for samples SU12-03/I-Z1 and SU08-03-Z1 were rejected based on hold time exceedance. Sample SU09-03-Z1 was reanalyzed using methanol extraction after hold time expired due to the level of tetrachloroethene present. Only the tetrachloroethene result was reported from this dilution and the result was qualified "J" due to the holding time. Re-analysis to substantiate matrix effects based on surrogate recoveries and/or internal standard area responses were performed after hold time expired.

Methods 8082

Aroclor 1260 and Aroclor 1016 results for sample SU14-11-Z1 were qualified "UJ" based on high RPD values for the MS/MSD analysis.

Methods 6010B/7471A

A number of sample nickel results were qualified "UJ" or "J" based on matrix spike recovery and RPD values for the field duplicate or laboratory MSD.

2.2.2.2 Soil Samples – Radiochemical Analysis

Many results were qualified with "UJ" based on the relationship between the result, the uncertainty, and the minimum detectable concentration (MDC). The "UJ" flag indicates that the MDC is uncertain and that the reported result is nearly indistinguishable from the MDC. In most cases, the "UJ" was applied to a result that was already "U" qualified (< MDC) by the laboratory, but not always.

The laboratory added a "J" qualifier to each result that was greater than the MDC and less than the reporting limit. Addition of this qualifier is not the convention for radiochemical data, since the uncertainty for each result is reported. The "J" qualifiers were removed from these results during the validation process.

Method EML A-01-R MOD

Several Th-230 results were "J" qualified due to peak shifting greater than 40 keV from the known energy.

A few of the samples had high uranium activity and needed to be diluted and re-extracted then recounted.

There were several instances of Th-230 method blank contamination that affected a few sample results ("J" qualified).

There were a few instances when MS/MSD and/or tracer recoveries were outside of acceptance limits, which were attributed to sample matrix effects. MS/MSD results were not qualified based on the data validation guidance.

Method EML GA-01-R MOD

The densities of 68% of the samples did not comply with the USACE guidance with respect to density of sample compared to the density of the solid standard used to calibrate the gamma spectroscopy systems. Per the guidance, 68% of the samples would have "J" qualifiers attached to their gamma results. The laboratory will procure a 2 grams per cubic centimeters (g/cc) standard and evaluate the soil density relative to the new standard. The laboratory will re-run samples under the calibration with the higher density standard. The gamma data from both runs will be compared to determine a "known" bias to the density differences. There were a few instances where an insufficient sample was received by the lab to fill the container, causing the results to be estimated with a low bias.

In several instances, the reproducibility of some of the detected radionuclides in the laboratory method duplicate was outside of the defined acceptance limits. Those gamma emitter results within the analytical batch were "J" qualified.

The gamma spectroscopy printouts reported the results in becquerel (Bq)/sample, but the certificates of analysis reported results as requested, in picocuries/gram (pCi/g). This required the validator to check the conversion calculation. This was checked on random samples after checking each result in the first few SDGs.

Method SW846 9315 MOD

This method was used for only one soil sample instead of the gamma spectroscopy method for Ra-226 analysis due to limited sample quantity.

Method SW846 9320 MOD

This method was used for only one soil sample instead of the gamma spectroscopy method for Ra-228 analysis due to limited sample quantity.

2.2.2.3 Concrete Samples – Radiochemical Analysis

Method EML A-01-R MOD

Sample F6-02 required dilution and re-extraction due to high uranium activity.

Method EML GA-01-R MOD

These samples did not require any qualification for gamma analysis.

2.2.2.4 Aqueous Samples (Rinsates) – Chemical Analysis

Method SW846 6010B
No rinsate sample results for this analysis were qualified.

Method SW846 8260B
Methylene chloride, acetone, chloromethane, and bromochloromethane were detected in the equipment blanks. Acetone concentrations detected in equipment blanks identified as RB-07, RB-08, RB-11, RB-12, RB-13 and RB-14 exceeded the upper calibration range resulting in analysis of the blanks at dilutions. The water source is suspect.

Acetone, toluene, and trichloroethene were detected in trip blanks. The trip blanks may be related to both the method blank and field blank contamination.

Criteria were not met for the tuning instrument performance check associated with the 6/25/07 initial calibration. Masses 75 and 176 were affected. Samples RB-11 and RB-12 were associated with this calibration. Sample RB-07 was analyzed after the instrument performance check expired.

Several sample results were qualified based on initial and/or continuing calibration criteria outliers. Non-detect results were qualified "UJ" if the calibration criteria indicated a low bias. Associated positive results were qualified "J."

2.2.2.5 Aqueous Samples (Rinsates) – Radiochemical Analysis

Method EML A-01-R MOD
Most of the alpha results for the rinsates were qualified U or UJ, with occasional low-level detections of Th-230, Th-228, U-235/236, and U-238.

Method EML RA-06-RC MOD
Most of the Ra-226 results were qualified U or UJ, with a few very low-level detections.

Method SW846 9315 MOD
Most of the Ra-228 results were qualified U or UJ, with a few very low-level detections.

2.3 Phase IIb Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. The SDGs are listed below. An SDGs is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. Samples were analyzed for volatile organic compounds by either Test America St. Louis or Test America, Knoxville. Both laboratories share a Laboratory Information Management System. Samples were logged in St. Louis with a work location of Knoxville. Knoxville performed the analysis, up-

loaded, and released the volatile data, while St. Louis performed the remainder of the analysis and reported the entire analytical lot. Knoxville scanned and posted the raw data (and any lab-generated forms) to a secure server site where St. Louis retrieved the information for inclusion in the data package. A DVM was generated for each SDG reported and a copy of the DVM is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. Tables 1 and 2 of the DVM summarize the samples and methods included for each SDG.

Sample Delivery Groups for Phase IIb	Laboratory for Phase IIb
F7J170197	TestAmerica St. Louis
F7J180209	TestAmerica St. Louis
F7J180215	TestAmerica St. Louis
F7J180221	TestAmerica St. Louis
F7J190135	TestAmerica St. Louis
F7J200141	TestAmerica St. Louis
F7J230124	TestAmerica St. Louis
F7J240297	TestAmerica St. Louis
F7J250239	TestAmerica St. Louis
F7J260313	TestAmerica St. Louis
F7J270115	TestAmerica St. Louis
F7J300150	TestAmerica St. Louis
F7J310158	TestAmerica St. Louis
F7K010154	TestAmerica St. Louis
F7K020128	TestAmerica St. Louis
F7K030109	TestAmerica St. Louis
F7K060142	TestAmerica St. Louis
F7K070137	TestAmerica St. Louis
F7K080236	TestAmerica St. Louis
F7K090188	TestAmerica St. Louis
F7K100117	TestAmerica St. Louis
F7K130132	TestAmerica St. Louis
F7K140241	TestAmerica St. Louis
F7K150173	TestAmerica St. Louis
F7K160210	TestAmerica St. Louis
F7L050327	TestAmerica St. Louis

2.3.1 Field Data Quality Evaluation

Table 2.3-1 provides a summary of the field QC samples and the associated field samples. Table 2.3-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.3-1 Field QC Associations for RI Phase IIb, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
100-11-991	100-11-Z3	FD	F7J310158
100-996-Z1	100-06/D-Z5	FD	F7K090188
140-994-Z1	140-07/D-Z8	FD	F7K070137
C10-02-983	C10-02-Z4	FD	F7K230133
C3-01-989	C3-01-Z4	FD	F7J270115
C7-981-Z1	C7-02-Z4	FD	F7J180215
C9-03/D-987	C9-03/D-Z8	FD	F7J250239
DR-K-993	DR-K-Z4	FD	F7K060142
EM-13-SO-998	EM-13-SO-01	FD	F7K140241
EM-8-1000	EM-8-SO-01	FD	F7K150173
LPH-C/D-Z2-982	LPH-C/D-Z2	FD	F7J190135
SU08-984-Z1	SU08-02/D-Z5	FD	F7J230124
SU08-986-Z1	SU08-11/D-Z1	FD	F7J240297
SU11-990-Z1	SU11-05/D-Z8	FD	F7J300150
SU12-11/I-995	SU12-11/I-Z4	FD	F7K080236
SU12-992-Z1	SU12-07/D-Z6	FD	F7K020128
SU12-997-Z1	SU12-17/I-Z2	FD	F7K140241
SU12-999-Z1	SU12-22/D-Z7	FD	F7K150173
SU13-07/D-980-Z8	SU13-07/D-Z8	FD	F7J180209
SU14-988-Z1	SU14-03/D-Z8	FD	F7J260313
TB-01	RB-02	TB	F7J180221
TB-02	RB-01; RB-03	TB	F7J190135
TB-03	FB-03; RB-05	TB	F7J230124
TB-04	FB-04; RB-06	TB	F7J240297
TB-05	FB-05; RB-07	TB	F7J250239
TB-06	FB-06; RB-08	TB	F7J260313
TB-07	FB-07; RB-09	TB	F7J270115
TB-08	FB-08; RB-10; RB-11	TB	F7J310158
TB-09	RB-12; RB-13	TB	F7K060142
TB-10	RB-14	TB	F7K070137
TB-11	RB-15	TB	F7K080236
TB-12	RB-16	TB	F7K090188
TB-13	RB-17	TB	F7K100117
TB-14	RB-18	TB	F7K130132
TB-15	RB-19; RB-20	TB	F7K150173
RB-01	All Soil Samples	EB	F7J190135
RB-02	All Soil Samples	EB	F7J180221
RB-03	All Soil Samples	EB	F7J190135
RB-04	All Soil Samples	EB	F7J230133
RB-05	All Soil Samples	EB	F7J230124
RB-06	All Soil Samples	EB	F7J240297
RB-07	All Soil Samples	EB	F7J250239
RB-08	All Soil Samples	EB	F7J260313
RB-09	All Soil Samples	EB	F7J270115
RB-10	All Soil Samples	EB	F7J310158

Table 2.3-1 Field QC Associations for RI Phase IIb, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
RB-11	All Soil Samples	EB	F7J310158
RB-12	All Soil Samples	EB	F7K060142
RB-13	All Soil Samples	EB	F7K060142
RB-14	All Soil Samples	EB	F7K070137
RB-15	All Soil Samples	EB	F7K080236
RB-16	All Soil Samples	EB	F7K090188
RB-17	All Soil Samples	EB	F7K100117
RB-18	All Soil Samples	EB	F7K130132
RB-19	All Soil Samples	EB	F7K150173
RB-20	All Soil Samples	EB	F7K150173
FB-01	All Soil Samples	FB	F7J170197
FB-02	All Soil Samples	FB	F7J180209
FB-02a	All Soil Samples	FB	F7J200141
FB-03	All Soil Samples	FB	F7J230124
FB-04	All Soil Samples	FB	F7J240297
FB-05	All Soil Samples	FB	F7J250239
FB-06	All Soil Samples	FB	F7J260313
FB-07	All Soil Samples	FB	F7J270115
FB-07a	All Soil Samples	FB	F7J300150
FB-08	All Soil Samples	FB	F7J310158
FB-09	All Soil Samples	FB	F7K020128

Key:
FD = Field duplicate.
TB = Trip blank.
EB = Equipment rinsate.
FB = Field blank.

Table 2.3-2 Field QC Samples by Method for RI Phase IIb, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Rinsate Blanks
6010B	Soil	209	20	10%	NA	20
8260B	Soil	209	20	10%	15	20
DOE A-01-R Th	Soil	209	20	10%	NA	20
DOE A-01-R Ur	Soil	209	20	10%	NA	20
DOE GA-01-R	Soil	209	20	10%	NA	19

2.3.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DVM. Field duplicate results are summarized on Table 4 of the DVM. Overall, field duplicate precision was good with sporadic high RPD values for nickel, methylene chloride, toluene, and radiochemistry parameters. The radiochemical results were evaluated using the normalized absolute difference (NAD) in addition to the RPD. In cases where the RPD was high, the NAD was usually within acceptance limits (≤1.96). The NAD results

are summarized in Table 4 (RAD NAD Summary Report) of the DVM. Parent and field duplicate samples associated with high RPD values were qualified as estimated.

2.3.1.2 Field Blanks

Rinsate samples were collected at a rate of one every 10 samples. The rinsates were collected from split-spoon samplers that were all purchased new by the driller for this phase of the project. Trip blanks were shipped with each set of rinsate blanks. Empty volatile vials identified as field blanks (FB) were included in nine shipments. These vials were filled at the laboratory and analyzed for VOCs. The FBs were added to address specifically the levels of contaminants in the method blanks from the previous rounds. Since no compounds of concern were found in the samples or laboratory method blank, the FB samples were not analyzed after the first few shipments.

Chloroform was detected in all rinsate blanks except one. Sporadic, low-level detections of toluene, styrene, methylene chloride, chloromethane, tetrachloroethene, and nickel were detected in some of the rinsate blanks. Similar detections were made for the associated method blanks indicating a laboratory source. Significant concentrations of benzene and chlorobenzene were detected in one rinsate blank sample (RB-06). Due to the high levels detected in the initial run, the laboratory analyzed this sample at multiple concentrations and the dilution factor correction resulted in elevated concentrations for several other detected compounds (e.g., 1,1,2-trichloroethane, 1,1-dichloroethane, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, trichloroethene, vinyl chloride, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, chloroform, methylcyclohexane, methylene chloride, o-xylene, tetrachloroethene, and toluene). Benzene and chlorobenzene were not detected in the associated on-site soil samples; therefore, this rinsate contamination has no impact on the sample results. An investigation of the laboratory raw data and logbooks does not indicate the laboratory as the source of the contaminants. An investigation of field sampling documentation does not indicate any problems or concerns. Low levels of benzene, chlorobenzene, trichlorobenzene, and dichlorobenzene were detected in some soils and field blanks. However, the possibility that the laboratory mislabeled sample containers from another project site appears likely as no significant field source could be identified.

Low levels of acetone, bromomethane, methylene chloride, and toluene were detected in the trip blanks. Levels were consistent with those detected in the laboratory method blanks.

Low levels of acetone, chloromethane, cyclohexane, methyl acetate, methylene chloride, and toluene were detected in the field blanks. Low levels of 1,2,3-trichlorobenzene, 1,2-dichlorobenzene, xylene, styrene and trichlorofluoromethane were detected in one field blank, FB-02, but were not detected on the

associated samples. Levels were consistent with those detected in the laboratory method blanks.

Low levels of uranium and thorium isotopes were detected in a few of the equipment rinsate blank samples. Levels were generally consistent with those detected in the laboratory method blanks with a few exceptions. A concentration of 2.08 pCi/L of U-233/234 was reported in rinsate sample RB-13, which was taken following decontamination of the equipment used to collect soil samples at boring locations SU12-03/I and DR-K. The samples from these borings had elevated levels of U-233/234 (maximum 63.7 pCi/g). This may indicate that the decontamination of the split spoons was incomplete. Although the split spoons were swiped with a masselin cloth and checked for radiation contamination in the field, the concentration was likely too low for detection by the field equipment. There appears to have been minimal impact on the next set of samples collected with these split spoons (SU12-04/I and DR-J). The U-233/234 results were at background levels for SU12-04/I and slightly elevated at 8.0 pCi/g for sample DR-J. In addition, a concentration of 0.51 pCi/L of U-233/234 was reported in rinsate sample RB-15, which was taken following decontamination of the equipment used to collect soil samples at boring locations SU12-12/I and SU12-11/I. The samples from SU12-11 had elevated levels of U-233/234 (maximum 41.3 pCi/g). There appears to have been minimal, if any, impact on the next set of samples collected (DR-CC, DR-Y, and DR-BB), which had U-233/234 levels ranging from 0.306 to 0.66 pCi/g.

2.3.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DVM in Appendix A and summarized in a separate section for each analytical method below.

Table 3 in the data validation memorandum provides a list of sample results qualified and the reason for data qualification.

2.3.2.1 Soil Samples – Chemical Analysis

Method 8260B

Acetone, methylene chloride, toluene, and the dichlorobenzene isomers were detected in the method blanks analyzed by TestAmerica St. Louis at concentrations below the reporting limits. Acetone, methylene chloride, 2-butanone, bromomethane, carbon disulfide, chloromethane, 1,2,4-trichlorobenzene, 1,2,3-trichlorobenzene, 1,2-dibromo-3-chloropropane, and toluene were detected in the method blanks analyzed by Test America Knoxville and concentrations were below the reporting limit. Associated sample results were qualified "U" at the reporting limit. Most samples were qualified for methylene chloride, carbon disul-

fide, and toluene at levels near the reporting limit. Some samples were qualified for trace levels of trihalomethane typically found in potable water.

Surrogate recovery was outside of QC limits for 53 samples. For one sample, DR-Z-Z1 recovery was 0% for surrogates 4-bromofluorobenzene and dibromofluoromethane. The laboratories substantiated matrix effects by reanalysis. For samples 100-06/D-Z3, 100-996-Z1, and LPH-C/D-Z1 results of the initial analysis are reported even though the reanalysis yielded improved surrogate recoveries. Results of the initial analyses correspond to those of adjacent samples. The reanalysis of DR-Z-Z1 was performed after hold time expired. Positive sample results associated with high and low recoveries were qualified "J+" or "J-." Non-detect results associated with low recoveries were qualified "UJ." Non-detect results associated with recoveries <10% were rejected "R." A second sample was collected from the Z1 interval at boring DR-2. Surrogate recovery was acceptable.

Internal standard area responses were low for eight soil samples. Associated positive sample results were qualified "J" and non-detected results were qualified "UJ." For sample C11-01-Z7 internal standard response for the initial analysis was -100%D, resulting in high detected concentrations. Responses for the reanalysis were within the acceptable range. Results are reported from the reanalysis of C11-01-Z7.

Laboratory control sample recovery was low for methyl acetate. Associated sample results were qualified "UJ." The majority of LCS outliers were due to high LCS/LCSD RPD values.

Ten samples were analyzed as MS/MSDs. Eight indicated matrix effects with recovery of several compounds outside of QC limits. Associated parent sample results were qualified based on high or low recoveries.

Several samples were qualified based on continuing calibration criteria outliers that indicated a low bias. Non-detect results were qualified "UJ" and associated positive results were qualified "J" or "J-."

Selected results for samples DR-BB-1/2-Z1, DR-BB-1/2-Z2, DR-X-Z2, and EM-35-SO-01 were qualified "UJ" or "J-" due to hold time violations. The samples were either reanalyzed or analyzed at dilutions after hold time expired. All initial analysis was completed within holding times.

Method 6010B

A number of sample nickel results were qualified "UJ" or "J" based on matrix spike recovery.

2.3.2.2 Soil Samples – Radiochemical Analysis

Method DOE GA-01-R Mod

Approximately 55% of the gamma spec results were J qualified because the sample density was not within 70-130% of the calibration standard density (1.50 g/cc). The laboratory has purchased a new gamma standard with a density that is appropriate for the majority of the Phase IIb soil samples (2.0 g/cc). Twenty selected samples have been reanalyzed using the new standard and the results for most of the gamma emitters are presented on Table 2.3-3. An evaluation of the ratio of the original result to the new result (see Table 2.3-3) shows that most of the gamma emitters did not show any systematic bias (i.e., the ratios were both greater than and less than 1). Gamma emitters, Pb-214 and Th-234, are possible exceptions. For each gamma emitter, the original and re-calibrated results were plotted and evaluated with a linear regression. Pb-214 and Th-234 original and re-calibrated results demonstrated good correlation and showed that the reanalysis results were slightly higher than the original ones. The higher results are consistent with the anticipated bias for a high density sample analyzed against a lower density standard because gamma emissions are shielded and/or reabsorbed to a greater extent as the sample density increases.

Several gamma spectroscopy results were qualified with UJ because of the relationship between the result, the MDC, and the uncertainty. Most of these were originally U qualified and the J was added because the MDC was considered inexact and the result was near the MDC. The qualified results are listed in the Qualified Rad Detail portion of Table 3 in the DVM.

Method DOE A-01-R Th

There were several Th-230 peaks with energies that were shifted more than 40 keV from the known energy. Those Th-230 results were J qualified. Some of the apparent shifts were due to manual integrations that were not updated properly and the actual energies were correct; those results were not qualified.

Several Th-230 results were qualified for blank contamination that may have been due in part to the Th-229 tracer peak tailing. The Th-229 tracer peak is adjacent to the Th-230 peak.

A few instances of poor Th-229 tracer recoveries necessitated sample repreparation and reanalysis, with insufficient sample remaining to meet the reporting limits.

Several thorium results were qualified with UJ because of the relationship between the result, the MDC, and the uncertainty. Most of these were originally U qualified and the J was added because the MDC was considered inexact and the result was near the MDC. The qualified results are listed in the Qualified Rad Detail portion of Table 3 in the DVM.

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:			Radium-226						Radium-228					
Units:			pCi/g						pCi/g					
Sample ID	Sample Depth	Sample Date	Result			Qual	MDC	Ratio[1]	Result			Qual	MDC	Ratio
EM-8-SO-02	5 ft	11/14/2007	0.55	±	0.14	J	0.11	0.60	1.28	±	0.20	J	0.1	0.84
EM-8-SO-02[3]			**0.33**	±	**0.14**		**0.19**		**1.07**	±	**0.24**		**0.33**	
EM-9-SO-02	5 ft	11/14/2007	0.52	±	0.15	J	0.13	0.56	0.68	±	0.18	J	0.26	0.79
EM-9-SO-02[3]			**0.29**	±	**0.14**		**0.19**		**0.54**	±	**0.18**		**0.25**	
EM-28-SO-01	9 ft	11/12/2007	0.20	±	0.11	J	0.16	1.75	0.26	±	0.16	J	0.20	0.85
EM-28-SO-01[3]			**0.35**	±	**0.14**		**0.18**		**0.22**	±	**0.21**	**UJ**	**0.33**	
EM-35-SO-01	1 ft	11/12/2007	0.175	±	0.091	J	0.14	1.96	0.20	±	0.11	UJ	0.23	0.85
EM-35-SO-01[3]			**0.343**	±	**0.097**		**0.061**		**0.17**	±	**0.16**	**UJ**	**0.26**	
EM-16-SO-01	1 ft	11/13/2007	0.182	±	0.084	J	0.12	1.68	0.27	±	0.12	J	0.22	1.33
EM-16-SO-01[3]			**0.306**	±	**0.098**		**0.087**		**0.36**	±	**0.2**		**0.26**	
DRH-A1-Z4	24-26 ft	11/02/2007	0.137	±	0.099	UJ	0.15	0.61	0.20	±	0.11	J	0.20	0.85
DRH-A1-Z4[3]			**0.084**	±	**0.089**	**U**	**0.15**		**0.17**	±	**0.14**	**UJ**	**0.21**	
DR-J-Z3	16-18 ft	11/06/2007	0.122	±	0.090	UJ	0.14	1.39	0.1	±	0.13	UJ	0.20	1.20
DR-J-Z3[3]			**0.169**	±	**0.084**		**0.11**		**0.12**	±	**0.12**	**U**	**0.19**	
C1-02-Z3	21-23 ft	11/01/2007	0.041	±	0.057	UJ	0.11	4.95	-0.04	±	0.32	UJ	0.24	-2.00
C1-02-Z3[3]			**0.203**	±	**0.067**		**0.039**		**0.08**	±	**0.13**	**U**	**0.23**	
C9-03/D-Z7	52-53 ft	10/24/2007	0.24	±	0.11	J	0.16	1.04	0.27	±	0.15	J	0.26	0.67
C9-03/D-Z7[3]			**0.25**	±	**0.13**		**0.19**		**0.18**	±	**0.19**	**UJ**	**0.29**	
C9-03/D-Z7[3] DUP			**0.278**	**±**	**0.091**		**0.1**		**0.28**	**±**	**0.13**		**0.15**	
C9-04/D-Z7	50-52 ft	10/23/2007	0.36	±	0.12	J	0.13	1.11	0.56	±	0.19	J	0.27	1.73
C9-04/D-Z7[3]			**0.4**	±	**0.12**		**0.15**		**0.97**	±	**0.2**		**0.09**	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:			Radium-226						Radium-228					
Units:			pCi/g						pCi/g					
Sample ID	Sample Depth	Sample Date	Result			Qual	MDC	Ratio[1]	Result			Qual	MDC	Ratio
C10-01-Z4	28-30 ft	10/22/2007	0.057	±	0.076	UJ	0.14	2.46	0.128	±	0.095	UJ	0.25	1.02
C10-01-Z4[3]			**0.14**	±	**0.1**	**UJ**	**0.16**		**0.13**	±	**0.15**	**UJ**	**0.24**	
SU11-990-Z1	61-62.5	10/29/2007	0.114	±	0.071	UJ	0.12	0.79	0.10	±	0.10	UJ	0.17	0.97
SU11-990-Z1[3]			**0.09**	±	**0.057**		**0.083**		**0.097**	±	**0.074**	**UJ**	**0.11**	
100-11-991	16-18	10/30/2007	0.18	±	0.10	J	0.16	1.91	0.52	±	0.18	J	0.28	1.08
100-11-991[3]			**0.344**	±	**0.09**		**0.098**		**0.56**	±	**0.12**		**0.15**	
SU12-03/I-Z3	16-18 ft	11/05/2007	0.244	±	0.092	J	0.11	0.74	0.29	±	0.14	J	0.21	0.60
SU12-03/I-Z3[3]			**0.18**	±	**0.1**		**0.15**		**0.173**	±	**0.09**		**0.11**	
SU12-07/D-Z5	38.5-39.5 ft	11/01/2007	0.053	±	0.072	UJ	0.12	2.30	0.078	±	0.098	UJ	0.16	1.67
SU12-07/D-Z5[3]			**0.122**	±	**0.076**		**0.11**		**0.13**	±	**0.12**	**UJ**	**0.18**	
SU12-08/I-Z1	7-8 ft	11/02/2007	0.059	±	0.079	UJ	0.13	2.73	0.15	±	0.13	UJ	0.19	0.86
SU12-08/I-Z1[3]			**0.161**	±	**0.066**		**0.083**		**0.129**	±	**0.088**		**0.12**	
SU12-11/I-Z1	6-8 ft	11/07/2007	0.35	±	0.13	J	0.16	0.97	0.35	±	0.15	J	0.24	0.77
SU12-11/I-Z1[3]			**0.34**	±	**0.14**		**0.18**		**0.27**	±	**0.19**		**0.26**	
SU12-11/I-Z2	10-12 ft	11/07/2007	0.50	±	0.14	J	0.12	1.12	0.32	±	0.17	J	0.30	2.00
SU12-11/I-Z2[3]			**0.56**	±	**0.11**		**0.07**		**0.64**	±	**0.12**	**UJ**	**0.05**	
SU14-03/D-Z2	13-14 ft	10/25/2007	0.48	±	0.14	J	0.16	1.35	0.70	±	0.23	J	0.27	1.20
SU14-03/D-Z2[3]			**0.65**	±	**0.12**		**0.07**		**0.84**	±	**0.19**		**0.17**	
140-07/D-Z4	30-31 ft	11/05/2007	0.127	±	0.068	J	0.10	0.52	0.13	±	0.12	UJ	0.19	0.62
140-07/D-Z4[3]			**0.066**	±	**0.088**	**U**	**0.15**		**0.08**	±	**0.13**	**UJ**	**0.21**	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:	Actinium-228				Bismuth-212						Bismuth-214					
Units:	pCi/g				pCi/g						pCi/g					
Sample ID	Result	Qual	MDC	Ratio	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio
EM-8-SO-02	0.20	J	0.1	0.84	--	±	--	--	--	--	0.55	±	0.14	J	0.11	0.60
EM-8-SO-02[3]	**0.24**		**0.33**		--	±	--	--	--		**0.33**	±	**0.14**		**0.19**	
EM-9-SO-02	0.18	J	0.26	0.79	--	±	--	--	--	--	0.52	±	0.15	J	0.13	0.56
EM-9-SO-02[3]	**0.18**		**0.25**		--	±	--	--	--		**0.29**	±	**0.14**		**0.19**	
EM-28-SO-01	0.16	J	0.20	0.85	--	±	--	--	--	--	0.20	±	0.11	J	0.16	1.75
EM-28-SO-01[3]	**0.21**	**U**	**0.33**		--	±	--	--	--		**0.35**	±	**0.14**		**0.18**	
EM-35-SO-01	--	--	--	--	--	±	--	--	--	--	0.175	±	0.091	J	0.14	1.96
EM-35-SO-01[3]	--	--	--		--	±	--	--	--		**0.343**	±	**0.097**		**0.061**	
EM-16-SO-01	0.12	J	0.22	1.33	--	±	--	--	--	--	0.182	±	0.084	J	0.12	1.68
EM-16-SO-01[3]	**0.2**		**0.26**		--	±	--	--	--		**0.306**	±	**0.098**		**0.087**	
DRH-A1-Z4	0.11	J	0.20	--	--	±	--	--	--	--	--	±	--	--	--	--
DRH-A1-Z4[3]	--	--	--		--	±	--	--	--		--	±	--	--	--	
DR-J-Z3	--	--	--	--	--	±	--	--	--	--	--	±	--	--	--	--
DR-J-Z3[3]	--	--	--		--	±	--	--	--		**0.169**	±	**0.084**		**0.11**	
C1-02-Z3	--	--	--	--	--	±	--	--	--	--	--	±	--	--	--	--
C1-02-Z3[3]	--	--	--		--	±	--	--	--		**0.203**	±	**0.067**		**0.039**	
C9-03/D-Z7	--	--	--	--	--	±	--	--	--	--	0.24	±	0.11	J	0.16	1.04
C9-03/D-Z7[3]	**0.19**	**UJ**	**0.29**		--	±	--	--	--		**0.25**	±	**0.13**		**0.19**	
C9-03/D-Z7[3] DUP	**0.13**		**0.15**		**0.52**	**±**	**0.28**		**0.28**		**0.278**	±	**0.091**		**0.1**	
C9-04/D-Z7	0.19	J	0.27	1.73	--	±	--	--	--	--	0.36	±	0.12	J	0.13	1.11
C9-04/D-Z7[3]	**0.2**		**0.09**		--	±	--	--	--		**0.4**	±	**0.12**		**0.15**	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:	Actinium-228				Bismuth-212						Bismuth-214					
Units:	pCi/g				pCi/g						pCi/g					
Sample ID	Result	Qual	MDC	Ratio	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio
C10-01-Z4	--	--	--	--	--	±	--	--	--	--	--	±	--	--	--	--
C10-01-Z4[3]	--	--	--		--	±	--	--	--		--	±	--	--	--	
SU11-990-Z1	--	--	--	--	--	±	--	--	--	--	--	±	--	--	--	--
SU11-990-Z1[3]	--	--	--		--	±	--	--	--		**0.09**	±	**0.057**		**0.083**	
100-11-991	0.18	J	0.28	1.08	--	±	--	--	--	--	0.18	±	0.10	J	0.16	1.91
100-11-991[3]	**0.12**		**0.15**		**0.41**	±	**0.25**		**0.36**		**0.344**	±	**0.09**		**0.098**	
SU12-03/I-Z3	0.14	J	0.21	0.60	--	±	--	--	--	--	0.244	±	0.092	J	0.11	--
SU12-03/I-Z3[3]	**0.09**		**0.11**		--	±	--	--	--		--	±	--	--	--	
SU12-07/D-Z5	--	--	--	--	--	±	--	--	--	--	--	±	--	--	--	--
SU12-07/D-Z5[3]	--	--	--		--	±	--	--	--		**0.122**	±	**0.076**		**0.11**	
SU12-08/I-Z1	--	--	--	--	--	±	--	--	--	--	--	±	--	--	--	--
SU12-08/I-Z1[3]	**0.088**		**0.12**		--	±	--	--	--		**0.161**	±	**0.066**		**0.083**	
SU12-11/I-Z1	0.15	J	0.24	0.77	--	±	--	--	--	--	0.35	±	0.13	J	0.16	0.97
SU12-11/I-Z1[3]	**0.19**		**0.26**		--	±	--	--	--		**0.34**	±	**0.14**		**0.18**	
SU12-11/I-Z2	0.17	J	0.30	2.00	--	±	--	--	--	--	0.50	±	0.14	J	0.12	1.12
SU12-11/I-Z2[3]	**0.12**		**0.05**		--	±	--	--	--		**0.56**	±	**0.11**		**0.07**	
SU14-03/D-Z2	0.23	J	0.27	1.20	--	±	--	--	--	--	0.48	±	0.14	J	0.16	1.35
SU14-03/D-Z2[3]	**0.19**		**0.17**		**0.47**	±	**0.27**		**0.38**		**0.65**	±	**0.12**		**0.07**	
140-07/D-Z4	--	--	--		--	±	--	--	--	--	0.127	±	0.068	J	0.10	--
140-07/D-Z4[3]	--	--	--		--	±	--	--	--		--	±	--	--	--	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:	Cesium-137						Potassium-40						Lead 210					
Units:	pCi/g						pCi/g						pCi/g					
Sample ID	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio
EM-8-SO-02	--	±	--	--	--	--	9.1	±	1.5	J	0.5	0.75	--	±	--	--	--	--
EM-8-SO-02[3]	--	±	--	--	--		**6.8**	±	**1.4**		**0.5**		--	±	--	--	--	
EM-9-SO-02	--	±	--	--	--	--	5.2	±	1.2	J	0.8	1.48	--	±	--	--	--	--
EM-9-SO-02[3]	--	±	--	--	--		**7.7**	±	**1.5**		**0.5**		--	±	--	--	--	
EM-28-SO-01	--	±	--	--	--	--	5.5	±	1.2	J	0.6	1.02	--	±	--	--	--	--
EM-28-SO-01[3]	--	±	--	--	--		**5.6**	±	**1.2**		**0.8**		--	±	--	--	--	
EM-35-SO-01	--	±	--	--	--	--	7.7	±	1.2	J	0.8	1.18	--	±	--	--	--	--
EM-35-SO-01[3]	--	±	--	--	--		**9.1**	±	**1.5**		**0.6**		--	±	--	--	--	
EM-16-SO-01	--	±	--	--	--	--	6.7	±	1.1	J	0.7	0.82	--	±	--	--	--	--
EM-16-SO-01[3]	--	±	--	--	--		**5.5**	±	**1.2**		**0.7**		--	±	--	--	--	
DRH-A1-Z4	--	±	--	--	--	--	5.3	±	1.1	J	0.6	0.63	--	±	--	--	--	--
DRH-A1-Z4[3]	--	±	--	--	--		**3.34**	±	**0.99**		**0.75**		--	±	--	--	--	
DR-J-Z3	--	±	--	--	--	--	3.27	±	0.95	J	0.70	1.01	--	±	--	--	--	--
DR-J-Z3[3]	--	±	--	--	--		**3.31**	±	**0.85**		**0.49**		--	±	--	--	--	
C1-02-Z3	--	±	--	--	--	--	3.16	±	0.76	J	0.63	1.08	--	±	--	--	--	--
C1-02-Z3[3]	--	±	--	--	--		**3.42**	±	**0.92**		**0.77**		--	±	--	--	--	
C9-03/D-Z7	--	±	--	--	--	--	3.66	±	0.88	J	0.95	0.87	--	±	--	--	--	--
C9-03/D-Z7[3]	--	±	--	--	--		**3.2**	±	**1.0**		**1.0**		--	±	--	--	--	
C9-03/D-Z7[3] DUP	--	±	--	--	--		**4.91**	±	**0.86**		**0.7**		--	±	--	--	--	
C9-04/D-Z7	--	±	--	--	--	--	2.04	±	0.72	J	0.68	0.82	--	±	--	--	--	--
C9-04/D-Z7[3]	--	±	--	--	--		**1.68**	±	**0.71**		**0.81**		--	±	--	--	--	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:	Cesium-137						Potassium-40						Lead 210					
Units:	pCi/g						pCi/g						pCi/g					
Sample ID	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio
C10-01-Z4	--	±	--	--	--	--	2.52	±	0.85	J	0.89	1.39	--	±	--	--	--	--
C10-01-Z4[3]	--	±	--	--	--		**3.51**	±	**0.998**		**0.68**		--	±	--	--	--	
SU11-990-Z1	--	±	--	--	--	--	--	±	--	--	--	--	--	±	--	--	--	--
SU11-990-Z1[3]	--	±	--	--	--		--	±	--	--	--		--	±	--	--	--	
100-11-991	--	±	--	--	--	--	5.2	±	1.1	J	0.6	1.35	--	±	--	--	--	--
100-11-991[3]	--	±	--	--	--		**7**	±	**0.99**		**0.44**		--	±	--	--	--	
SU12-03/I-Z3	--	±	--	--	--	--	4.75	±	0.95	J	0.32	1.07	--	±	--	--	--	--
SU12-03/I-Z3[3]	--	±	--	--	--		**5.1**	±	**1.1**		**0.4**		--	±	--	--	--	
SU12-07/D-Z5	--	±	--	--	--	--	0.89	±	0.52	J	0.68	1.07	--	±	--	--	--	--
SU12-07/D-Z5[3]	--	±	--	--	--		**0.95**	±	**0.52**		**0.61**		--	±	--	--	--	
SU12-08/I-Z1	--	±	--	--	--	--	7.8	±	1.3	J	0.4	1.00	--	±	--	--	--	--
SU12-08/I-Z1[3]	--	±	--	--	--		**7.8**		**1.1**		**0.5**		--	±	--	--	--	
SU12-11/I-Z1	--	±	--	--	--	--	6.1	±	1.3	J	0.6	0.77	--	±	--	--	--	--
SU12-11/I-Z1[3]	--	±	--	--	--		**4.7**	±	**1.2**		**0.9**		--	±	--	--	--	
SU12-11/I-Z2	--	±	--	--	--	--	6.1	±	1.2	J	0.4	1.09	--	±	--	--	--	--
SU12-11/I-Z2[3]	--	±	--	--	--		**6.63**	±	**0.96**		**0.44**		--	±	--	--	--	
SU14-03/D-Z2	--	±	--	--	--	--	8.2	±	1.4	J	0.5	1.16	--	±	--	--	--	--
SU14-03/D-Z2[3]	--	±	--	--	--		**9.5**	±	**1.2**		**0.4**		--	±	--	--	--	
140-07/D-Z4	--	±	--	--	--	--	2.12	±	0.69	J	0.86	1.83	--	±	--	--	--	--
140-07/D-Z4[3]	--	±	--	--	--		**3.89**	±	**0.99**		**0.43**		--	±	--	--	--	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:	Protactinium-234m						Lead-212						Lead-214					
Units:	pCi/g						pCi/g						pCi/g					
Sample ID	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio
EM-8-SO-02	--	±	--	--	--	--	1.21	±	0.24	J	0.19	1.06	0.35	±	0.12	J	0.15	1.51
EM-8-SO-02[3]	--	±	--	--	--		**1.28**	±	**0.18**		**0.14**		**0.53**	±	**0.12**		**0.12**	
EM-9-SO-02	--	±	--	--	--	--	0.74	±	0.14	J	0.12	1.08	0.36	±	0.12	J	0.15	1.14
EM-9-SO-02[3]	--	±	--	--	--		**0.8**	±	**0.15**		**0.14**		**0.41**	±	**0.11**		**0.14**	
EM-28-SO-01	--	±	--	--	--	--	0.41	±	0.12	J	0.11	0.70	0.38	±	0.11	J	0.09	1.03
EM-28-SO-01[3]	**29.8**	±	**9.3**	**J**	**8.5**		**0.289**	±	**0.093**		**0.1**		**0.39**	±	**0.11**		**0.13**	
EM-35-SO-01	--	±	--	--	--	--	0.265	±	0.088	J	0.10	0.94	0.206	±	0.080	J	0.12	1.47
EM-35-SO-01[3]	--	±	--	--	--		**0.248**	±	**0.069**		**0.07**		**0.303**	±	**0.084**		**0.084**	
EM-16-SO-01	--	±	--	--	--	--	0.47	±	0.16	J	0.14	0.89	0.269	±	0.078	J	0.12	1.26
EM-16-SO-01[3]	--	±	--	--	--		**0.42**	±	**0.1**		**0.1**		**0.34**	±	**0.11**		**0.12**	
DRH-A1-Z4	--	±	--	--	--	--	0.198	±	0.066	J	0.076	1.01	0.143	±	0.066	J	0.12	1.20
DRH-A1-Z4[3]	--	±	--	--	--		**0.2**	±	**0.085**		**0.1**		**0.171**	±	**0.088**		**0.12**	
DR-J-Z3	--	±	--	--	--	--	0.170	±	0.075	J	0.081	0.83	0.127	±	0.063	J	0.11	1.13
DR-J-Z3[3]	--	±	--	--	--		**0.141**	±	**0.063**		**0.072**		**0.144**	±	**0.063**		**0.076**	
C1-02-Z3	--	±	--	--	--	--	--	±	--	--	--	--	--	±	--	--	--	--
C1-02-Z3[3]	--	±	--	--	--		**0.142**	±	**0.059**		**0.066**		**0.114**	±	**0.058**		**0.075**	
C9-03/D-Z7	60.4	±	9.9	J	2.7	1.01	0.348	±	0.088	J	0.10	1.21	0.26	±	0.10	J	0.16	0.88
C9-03/D-Z7[3]	**61.0**	±	**13**	**J**	**4**		**0.42**	±	**0.13**		**0.14**		**0.229**	±	**0.095**		**0.12**	
C9-03/D-Z7[3] DUP	**63.0**	±	**9.6**	**J**	**3.4**		**0.414**	±	**0.093**		**0.1**		**0.413**	±	**0.099**		**0.087**	
C9-04/D-Z7	--	±	--	--	--	--	0.70	±	0.14	J	0.12	1.06	0.53	±	0.12	J	0.08	0.79
C9-04/D-Z7[3]	--	±	--	--	--		**0.74**	±	**0.13**		**0.1**		**0.42**	±	**0.1**		**0.12**	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:	Protactinium-234m						Lead-212						Lead-214					
Units:	pCi/g						pCi/g						pCi/g					
Sample ID	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio
C10-01-Z4	--	±	--	--	--	--	0.229	±	0.083	J	0.085	0.78	0.165	±	0.080	J	0.11	1.38
C10-01-Z4[3]	--	±	--	--	--		**0.179**	±	**0.084**		**0.1**		**0.227**	±	**0.088**		**0.099**	
SU11-990-Z1	--	±	--	--	--	--	0.107	±	0.051	J	0.075	1.05	0.133	±	0.069	J	0.11	1.33
SU11-990-Z1[3]	--	±	--	--	--		**0.112**	±	**0.054**		**0.074**		**0.177**	±	**0.057**		**0.061**	
100-11-991	--	±	--	--	--	--	0.73	±	0.15	J	0.12	0.97	0.289	±	0.084	J	0.11	1.12
100-11-991[3]	--	±	--	--	--		**0.71**	±	**0.12**		**0.11**		**0.323**	±	**0.081**		**0.092**	
SU12-03/I-Z3	--	±	--	--	--	--	0.309	±	0.082	J	0.079	0.90	0.328	±	0.083	J	0.084	0.86
SU12-03/I-Z3[3]	--	±	--	--	--		**0.278**	±	**0.088**		**0.1**		**0.282**	±	**0.088**		**0.13**	
SU12-07/D-Z5	--	±	--	--	--	--	0.138	±	0.064	J	0.074	--	--	±	--	--	--	--
SU12-07/D-Z5[3]	--	±	--	--	--		--	±	--	--	--		--	±	--	--	--	
SU12-08/I-Z1	--	±	--	--	--	--	0.226	±	0.092	J	0.085	0.81	0.188	±	0.065	J	0.093	1.16
SU12-08/I-Z1[3]	--	±	--	--	--		**0.182**	±	**0.065**		**0.079**		**0.219**	±	**0.061**		**0.073**	
SU12-11/I-Z1	--	±	--	--	--	--	0.51	±	0.11	J	0.1	1.04	0.39	±	0.10	J	0.16	1.44
SU12-11/I-Z1[3]	--	±	--	--	--		**0.53**	±	**0.11**		**0.1**		**0.56**	±	**0.13**		**0.08**	
SU12-11/I-Z2	--	±	--	--	--	--	0.432	±	0.094	J	0.086	1.20	0.57	±	0.14	J	0.13	1.04
SU12-11/I-Z2[3]	--	±	--	--	--		**0.517**	±	**0.093**		**0.088**		**0.595**	±	**0.097**		**0.092**	
SU14-03/D-Z2	--	±	--	--	--	--	0.72	±	0.13	J	0.11	1.03	0.43	±	0.12	J	0.12	1.65
SU14-03/D-Z2[3]	--	±	--	--	--		**0.74**	±	**0.11**		**0.09**		**0.71**	±	**0.11**		**0.08**	
140-07/D-Z4	--	±	--	--	--	--	0.276	±	0.075	J	0.077	0.35	0.133	±	0.066	J	0.098	0.90
140-07/D-Z4[3]	--	±	--	--	--		**0.096**	±	**0.057**		**0.079**		**0.12**	±	**0.99**		**0.43**	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:	Thallium-208						Thorium-234					
Units:	pCi/g						pCi/g					
Sample ID	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio
EM-8-SO-02	0.474	±	0.091	J	0.050	1.01	9.6	±	1.5	J	2.6	1.58
EM-8-SO-02[3]	**0.48**	±	**0.11**		**0.07**		**15.2**	±	**1.9**		**2.5**	
EM-9-SO-02	0.233	±	0.061	J	0.035	1.37	7.8	±	1.4	J	1.8	1.00
EM-9-SO-02[3]	**0.32**	±	**0.095**		**0.074**		**7.8**	±	**1.2**		**1.9**	
EM-28-SO-01	0.067	±	0.044	J	0.065	--	22.0	±	2.2	J	2.4	1.31
EM-28-SO-01[3]	--	±	--	--	--		**28.9**	±	**3.9**		**3.3**	
EM-35-SO-01	0.175	±	0.054	J	0.048	0.47	2.68	±	0.73	J	1.2	1.21
EM-35-SO-01[3]	**0.083**	±	**0.038**		**0.046**		**3.25**	±	**0.77**		**1.4**	
EM-16-SO-01	0.179	±	0.050	J	0.044	0.75	1.69	±	0.54	J	0.90	1.47
EM-16-SO-01[3]	**0.134**	±	**0.052**		**0.04**		**2.49**	±	**0.77**		**1.5**	
DRH-A1-Z4	--	±	--	--	--	--	4.12	±	0.82	J	1.2	1.07
DRH-A1-Z4[3]	**0.056**	±	**0.039**		**0.052**		**4.42**	±	**0.83**		**1.5**	
DR-J-Z3	--	±	--	--	--	--	1.27	±	0.41	J	0.80	1.60
DR-J-Z3[3]	--	±	--	--	--		**2.03**	±	**0.48**		**0.94**	
C1-02-Z3	--	±	--	--	--	--	5.6	±	1.0	J	1.4	1.27
C1-02-Z3[3]	--	±	--	--	--		**7.1**	±	**1**		**1.5**	
C9-03/D-Z7	0.207	±	0.062	J	0.058	1.03	38.5	±	3.4	J	3.1	1.24
C9-03/D-Z7[3]	**0.213**	±	**0.068**		**0.046**		**47.9**	±	**4.4**		**4.3**	
C9-03/D-Z7[3] DUP	**0.101**	±	**0.042**		**0.06**		**51.1**	±	**8.0**		**8**	
C9-04/D-Z7	0.291	±	0.071	J	0.050	0.96	5.0	±	1.0	J	1.7	1.56
C9-04/D-Z7[3]	**0.278**	±	**0.061**		**0.031**		**7.8**	±	**1.6**		**1.6**	

Table 2-3-3. Gamma Spec Results for 1.5 g/cc and 2.0 g/cc Calibration Standards

Analyte:	Thallium-208						Thorium-234					
Units:	pCi/g						pCi/g					
Sample ID	Result			Qual	MDC	Ratio	Result			Qual	MDC	Ratio
C10-01-Z4	--	±	--	--	--	--	3.76	±	0.71	J	1.1	1.06
C10-01-Z4[3]	**0.065**	±	**0.044**		**0.062**		**3.97**	±	**0.79**		**1.4**	
SU11-990-Z1	--	±	--	--	--	--	1.14	±	0.72	J	0.89	--
SU11-990-Z1[3]	**0.044**	±	**0.028**		**0.038**		--	±	--	--	--	
100-11-991	0.252	±	0.080	J	0.064	1.01	6.6	±	1.1	J	1.5	1.71
100-11-991[3]	**0.254**	±	**0.051**		**0.039**		**11.3**	±	**3.9**		**4.3**	
SU12-03/I-Z3	0.070	±	0.041	J	0.060	--	6.3	±	1.6	J	1.6	1.19
SU12-03/I-Z3[3]	--	±	--	--	--		**7.5**	±	**1.2**		**2**	
SU12-07/D-Z5	--	±	--	--	--	--	0.88	±	0.57	J	0.81	--
SU12-07/D-Z5[3]	**0.042**	±	**0.03**		**0.041**		--	±	--	--	--	
SU12-08/I-Z1	0.043	±	0.028	J	0.038	--	1.09	±	0.60	J	0.78	--
SU12-08/I-Z1[3]	--	±	--	--	--		--	±	--	--	--	
SU12-11/I-Z1	0.088	±	0.058	J	0.087	1.98	6.37	±	0.97	J	1.4	1.02
SU12-11/I-Z1[3]	**0.174**	±	**0.063**		**0.071**		**6.5**	±	**1.1**		**1.9**	
SU12-11/I-Z2	0.233	±	0.065	J	0.051	0.74	3.56	±	0.80	J	1.5	0.87
SU12-11/I-Z2[3]	**0.172**	±	**0.041**		**0.035**		**3.1**	±	**1.1**	**U**	**4.5**	
SU14-03/D-Z2	0.300	±	0.079	J	0.060	0.85	2.39	±	0.84	J	1.4	--
SU14-03/D-Z2[3]	**0.256**	±	**0.05**		**0.038**		--	±	--	--	--	
140-07/D-Z4	0.130	±	0.046	J	0.044	--	1.81	±	0.43	J	0.86	--
140-07/D-Z4[3]	--	±	--	--	--		--	±	--	--	--	

[1] Ratio of result vs. 2.0 g/cc standard to result vs. 1.5 g/cc standard.

[2] Result is less than the MDC.

[3] Reanalysis results using gamma calibration standard with density = 2.0 g/cc are bolded.

Method DOE A-01-R U

A few instances of poor U-232 tracer recoveries necessitated sample reprepara-tion and reanalysis, with insufficient sample remaining to meet the reporting lim-its. This only occurred with rinsate samples and did not impact data usability.

Several uranium results were qualified with UJ because of the relationship be-tween the result, the MDC, and the uncertainty. Most of these were originally U qualified and the J was added because the MDC was considered inexact and the result was near the MDC. The qualified results are listed in the Qualified Rad Detail portion of Table 3 in the DVM.

2.3.2.3 Aqueous Samples (Rinsates) – Chemical Analysis

Method 8260B

As listed in Section 2.3.1 several compounds were detected at low concentrations in the rinsate samples. Significant concentrations of benzene and chlorobenzene were detected in RB-06.

Trace levels of 1,2,4-trichlorobenzene, acetone, bromomethane, carbon disulfide, chloromethane, methylene chloride and toluene were detected in the associated method blanks.

Rinsate blank 1,2,4-trichlorobenzene, 1,2-dibromo-3-chloropropane, 1,4-dioxane, cis-1,3-dichloropropene, chloromethane, bromomethane, methyl tert-butyl ether, and methyl acetate results were qualified "UJ" or "J" based on LCS recovery or LCS/LCSD RPD values outside of QC limits.

Several samples were qualified based on continuing calibration criteria outliers that indicated a low bias. Non-detect results were qualified "UJ" and associated positive results were qualified "J."

2.3.2.4 Aqueous Samples (Rinsates) – Radiochemical Analysis

Methods DOE A-01-R Th and DOE A-01-R U

There were a few instances where the recorded rinsate blank sample volumes for alpha spectroscopy were suspect; the laboratory was uncertain of the actual vol-ume analyzed. The laboratory decided that reanalysis was necessary, however, such a small volume of sample was left that the detection limits were elevated above the reporting limit.

Method DOE RA-06-RC Mod

The Ra-228 result for water sample RB-14 was rejected because the absolute value of the negative result was larger than the uncertainty; which makes the en-tire range of possible values negative.

2.4 Phase IIIa Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDGs is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. In order to accommodate the quick turnaround time for the vertical profile samples, American Analytical Laboratories grouped samples by daily delivery or by requested turnaround time.

Results of vertical profile volatile and metals screening analysis performed by American Analytical Laboratories and the vertical profile radiological analysis performed by GEL Laboratories were verified for completeness and the presence of any significant quality issues. Individual data validation memos were not generated. DVMs were generated for the soil and groundwater sample volatile, metal and radiological analysis performed by GEL Laboratories and a copy is included in Appendix A.

Sample Delivery Groups for Phase IIIa	Laboratory for Phase IIIa
811036	AAL
811046	AAL
811088	AAL
811089	AAL
811102	AAL
811103	AAL
811126	AAL
811127	AAL
811160	AAL
811161	AAL
811162	AAL
811163	AAL
811171	AAL
811173	AAL
811192	AAL
811193	AAL
811260	AAL
811270	AAL
811291	AAL
811292	AAL
811293	AAL
811296	AAL
811299	AAL
811305	AAL
811310	AAL
811315	AAL
811316	AAL
811322	AAL
811326	AAL
811342	AAL

Sample Delivery Groups for Phase IIIa	Laboratory for Phase IIIa
811346	AAL
811355	AAL
811356	AAL
812017	AAL
812047	AAL
812048	AAL
812076	AAL
812079	AAL
812080	AAL
812088	AAL
812104	AAL
812105	AAL
812109	AAL
812115	AAL
812217	AAL
812232	AAL
812233	AAL
812241	AAL
812242	AAL
812249	AAL
812251	AAL
812270	AAL
812271	AAL
812272	AAL
812277	AAL
812278	AAL
812282	AAL
812285	AAL
812289	AAL
812301	AAL
812307	AAL
812316	AAL
812317	AAL
812318	AAL
812319	AAL
812320	AAL
812321	AAL
812322	AAL
812323	AAL
812324	AAL
901034	AAL
901049	AAL
901050	AAL
901060	AAL
901061	AAL
901062	AAL
901063	AAL

Sample Delivery Groups for Phase IIIa	Laboratory for Phase IIIa
901065	AAL
901075	AAL
901076	AAL
901077	AAL
901078	AAL
901098	AAL
901099	AAL
901109	AAL
901112	AAL
901113	AAL
901114	AAL
901115	AAL
901116	AAL
901117	AAL
901128	AAL
901145	AAL
901146	AAL
901201	AAL
901202	AAL
901203	AAL
901204	AAL
901251	AAL
901257	AAL
901258	AAL
901262	AAL
901270	AAL
901288	AAL
901289	AAL
901296	AAL
901310	AAL
901317	AAL
901324	AAL
901406	AAL
901408	AAL
901412	AAL
901413	AAL
901414	AAL
901415	AAL
901419	AAL
901427	AAL
902001	AAL
902004	AAL
902005	AAL
902006	AAL
902007	AAL
902009	AAL
902011	AAL

Sample Delivery Groups for Phase IIIa	Laboratory for Phase IIIa
902012	AAL
902083	AAL
902087	AAL
902109	AAL
902120	AAL
902123	AAL
902126	AAL
902136	AAL
902137	AAL
902147	AAL
902148	AAL
902155	AAL
902158	AAL
902162	AAL
902185	AAL
902189	AAL
902199	AAL
902200	AAL
902202	AAL
902221	AAL
902222	AAL
902246	AAL
902247	AAL
902249	AAL
902250	AAL
902251	AAL
902252	AAL
902253	AAL
902254	AAL
902256	AAL
902257	AAL
902258	AAL
902263	AAL
902264	AAL
902292	AAL
902293	AAL
902297	AAL
902304	AAL
902305	AAL
218321	GEL
218393	GEL
218469	GEL
218534	GEL
220083	GEL
220154	GEL
220309	GEL
220311	GEL

Sample Delivery Groups for Phase IIIa	Laboratory for Phase IIIa
220474	GEL
220758	GEL
221683	GEL
221986	GEL
222081	GEL
222147	GEL
222237	GEL
222478	GEL
222485	GEL
223115	GEL
223776	GEL
223894	GEL
223897	GEL
224364	GEL
224377	GEL
225014	GEL
225016	GEL
225226	GEL
226310	GEL
226403	GEL
226605	GEL

2.4.1 Field Data Quality Evaluation

Table 2.4-1 provides a summary of the field QC samples and the associated field samples. Table 2.4-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.4-1 Field QC Associations for RI Phase IIIa, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-13D-VP805	MW-13D-VP12	FD	811270
MW-13D-VP806	MW-13D-VP18	FD	811292
MW-13D-VP807	MW-13D-VP21	FD	811292
MW-14D-VP801	MW-14D-VP08	FD	811103
MW-14D-VP803	MW-14D-VP15	FD	811163
MW-14D-VP804	MW-14D-VP21	FD	811163
MW-15D-VP800	MW-15D-VP08	FD	811088
MW-15D-VP802	MW-15D-VP19	FD	811162
MW-19D-VP810	MW-19D-VP03	FD	811342
MW-19D-VP811	MW-19D-VP11	FD	811356
MW-20D-VP812	MW-20D-VP05	FD	811355
MW-20D-VP813	MW-20D-VP09	FD	812017
MW-20D-VP814	MW-20D-VP19	FD	812080
MW-21D-VP808	MW-21D-VP10	FD	811299
MW-21D-VP809	MW-21D-VP21	FD	811322
MW-23D-VP826	MW-23D-VP11	FD	901146

Table 2.4-1 Field QC Associations for RI Phase IIIa, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-23D-VP827	MW-23D-VP19	FD	901204
MW-24D-VP821	MW-24D-VP09	FD	901049
MW-24D-VP822	MW-24D-VP20	FD	901061
MW-25D-VP815	MW-25D-VP08	FD	812217
MW-25D-VP816	MW-25D-VP23	FD	812241
MW-26D-VP817	MW-26D-VP02	FD	812301
MW-26D-VP818	MW-26D-VP08	FD	812301
MW-26D-VP819	MW-26D-VP19	FD	812319
MW-26D-VP820	MW-26D-VP21	FD	812318
MW-27D-VP824	MW-27D-VP11	FD	901145
MW-27D-VP825	MW-27D-VP14	FD	901145
MW-28D-VP823	MW-28D-VP18	FD	901078
MW-33D-VP832	MW-33D-VP11	FD	902006
MW-34D-VP833	MW-34D-VP09	FD	902007
MW-34D-VP834	MW-34D-VP19	FD	902007
RI-SB-19-NS	RI-SB-800-NS	FD	218393
RI-SB-23-SS	RI-SB-800-SS	FD	218393
RI-SB-09-SS	RI-SB-801-SS	FD	218469
RI-SB-16-NS	RI-SB-801-NS	FD	218469
RI-SB-06-NS	RI-SB-802-NS	FD	218534
MW-20D-VP06	MW-20D-VP812	FD	220083
MW-20D-VP09	MW-20D-VP813	FD	220309
MW-20D-VP19	MW-20D-VP814	FD	220474
MW-24D-VP09	MW-24D-VP821	FD	222081
MW-24D-VP20	MW-24D-VP822	FD	222147
MW-27D-VP11	MW-27D-824	FD	222485
MW-27D-VP14	MW-27D-825	FD	222485
MW-33D-VP02	MW-33D-VP830	FD	223776
MW-33D-VP06	MW-33D-VP831	FD	223776
MW-33D-VP11	MW-33D-VP832	FD	223897
MW-33D-VP05	MW-33D-VP842	FD	225014
MW-33D-VP09	MW-33D-VP843	FD	225014
MW-33D-VP14	MW-33D-VP844	FD	225014
MW25D-GW	MW800-GW	FD	226605
MW24D-GW	MW801-GW	FD	226635
MW30D-GW	MW802-GW	FD	226771

Table 2.4-2 Field QC Samples by Method for RI Phase IIIa, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Rinsate Blanks
SW1010A	Soil	2	0	0%	NA	NA
SW6010B	Soil	105	8	8%	NA	NA
SW Ch. 7.3.3	Soil	4	0	0%	NA	NA

Table 2.4-2 Field QC Samples by Method for RI Phase IIIa, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Rinsate Blanks
SW7470	Soil	5	0	0%	NA	NA
SW7471A	Soil	61	5	8%	NA	NA
SW8081A	Soil	5	0	0%	NA	NA
SW8082	Soil	4	0	0%	NA	NA
SW8151A	Soil	5	0	0%	NA	NA
SW8260B	Soil	41	3	8%	NA	NA
SW8270C	Soil	5	0	0%	NA	NA
SW9045C/9045D	Soil	2	0	0%	NA	NA
SW Ch. 7.3.4-TIT	Soil	4	0	0%	NA	NA
DOE A-01-R Th	Soil	37	3	8%	NA	NA
DOE A-01-R Ur	Soil	55	3	6%	NA	NA
DOE GA-01-R	Soil	37	3	8%	NA	NA
SW1010A	Water	3	0	0%	NA	NA
SW6010	Water	53	6	11%	NA	NA
SW6010B	Water	9	0	0%	NA	NA
SW Ch. 7.3.3	Water	3	0	0%	NA	NA
SW7470	Water	30	3	10%	NA	NA
SW8081A	Water	4	0	0%	NA	NA
SW8082	Water	3	0	0%	NA	NA
SW8151A	Water	3	0	0%	NA	NA
SW8260B (Low Level)	Water	37	3	8%	6	NA
SW8270C	Water	4	0	0%	NA	NA
SW9040	Water	3	0	0%	NA	NA
SW9315 MOD	Water	143	10	7%	NA	2
ASTM D5174	Water	29	3	10%	NA	NA
SW Ch. 7.3.4-TIT	Water	3	0	0%	NA	NA
DOE A-01-R Th	Water	170	13	8%	NA	2
DOE A-01-R Ur	Water	176	13	7%	NA	2
EPA 900.0	Water	30	3	10%	NA	NA
EPA 901.1	Water	26	3	12%	NA	NA
EPA 903.1	Water	29	3	10%	NA	NA
EPA 904.0/EPA 9320	Water	29	3	10%	NA	NA
HASL-300 RA-06-RC MOD	Water	144	10	7%	NA	2

2.4.1.1 Field Duplicates

Soil Samples

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DVM. Field duplicate results are summarized on Table 4 of the DVM. Overall soil sample field duplicate precision for all chemical parameters was good except for calcium, cobalt, lead, nickel, and tetrachloroethylene results for sample RI-SB-16-NS. Sample non-homogeneity is suspected and the results were qualified as estimated.

Overall soil sample field duplicate precision for all radiochemical parameters was good except U235/236 for sample RI-SB-06-NS. Sample non-homogeneity is suspected and the results were qualified as estimated.

Vertical Profile Groundwater Samples

Field duplicates were submitted blind to the laboratory. Overall, field duplicate precision for volatile analysis was good except for ethyl acetate results for samples MW-13D-VP12 and MW-13D-VP19. The high RPD values for this compound are common due to its poor purging efficiency. Metals field duplicate precision shows greater variability, particularly for aluminum, iron, and manganese. Parent and field duplicate samples associated with high RPD values were qualified as estimated.

Overall, field duplicate precision for radiochemical analysis was good except Ra-228 results for sample MW-24D-VP20. The limited sample volume for the field duplicate sample MW-24D-822 was consumed during reanalysis and a much smaller volume was analyzed compared with the parent sample. Parent and field duplicate samples associated with high RPD values were qualified as estimated.

Groundwater Samples

Overall, field duplicate precision for all chemical parameters was good except for several sample MW30D-GW metals results. The affected metals – barium, cobalt, iron, manganese, nickel, potassium, sodium, and zinc – indicate that the presence of particulates may have influenced results. Results for these metals were qualified as estimated.

Overall, field duplicate precision for all radiochemical parameters was good.

2.4.1.2 Field Blanks

Soil Samples

Rinsate samples were collected at a rate of one every 10 samples. The rinsates were collected from split-spoon samplers that were all purchased new by the driller for this phase of the project. Trip blanks were shipped with each set of rinsate blanks and analyzed for volatile organic compounds.

Two rinsate blanks associated with vertical profile soil samples were collected and analyzed for volatile organic compounds. Common laboratory contaminants of methylene chloride and acetone, trihalomethanes, and toluene were detected. Three rinsate blank samples associated with the vertical profile soil samples were collected and analyzed for metals. Calcium, sodium, and zinc were detected in all three rinsate blanks. Magnesium, manganese, iron, cobalt, and potassium were also detected in at least one of the rinsate blanks.

Three rinsate blank samples associated with the vertical profile soil samples were collected and analyzed for radiochemical constituents. Thorium isotopes were not detected in any of the rinsates. Low levels of uranium isotopes (near the reporting limit), radium 228, and total alpha radium were detected below the reporting limit in one rinsate blank.

Trace levels of methylene chloride and chloromethane were detected were detected in both trip blanks and are considered to be laboratory introduced. Methylene chloride results for samples RI-SB-05-NS, RI-SB-09-NS, RI-SB-15-NS and RI-SB-22-NS were qualified "U" as not detected at the reporting limit.

Vertical Profile Groundwater Samples

Rinsate blanks were collected and analyzed at each borehole. Isolated, low-level detections of target compounds, including 4-methyl-2-pentanone, tetrachloroethene, and toluene were made.

Drill water samples were analyzed and found to contain trihalomethanes, indicating a treated water source.

Low levels of aluminum, calcium, iron, magnesium, potassium, and sodium were detected in all rinsate blanks. In addition, antimony, barium, chromium, copper, manganese, nickel, and zinc were detected sporadically.

Aluminum, barium, calcium, iron, magnesium, potassium, sodium, and zinc were detected in all drill water samples. Copper, lead, and manganese were also detected in the 11/2/008 drill water sample

Groundwater Samples

Trip blanks accompanied each groundwater sample shipment. No target compounds were detected.

2.4.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified and summarized in a separate section for each analytical method below.

2.4.2.1 Soil Samples

Method 8260B

No target compounds were detected in the laboratory method blanks associated with the soil samples.

Surrogate recovery was low for one soil sample, RI-SB-27-NS. As required, the sample was reanalyzed with acceptable recovery but after hold time had expired.

The laboratory reported results from the initial analysis. All results were qualified as estimated. Surrogate recovery was high for one trip blank, TB-02. No results were qualified.

Internal standard area responses were low for three samples. All were reanalyzed after hold time had expired with acceptable responses. The initial results for samples RI-SB-11-NS and RI-SB-09-NS were reported by the laboratory and were qualified as estimated. Internal standard area responses were extremely low for the initial analysis of sample RI-SB-15-NS. Results qualified as estimated from the reanalysis were reported.

2-Hexanone recovery exceeded control limits for one laboratory control sample. This compound was not detected in any associated sample. Therefore, no data qualification was necessary.

Two samples were analyzed for volatile MS/MSD analysis. Both exhibit matrix effects with recovery of several compounds outside of control limits. Bromoform and 1,1,2-trichloroethane results for sample RI-SB-17-NS were rejected based on recoveries of less than 10%.

Several samples were qualified as estimated "UJ" or "J" based on calibration criteria outliers. Compounds of concern were not affected.

Results for three samples were qualified as estimated based on hold time violations. Samples –RI-SB-29-NS and RI-SB-30-NS were analyzed after hold time expired due to a laboratory scheduling oversight. Sample RI-SB-05-NS required reanalysis after hold time expired due to poor internal standard area responses.

Method 6010B/7471

Trace levels of sodium, potassium, nickel, vanadium, and zinc were detected in the metals method blanks. No field sample results required qualification based on the associated method blank concentrations. A rinsate (S-RB-05) vanadium results was qualified "U," as not detected at the reporting limit. Trace levels of metals were also detected in calibration blanks but no qualification was required based on the associated sample results.

Six total metals MS/MD analysis and seven mercury MS/MD analysis were performed. Results for several elements were qualified as estimated based on recovery and RPD outliers. Control limits were not applied for all elements since sample concentrations exceeded spike amounts by more than four times.

HASL-300 Alpha Spec Thorium, Solid

Several Th-230 and Th-232 results were qualified with a "J" due to apparent method blank contamination; most likely the laboratory did not count the method blank long enough to meet the required criteria.

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

HASL-300 Alpha Spec Uranium, Solid

The batch MS/MSD recoveries were below the acceptance limit for U-238, resulting in "J" qualifiers for the U-238 results for six samples.

A few samples were re-prepared using smaller aliquots due to high activity.

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

HASL-300 Gamma Spec, Solid

Some gamma results for the U-238 and Th-232 decay chains were not identical to the corresponding uranium and thorium alpha spec results due to the better accuracy and precision of the alpha spec methods. No results were qualified on this basis.

Several negative results were qualified with an "R" because their absolute value was greater than their uncertainty.

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

2.4.2.2 Vertical Profile Samples

Method 8260B

Methylene chloride was detected in all laboratory method blanks and at similar concentrations in all screening samples, indicating that this compound was introduced to the sample at the laboratory. All vertical profile methylene chloride results were qualified "U" as not detected at the reported concentration.
Methylene chloride recovery was high for one laboratory control sample. Since all sample methylene chloride results were qualified "U" based on method blank concentrations, no additional qualification was required.

The laboratory documented calibration criteria outliers for several compounds. None were major compounds of concern.

MS/MSD samples were collected at a frequency of one per 20 samples. Sporadic low recoveries and high RPD values were reported. No data quality issues were indicated based on the MS/MSD results.

Method 6010B/7470A

A trace level of magnesium was detected in one metals method blank.

Recovery of several metals, predominantly the anions and iron, was outside of control limits. In some instances, control limits were not applicable since sample concentrations exceeded the spike amount by more than four times. Data quality issues were not indicated.

HASL-300 Alpha Spec Thorium, Liquid

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

HASL-300 Alpha Spec Uranium, Liquid

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

A few detection limits exceeded the reporting limit, however, the sample results were above the detection limits and data usability was not impacted.

For a few high-activity samples the spike activity was lower than the sample activity and the spike recovery was not applicable. This had no impact on data usability.

Method 903.0, Total Alpha Radium

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

Method 904.0, Radium-228 in Drinking Water

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

2.4.2.3 Groundwater Samples

Method 8260B

Trace levels of volatile target compounds were sporadically detected on the method blanks. The methylene chloride concentration for only one sample, MW23D-GW, required qualification as not detected based on the associated method blank level.

One MS/MSD outlier was reported. Recovery of bromodichloromethane was above control limits for the MSD analysis of sample MW17S-GW. The compound was not detected in the parent sample and no qualification was required.

Dichlorodifluoromethane recovery exceeded control limits for the second source calibration standard and continuing calibration standards. This compound was not detected in the samples and no data qualification was needed. Continuing calibration criteria resulted in a low bias for isopropylbenzene for one standard and associated sample results were qualified as estimated, not detected.

Method 6010B/7470A

Potassium, sodium, and zinc were detected in several method blanks. Potassium and sodium were also reported as positive detections or as negative readings for several calibration blanks. Several zinc sample results were qualified as not detected at the PQL based on the method blank concentrations.

Six MS/MSD analyses were performed for metals analysis. Recoveries of calcium and sodium were outside of control limits but qualification was not appropriate since sample concentrations were more than four times the spike amount added.

ASTM D5174, Total Uranium in Drinking Water

A few samples were re-prepped and/or re-analyzed due to high or low recovery.

Sample MW31D-GW was qualified with a "J" due to method blank contamination.

Sample MW 25D-GW was reanalyzed for total uranium at E & E's request because the alpha spec uranium results did not add up to even half that activity. The reanalysis result is being reported. The original analysis was performed immediately following a high uranium activity sample and instrument carryover or laboratory cross contamination is suspected to be the cause of the high original result.

HASL-300 Alpha Spec Thorium, Liquid

A few samples were re-prepped and/or re-analyzed due to high or low recovery.

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

HASL-300 Alpha Spec Uranium, Liquid

A few samples were re-prepped and/or re-analyzed due to high or low recovery.

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

Method 900.0, Gross Alpha Beta in Drinking Water

A few gross alpha results were qualified with a "J" because the MS/MSD accuracies were outside of acceptance limits.

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

Samples MW-32D-GW and MW 34D-GW-U were reanalyzed for gross alpha at E & E's request because the results were much greater than the summed alpha spec activity. The reanalysis results are being reported. The laboratory noted inhomogeneity of solids between the sample aliquots likely explain the differences.

Method 901.1, Gammaspec, Gamma, Liquid

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

Method 903.1, Radium-226 in Drinking Water

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

A few results were qualified with a "J" because although the MS/MSD accuracy was acceptable, the precision was not acceptable.

Method 904.0, Radium-228 in Drinking Water

Several results were qualified with a "UJ" because of the relationship between the result, uncertainty, and detection limit.

Several samples were post-spiked to confirm nondetects and to eliminate the possibility of quenching.

Several samples were re-analyzed due to bubbles forming inside of the instrument tubing.

3 Data Summaries

Tables summarizing the complete results for the site samples are provided in this section. Tables summarizing the positive results only are provided in the associated data summary reports submitted under separate cover. Field duplicate results are presented along with the field samples. Table 4 in the DVM presented in Appendix A reports the RPDs for the field duplicates. The ADR outlier reports provided as an attachment to the DVM provide a summary of positive results for the QC samples outside QC criteria including positive results for method blanks and the associated data qualifiers.

Complete analytical results are provided in databases in Appendix B.

The following sections provide data tables for each phase of field work.

3.1 Phase I Data Summaries

Tables 3.1-1 through 3.1-6 include complete analytical results for Phase I investigations conducted in September and November 2006. Summary of positive results are provided in the associated letter report.

3.2 Phase IIa Data Summaries

Tables 3.2-1 through 3.2-4 include complete analytical results for Phase IIa investigations conducted in May and June 2007. Summary of positive results are provided in the associated letter report.

3.3 Phase IIb Data Summaries

Tables 3.3-1 through 3.3-4 include complete analytical results for Phase IIb investigations conducted in October and November 2007. Summary of positive results are provided in the associated letter report.

For samples for VOCs, the analysis was split between TestAmerica St. Louis and TestAmerica Knoxville to maintain capacity for the field sampling schedule. The laboratories did not have the exact same sample list.

None of the compounds that were different between the laboratories were compounds of concern at the site. The compounds were not detected in the samples.

3.4 Phase IIIa Data Summaries

The complete analytical results for Phase IIIa investigations (and for Phases I and II) are provided in the newly developed interactive database on the provided disk. Therefore, data summary tables for Phase IIIa are not provided in this report.

Table 3.1-1a Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-TB-01 9/25/2006
SW8260B (ng)	
1,1,1-Trichloroethane	5 U
1,1,2,2-Tetrachloroethane	5 U
1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U
1,1-Dichloroethene	5 U
1,2,3-Trichlorobenzene	**13.32 J**
1,2,4-Trichlorobenzene	**12.39 J**
1,2-Dibromo-3-chloropropane	5 U
1,2-Dibromoethane	5 U
1,2-Dichlorobenzene	5 U
1,2-Dichloroethane	5 U
1,2-Dichloropropane	5 U
1,3-Dichlorobenzene	5 U
1,4-Dichlorobenzene	**1.685 J**
2-Butanone	50 U
Acetone	**35.71 J**
Benzene	**3.795 J**
Bromochloromethane	5 U
Bromodichloromethane	5 U
Bromoform	5 U
Carbon tetrachloride	5 U
Chlorobenzene	5 U
Chloroform	5 U
Chloromethane	**8.647**
cis-1,2-Dichloroethene	5 U
cis-1,3-Dichloropropene	5 U
Dibromochloromethane	5 U
Ethylbenzene	5 U
Isopropylbenzene	5 U
m,p-Xylene	10 U
Methylene chloride	5 U
o-Xylene	5 U
Styrene	**0.9460 J**
Tetrachloroethene	**18.71**
Toluene	**2.110 J**
trans-1,2-Dichloroethene	5 U
Trichloroethene	5 U
Vinyl chloride	5 U

Table 3.1-1b Summary of Complete Results for Sub-Slab Soil Vapor Field Blank Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	IA-TB-01 11/14/2006	SSA-TB-01 09/13/2006
TO-15 (ug/m3)		
1,1,1-Trichloroethane	0.87 U	0.87 U
1,1,2,2-Tetrachloroethane	1.1 U	1.1 U
1,1,2-Trichloroethane	0.87 U	0.87 U
1,1-Dichloroethane	0.65 U	0.65 U
1,1-Dichloroethene	0.63 U	0.63 U
1,2,4-Trichlorobenzene	3.0 U	3.0 U
1,2,4-Trimethylbenzene	0.79 U	0.79 U
1,2-Dibromoethane	1.2 U	1.2 U
1,2-Dichlorobenzene	0.96 U	0.96 U
1,2-Dichloroethane	0.65 U	0.65 U
1,2-Dichloropropane	0.74 U	0.74 U
1,2-Dichlorotetrafluoroethane	1.1 U	1.1 U
1,3,5-Trimethylbenzene	0.79 U	0.79 U
1,3-Butadiene	0.88 U	0.88 U
1,3-Dichlorobenzene	0.96 U	0.96 U
1,4-Dichlorobenzene	0.96 U	0.96 U
1,4-Dioxane	14 U	14 UJ
2,2,4-Trimethylpentane	0.75 U	0.75 U
2-Hexanone	1.6 U	1.6 U
3-Chloropropene	1.3 U	1.3 U
4-Ethyltoluene	0.79 U	0.79 U
Acetone	**36**	9.5 U
Benzene	**0.70**	0.51 U
Bromodichloromethane	1.1 U	1.1 U
Bromoethene	0.70 U	0.70 U
Bromoform	1.7 U	1.7 U
Bromomethane	0.62 U	0.62 U
Carbon disulfide	1.2 U	1.2 U
Carbon tetrachloride	1.0 U	1.0 U

Table 3.1-1b Summary of Complete Results for Sub-Slab Soil Vapor Field Blank Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	IA-TB-01 11/14/2006	SSA-TB-01 09/13/2006
TO-15 (ug/m3)		
Chlorobenzene	0.74 U	0.74 U
Chloroethane	1.1 U	1.1 U
Chloroform	**3.4**	0.78 U
Chloromethane	**1.4**	0.83 U
cis-1,2-Dichloroethene	0.63 U	0.63 U
cis-1,3-Dichloropropene	0.73 U	0.73 U
Cyclohexane	0.55 U	0.55 U
Dibromochloromethane	1.4 U	1.4 U
Dichlorodifluoromethane	**5.4**	2.0 U
Ethylbenzene	0.69 U	0.69 U
Freon TF	1.2 U	1.2 U
Heptane	0.66 U	0.66 U
Hexachlorobutadiene	1.7 U	1.7 U
Hexane	**15**	1.4 U
Isopropyl alcohol	9.8 U	9.8 U
Methyl ethyl ketone	**2.9**	1.2 U
Methyl isobutyl ketone	1.6 U	1.6 U
Methyl tert-butyl ether	1.4 U	1.4 U
Methylene chloride	**90 J-**	1.4 U
o-Xylene	0.69 U	0.69 U
Styrene	0.68 U	0.68 U
Tetrachloroethene	1.1 U	1.1 UJ
Tetrahydrofuran	12 U	12 U
Toluene	**1.8**	0.60 U
trans-1,2-Dichloroethene	0.63 U	0.63 U
trans-1,3-Dichloropropene	0.73 U	0.73 U
Trichloroethene	0.86 U	0.86 UJ
Trichlorofluoromethane	**2.7**	0.90 U
Vinyl chloride	0.41 U	0.41 U

Table 3-1-1c Summary of Complete Results for Ambient Air (Indoor and Outdoor Air) Field Blank Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	IA-TB-02 11/14/2006
TO-15 (ug/m3)	
1,1,1-Trichloroethane	0.055 U
1,1,2,2-Tetrachloroethane	0.069 U
1,1,2-Trichloroethane	0.055 U
1,1-Dichloroethane	0.040 U
1,1-Dichloroethene	0.040 U
1,2-Dibromoethane	0.077 U
1,2-Dichloroethane	0.081 U
1,2-Dichloropropane	0.092 U
1,2-Dichlorotetrafluoroethane	0.070 U
1,3,5-Trimethylbenzene	0.049 U
1,3-Butadiene	0.044 U
2,2,4-Trimethylpentane	0.047 U
3-Chloropropene	0.063 UJ
4-Ethyltoluene	0.049 U
Benzene	0.032 U
Bromodichloromethane	0.067 U
Bromoethene	0.087 U
Bromoform	0.10 U
Bromomethane	0.078 U
Carbon tetrachloride	0.063 U
Chloroethane	0.053 U
Chloroform	0.049 U
cis-1,2-Dichloroethene	0.040 U
cis-1,3-Dichloropropene	0.045 U
Cyclohexane	0.034 U
Dibromochloromethane	0.085 U
Dichlorodifluoromethane	0.049 U
Ethylbenzene	0.043 U
Heptane	0.041 UJ
Hexane	0.070 U
Methyl tert-butyl ether	0.036 U
o-Xylene	0.043 U
Tetrachloroethene	0.068 U
Toluene	0.038 U
trans-1,2-Dichloroethene	0.040 U
trans-1,3-Dichloropropene	0.045 U
Trichloroethene	0.054 U
Trichlorofluoromethane	0.056 U
Vinyl chloride	0.051 U

Table 3.1-2a Summary of Complete Results for Passive Soil Gas Field Duplicates Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-015 18_5" 9/25/2006	SG-900 18_5" 9/25/2006	SG-026 18" 9/25/2006	SG-901 18" 9/25/2006	SG-028 18" 9/25/2006	SG-902 18" 9/25/2006	SG-044 18_5" 9/25/2006	SG-903 18_5" 9/25/2006	SG-062 7" 9/25/2006	SG-904 7" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**0.3620 J**
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	**48.09**	50 U	50 U	50 U	**183.2**	**93.42**	50 U	**70.78**	**112.3**	**32.83**
Benzene	**9.497**	**6.455**	**6.936**	**5.252**	**6.236**	**10.86**	**15.16**	**8.181**	**3.353 J**	**4.477 J**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	**6.931**	5 U	5 U	**4.746 J**	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	**2.363 J**	**1.219 J**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**0.6460 J**
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.3910 J**
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**0.4650 J**
o-Xylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**0.1040 J**
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	**34590**	**26290**	**3597 J**	**1653 J**	**37.48**	**111.5 J**	**3708 J**	**2102 J**	**22.20**	**20.70**
Toluene	**10.37**	**13.37**	**6.165**	**6.792**	**8.179**	**16.81 J**	**12.10**	**11.01**	**20.19**	**24.59**
trans-1,2-Dichloroethene	**1.611 J**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	**145.2**	**76.80**	**6.679**	**2.176**	5 U	5 U	**13.47 J**	**6.023 J**	5 U	5 U
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-2a Summary of Complete Results for Passive Soil Gas Field Duplicates Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-067 7" 9/25/2006	SG-905 7" 9/25/2006	SG-068 17_5" 9/25/2006	SG-906 17_5" 9/25/2006	SG-070 7" 9/25/2006	SG-907 7" 9/25/2006	SG-077 7_5" 9/25/2006	SG-908 7_5" 9/25/2006
SW8260B (ng)								
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	50 U	50 U	**285.9**	50 U	**1444**	50 U	50 U	50 U
Benzene	**4.233 J**	**4.743 J**	**11.18**	**8.722**	**7.482**	**8.301**	**3.087 J**	**5.786**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	**4.797 J**	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	5 U	5 U	5 U	**0.7770 J**	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	**19.86**	**47.17**	**806.1**	**767.1**	**25.45**	**43.95**	**13.99**	**27.50**
Toluene	**12.87**	**14.24**	**9.707**	**6.935**	**90.66**	**68.42**	**6.147**	**25.98**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	**2.258 J**	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-2b Summary of Complete Results for Sub-Slab Soil Vapor Field Duplicates Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B70-SSA-012 09/13/2006	B70-SSA-090 09/13/2006	B70-SSA-15 11/14/2006	B70-SSA-092 11/14/2006
TO-15 (ug/m3)				
1,1,1-Trichloroethane	53 U	320 U	**7.6**	**1.1 R**
1,1,2,2-Tetrachloroethane	67 U	400 U	6.9 U	**1.4 R**
1,1,2-Trichloroethane	53 U	320 U	5.5 U	**1.1 R**
1,1-Dichloroethane	40 U	230 U	4.0 U	**0.81 R**
1,1-Dichloroethene	39 U	230 U	4.0 U	**0.79 R**
1,2,4-Trichlorobenzene	190 U	1100 U	19 U	**3.7 R**
1,2,4-Trimethylbenzene	48 U	290 U	4.9 U	**0.98 R**
1,2-Dibromoethane	75 U	450 U	7.7 U	**1.5 R**
1,2-Dichlorobenzene	59 U	350 U	6.0 U	**1.2 R**
1,2-Dichloroethane	40 U	230 U	4.0 U	**0.81 R**
1,2-Dichloropropane	45 U	270 U	4.6 U	**0.92 R**
1,2-Dichlorotetrafluoroethane	69 U	410 U	7.0 U	**1.4 R**
1,3,5-Trimethylbenzene	48 U	290 U	4.9 U	**0.98 R**
1,3-Butadiene	55 U	330 U	5.5 U	**1.1 R**
1,3-Dichlorobenzene	59 U	350 U	6.0 U	**1.2 R**
1,4-Dichlorobenzene	59 U	350 U	6.0 U	**1.2 R**
1,4-Dioxane	900 UJ	5400 UJ	90 U	**18 R**
2,2,4-Trimethylpentane	46 U	270 U	4.7 U	**0.93 R**
2-Hexanone	100 U	610 U	10 U	**2.0 R**
3-Chloropropene	78 U	470 U	7.8 U	**1.6 R**
4-Ethyltoluene	48 U	290 U	4.9 U	**0.98 R**
Acetone	590 U	3600 U	93 U	12 UJ
Benzene	31 U	190 U	3.2 U	1.0 UJ
Bromodichloromethane	66 U	390 U	6.7 U	**1.3 R**
Bromoethene	43 U	250 U	4.4 U	**0.87 R**
Bromoform	100 U	600 U	10 U	**2.1 R**
Bromomethane	38 U	230 U	3.9 U	**0.78 R**
Carbon tetrachloride	62 U	360 U	6.3 U	**1.3 R**
Chlorobenzene	45 U	270 U	4.6 U	**0.92 R**

Table 3.1-2b Summary of Complete Results for Sub-Slab Soil Vapor Field Duplicates Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B70-SSA-012 09/13/2006	B70-SSA-090 09/13/2006	B70-SSA-15 11/14/2006	B70-SSA-092 11/14/2006
TO-15 (ug/m3)				
Chloroethane	66 U	400 U	6.6 U	**1.3 R**
Chloroform	48 U	280 U	4.9 U	**0.98 R**
Chloromethane	52 U	310 U	5.2 U	**1.0 R**
cis-1,2-Dichloroethene	39 U	230 U	**4.0**	**0.79 R**
cis-1,3-Dichloropropene	44 U	260 U	4.5 U	**0.91 R**
Cyclohexane	34 U	200 U	3.4 U	**0.69 R**
Dibromochloromethane	83 U	490 U	8.5 U	**1.7 R**
Dichlorodifluoromethane	120 U	740 U	17 U	5.9 UJ
Ethylbenzene	43 U	250 U	4.3 U	**0.87 R**
Freon TF	75 U	440 U	7.7 U	**1.5 R**
Heptane	40 U	240 U	**4.1**	**0.82 R**
Hexachlorobutadiene	100 U	620 U	11 U	**2.1 R**
Hexane	88 U	530 U	8.8 U	1.8 UJ
Isopropyl alcohol	610 U	3700 U	**130**	**14 J**
Methyl ethyl ketone	74 U	440 U	**41**	2.5 UJ
Methyl isobutyl ketone	100 U	610 U	**12**	**2.0 R**
Methyl tert-butyl ether	90 U	540 U	9.0 U	**1.8 R**
Methylene chloride	87 U	520 U	8.7 U	**1.7 R**
o-Xylene	43 U	250 U	4.3 U	**1.2 J**
Styrene	42 U	250 U	4.3 U	**0.85 R**
Tetrachloroethene	**8800 J**	**62000 J**	**880**	**81 J**
Tetrahydrofuran	740 U	4400 U	74 U	**15 R**
Toluene	**41**	220 U	**57**	4.9 UJ
trans-1,2-Dichloroethene	39 U	230 U	4.0 U	**0.79 R**
trans-1,3-Dichloropropene	44 U	260 U	4.5 U	**0.91 R**
Trichloroethene	**190 J**	**1100 J**	**28**	**2.8 J**
Trichlorofluoromethane	**180**	330 U	**33**	11 UJ
Vinyl chloride	25 U	150 U	2.6 U	**0.51 R**

Table 3.1-2c Summary of Complete Results for Ambient Air (Indoor and Outdoor Air) Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B70-IA-02 11/14/2006	B70-IA-090 11/14/2006
TO-15 (ug/m3)		
1,1,1-Trichloroethane	**0.16**	**0.16**
1,1,2,2-Tetrachloroethane	0.14 U	0.14 U
1,1,2-Trichloroethane	0.11 U	0.11 U
1,1-Dichloroethane	0.081 U	0.081 U
1,1-Dichloroethene	0.079 U	0.079 U
1,2-Dibromoethane	0.15 U	0.15 U
1,2-Dichloroethane	0.16 U	0.16 U
1,2-Dichloropropane	0.18 U	0.18 U
1,2-Dichlorotetrafluoroethane	0.14 U	**0.15**
1,3,5-Trimethylbenzene	**0.49 J-**	**0.54 J-**
1,3-Butadiene	0.088 UJ	0.088 UJ
2,2,4-Trimethylpentane	**0.14**	**0.15**
3-Chloropropene	0.13 U	0.13 U
4-Ethyltoluene	**0.88**	**0.93**
Benzene	**0.42**	**0.45**
Bromodichloromethane	0.13 U	0.13 U
Bromoethene	0.17 U	0.17 U
Bromoform	0.21 U	0.21 U
Bromomethane	0.16 U	0.16 U
Carbon tetrachloride	**0.75**	**0.75**
Chloroethane	0.11 U	0.11 U
Chloroform	**0.10**	**0.098**
cis-1,2-Dichloroethene	0.079 U	0.079 U
cis-1,3-Dichloropropene	0.091 U	0.091 U
Cyclohexane	**0.079 J**	**0.12 J**
Dibromochloromethane	0.17 U	0.17 U
Dichlorodifluoromethane	**6.4**	**6.9**
Ethylbenzene	**0.87**	**0.91**
Heptane	**0.15 J**	**0.21 J**
Hexane	**0.30 J**	**0.46 J**
Methyl tert-butyl ether	0.072 U	0.072 U
o-Xylene	**2.5**	**2.5**
Tetrachloroethene	**8.8**	**8.1**
Toluene	**0.87**	**0.98**
trans-1,2-Dichloroethene	0.079 U	0.079 U
trans-1,3-Dichloropropene	0.091 U	0.091 U
Trichloroethene	**0.97**	**0.86**
Trichlorofluoromethane	**19 J**	**19 J**
Vinyl chloride	0.10 U	0.10 U

Table 3.1-2d Summary of Complete Results for Tranformer Pad Soil Field Duplicates Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	NS-03 09/15/2006	NS-90 09/15/2006
PCBs SW8082 (ug/Kg)		
AROCLOR 1016	18 U	18 U
AROCLOR 1221	18 U	18 U
AROCLOR 1232	18 U	18 U
AROCLOR 1242	18 U	18 U
AROCLOR 1248	18 U	18 U
AROCLOR 1254	**170**	**140**
AROCLOR 1260	**69**	**61**

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-001 8" 9/25/2006	SG-002 18" 9/25/2006	SG-003 8" 9/25/2006	SG-004 16" 9/25/2006	SG-005 7" 9/25/2006	SG-006 17" 9/25/2006	SG-007 16" 9/25/2006	SG-008 18" 9/25/2006	SG-009 18" 9/25/2006	SG-010 17_5" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**4.341 J**	**8.730**
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	50 U	**80.73**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**166.4**
Benzene	**1.821J**	**8.707**	**1.202 J**	**3.752 J**	**7.371**	**8.642**	**4.036 J**	**6.064**	**2.548 J**	**6.885**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	**2.503 J**	**116.8**	**3.923 J**	**454.2 J**	**7.004**	**45.30**	**35.82**	**578.6**	**360.5 J**	**441.1**
Toluene	**3.989 J**	**3.782 J**	**2.323 J**	**5.734**	**4.920 J**	**6.547**	**1.472 J**	**4.676 J**	**5.525**	**11.59**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	**2.703 J**	5 U	5 U	5 U	**1.427 J**	**1.097 J**	**1.500 J**
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-011 16_5" 9/25/2006	SG-012 16" 9/25/2006	SG-013 18" 9/25/2006	SG-014 18" 9/25/2006	SG-015 18_5" 9/25/2006	SG-016 7" 9/25/2006	SG-017 19" 9/25/2006	SG-018 18_5" 9/25/2006	SG-019 16" 9/25/2006	SG-020 17" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	**5.431**	**1.732 J**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	**2.806 J**	5 U	**2.127 J**	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	**35.11**	50 U	**71.21**	**77.82**	**48.09**	50 U	50 U	50 U	**236.5 J**	**114.5**
Benzene	**1.865 J**	**5.401**	**4.292 J**	**6.030**	**9.497**	**2.335 J**	**2.625 J**	**2.030 J**	**5.400**	**4.065 J**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	**6.931**	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	**2.524 J**	5 U	**2.363 J**	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	**0.5900 J**	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	**353.1**	**2587**	**10950**	**10260**	**34590**	**241.0**	**92.36**	**17.17**	**29.01**	**112.1**
Toluene	**4.618 J**	**9.829**	**5.838**	**4.070 J**	**10.37**	**2.748 J**	**3.012 J**	**3.101 J**	**12.19**	**9.616**
trans-1,2-Dichloroethene	**3.153 J**	**1.234 J**	**5.076**	5 U	**1.611 J**	5 U	5 U	5 U	5 U	5 U
Trichloroethene	**3.316 J**	**47.22**	**442.8**	**24.88**	**145.2**	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-021 16_5" 9/25/2006	SG-022 16_6" 9/25/2006	SG-023 16" 9/25/2006	SG-024 16_5" 9/25/2006	SG-025 17_5" 9/25/2006	SG-026 18" 9/25/2006	SG-027 7" 9/25/2006	SG-028 18" 9/25/2006	SG-029 7_5" 9/25/2006	SG-030 18" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	**2.714 J**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**5.886**	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**7.187**	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**1.453 J**	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	**92.19**	**138.8**	**91.06**	**77.52**	50 U	50 U	**227.8**	**183.2**	**82.70**	**50.24**
Benzene	**5.466**	**5.518**	**3.047 J**	**6.385**	**4.109 J**	**6.936**	**3.714 J**	**6.236**	**7.272**	**8.276**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**2.288 J**	5 U
Tetrachloroethene	**121.7**	**208.0**	**46.73**	**814.6**	**451.8**	**3597 J**	**74.20**	**37.48**	**21.25**	**84.74**
Toluene	**13.04**	**25.51**	**4.560 J**	**15.77**	**7.044**	**6.165**	**8.018**	**8.179**	**18.45 J**	**4.523 J**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	**2.040 J**	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	**1.175 J**	**3.567 J**	**6.679**	5 U	5 U	5 U	5 U
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-031 6_5" 9/25/2006	SG-032 18" 9/25/2006	SG-033 7" 9/25/2006	SG-034 18" 9/25/2006	SG-035 17_5" 9/25/2006	SG-036 18" 9/25/2006	SG-037 18" 9/25/2006	SG-038 17_5" 9/25/2006	SG-039 18" 9/25/2006	SG-040 18" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**4.039 J**
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**4.339 J**
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**1.360 J**
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	**64.73**	**52.63**	**48.84**	**60.20**	**40.32**	**57.95**	**110.0**	**111.1**	**176.9**	**111.6**
Benzene	**5.859**	**5.824**	**3.292 J**	**5.759**	**2.567 J**	**6.109**	**13.06**	**5.765**	**7.228**	**7.381**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**2.130 J**
Tetrachloroethene	**17.24**	**50.97**	**34.26**	**243.7**	**24.38**	**78.24**	**130.6**	**1103**	**43.94**	**310.2 J**
Toluene	**9.231**	**6.995**	**5.373**	**3.116**	**8.545**	**3.257 J**	**2.703 J**	**8.357**	**21.92**	**18.52 J**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	**1.088**	5 U	5 U	**14.03**	**2.716**	5 U	**4.112 J**
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-041 18" 9/25/2006	SG-042 18" 9/25/2006	SG-043 6" 9/25/2006	SG-044 18_5" 9/25/2006	SG-045 6_5" 9/25/2006	SG-046 7" 9/25/2006	SG-047 18" 9/25/2006	SG-048 18" 9/25/2006	SG-049 18" 9/25/2006	SG-050 17" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**2.328 J**	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	**2.454 J**	**23.10**	**26.37**	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**3.209 J**	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	50 U	50 U	50 U	50 U	**139.4**	50 U	50 U	50 U	**371.1**	**134.5**
Benzene	**8.004**	**10.56**	**1.465 J**	**15.16**	**8.010**	**3.996 J**	**6.370**	**10.84**	**25.70**	**14.53**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	**24.36**	**14.46**	**4.855 J**	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	**2.140 J**	10 U	**2.392 J**	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	**1.335 J**	**1.281 J**	5 U	5 U
o-Xylene	5 U	5 U	5 U	5 U	5 U	5 U	**1.197 J**	**0.8070 J**	**1.146 J**	**0.8500 J**
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**0.8230 J**	5 U
Tetrachloroethene	**419.9**	**7911**	**73.00**	**3708 J**	**73.21**	**26.24**	**94290**	**64120**	**41820**	**6525**
Toluene	**26.02**	**22.22**	**3.312**	**12.10**	**24.76**	**9.461**	**79.09**	**63.30**	**82.82**	**39.11**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	**5.994**	**6.270**	**15.37**	5 U
Trichloroethene	**1.156 J**	**10.36**	5 U	**13.47 J**	5 U	5 U	**384.8**	**184.0**	**332.1**	**12.64**
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-051 18" 9/25/2006	SG-052 7" 9/25/2006	SG-053 7" 9/25/2006	SG-054 18" 9/25/2006	SG-055 17_5" 9/25/2006	SG-056 18" 9/25/2006	SG-057 18" 9/25/2006	SG-058 17" 9/25/2006	SG-059 18" 9/25/2006	SG-060 18_5" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	**3.073 J**	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	**95.64**	**7.935**	5 U	**13.51**	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	**122.4**	**147.9**	50 U	**43.55**	50 U	**66.44**	**47.52**	**76.81**	**142.8**	**64.77**
Benzene	**16.23**	**3.007 J**	**5.312**	**20.63**	**4.361 J**	**25.15**	**12.80**	**12.03**	**5.019**	**14.23**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	**1.228 J**	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	5 U	**0.9050 J**	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	**362.0**	**30.39**	**16.21**	**18750**	**1108**	**32420**	**7587**	**2187**	**8177**	**201.2**
Toluene	**35.10**	**12.27**	**15.85**	**80.69**	**9.964**	**100.9**	**18.67**	**31.61**	**40.66**	**21.67**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	**1.656 J**	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	**57.02**	**1.297 J**	**50.92**	**39.51**	**3.623 J**	**12.49**	5 U
Vinyl chloride	5 U	5 U	5 U	**5.923**	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-061 17" 9/25/2006	SG-062 7" 9/25/2006	SG-063 7_5" 9/25/2006	SG-064 18" 9/25/2006	SG-065 18" 9/25/2006	SG-066 7" 9/25/2006	SG-067 7" 9/25/2006	SG-068 17_5" 9/25/2006	SG-069 7_5" 9/25/2006	SG-070 7" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	**300.1**	**112.3**	**4206**	50 U	50 U	50 U	50 U	**285.9**	**131.6**	**1444**
Benzene	**8.061**	**3.353 J**	**18.38**	**13.95**	**10.98**	**4.440 J**	**4.233 J**	**11.18**	**5.662**	**7.482**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**4.797 J**
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	**2.540 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	**1.184 J**	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	**434.5**	**22.20**	**11.30**	**373.4**	**363.2**	**54.94**	**19.86**	**806.1**	**29.84**	**25.45**
Toluene	**34.09**	**20.19**	**53.47**	**26.86**	**30.72**	**6.276**	**12.87**	**9.707**	**13.12**	**90.66**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	**2.925 J**	**1.632 J**	5 U	5 U	**2.258 J**	5 U	5 U
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-071 7" 9/25/2006	SG-072 17_5" 9/25/2006	SG-073 18" 9/25/2006	SG-074 18" 9/25/2006	SG-075 6_5" 9/25/2006	SG-076 7" 9/25/2006	SG-077 7_5" 9/25/2006	SG-078 18" 9/25/2006	SG-079 18" 9/25/2006	SG-080 18" 9/25/2006
SW8260B (ng)										
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	**12.24**	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	**278.4**	50 U	50 U	50 U	**56.27**	50 U	50 U	**297.2**	**80.39**	**41.32**
Benzene	**5.023**	**4.446 J**	**6.863**	**3.188 J**	**4.059 J**	**5.731**	**3.087 J**	**1.617 J**	**2.574 J**	**1.792 J**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	**19.62**	**24.34**	**430.1**	**125.7**	**188.1**	**34.26**	**13.99**	**5.369**	**8.659**	**9.806**
Toluene	**32.48**	**3.173 J**	**2.047 J**	**3.816 J**	**5.381**	**12.16**	**6.147**	**1.747 J**	**4.963 J**	**2.777 J**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	**2.260 J**	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-3 Summary of Complete Results for Passive Soil Gas Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	SG-081 18" 9/25/2006	SG-082 18" 9/25/2006	SG-083 17_5" 9/25/2006	SG-084 18" 9/25/2006	SG-085 18_5" 9/25/2006	SG-086 18" 9/25/2006	SG-087 7" 9/25/2006	SG-088 6_5" 9/25/2006	SG-089 7" 9/25/2006
SW8260B (ng)									
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**5.136**	**3.430 J**
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**5.373**	5 U
1,2-Dibromo-3-chloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	50 U	50 U	50 U	50 U	**57.02**	50 U	**97.21**	**125.1**	**47.64**
Benzene	**4.165 J**	**8.063**	**4.560 J**	**3.432 J**	**2.786 J**	**2.449 J**	**5.111**	**3.354**	**4.139 J**
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	**22.56**	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**1.002 J**	5 U
Tetrachloroethene	**260.5**	**1265**	**66.59**	**295.9**	**135.3**	**23.26**	**28.42**	**54.42**	**40.68**
Toluene	**12.14**	**14.80**	**16.56**	**9.735**	**5.588**	**6.671**	**21.42**	**21.21**	**19.87**
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	**16.01**	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 3.1-4 Summary of Complete Results for Sub-Slab Soil Vapor Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B100-SSA-01 11/14/2006	B100-SSA-02 11/14/2006	B100-SSA-03 11/14/2006	B140-SSA-01 11/14/2006	B140-SSA-02 11/14/2006	B140-SSA-03 11/14/2006	B70-SSA-01 09/13/2006	B70-SSA-010 09/13/2006
TO-15 (ug/m3)								
1,1,1-Trichloroethane	**10**	**270**	**100**	**9.8**	44 U	140 U	**71**	330 U
1,1,2,2-Tetrachloroethane	6.9 U	17 U	54 U	3.4 U	56 U	180 U	27 U	410 U
1,1,2-Trichloroethane	5.5 U	14 U	43 U	2.7 U	44 U	140 U	22 U	330 U
1,1-Dichloroethane	4.0 U	10 U	32 U	2.0 U	33 U	110 U	16 U	240 U
1,1-Dichloroethene	4.0 U	9.9 U	31 U	2.0 U	32 U	100 U	16 U	240 U
1,2,4-Trichlorobenzene	19 U	47 U	140 U	9.6 U	150 U	470 U	74 U	1100 U
1,2,4-Trimethylbenzene	4.9 U	**25**	38 U	**22**	40 U	130 U	20 U	290 U
1,2-Dibromoethane	7.7 U	19 U	60 U	3.8 U	62 U	200 U	31 U	460 U
1,2-Dichlorobenzene	6.0 U	15 U	47 U	3.0 U	49 U	160 U	24 U	360 U
1,2-Dichloroethane	4.0 U	10 U	32 U	2.0 U	33 U	110 U	16 U	240 U
1,2-Dichloropropane	4.6 U	12 U	36 U	2.3 U	37 U	120 U	18 U	280 U
1,2-Dichlorotetrafluoroethane	7.0 U	17 U	55 U	3.5 U	57 U	180 U	28 U	420 U
1,3,5-Trimethylbenzene	4.9 U	12 U	38 U	**5.9**	40 U	130 U	20 U	290 U
1,3-Butadiene	5.5 U	14 U	42 U	2.9 U	44 U	140 U	22 U	330 U
1,3-Dichlorobenzene	6.0 U	15 U	47 U	3.0 U	49 U	160 U	24 U	360 U
1,4-Dichlorobenzene	6.0 U	15 U	47 U	3.0 U	49 U	160 U	24 U	360 U
1,4-Dioxane	90 U	230 U	680 U	47 U	720 U	2300 U	360 UJ	5400 UJ
2,2,4-Trimethylpentane	4.7 U	12 U	36 U	2.3 U	38 U	120 U	19 U	280 U
2-Hexanone	10 U	26 U	78 U	**6.6**	82 U	260 U	41 U	610 U
3-Chloropropene	7.8 U	20 U	59 U	4.1 U	63 U	200 U	31 U	470 U
4-Ethyltoluene	4.9 U	12 U	38 U	**21**	40 U	130 U	20 U	290 U
Acetone	**380**	**330**	450 U	170 U	480 U	1500 U	240 U	3600 U
Benzene	3.2 U	8.0 U	25 U	1.6 U	26 U	83 U	13 U	190 U
Bromodichloromethane	6.7 U	17 U	52 U	3.4 U	54 U	170 U	27 U	400 U
Bromoethene	4.4 U	11 U	34 U	2.2 U	35 U	110 U	17 U	260 U
Bromoform	10 U	26 U	81 U	5.2 U	84 U	270 U	41 U	620 U
Bromomethane	3.9 U	9.7 U	30 U	1.9 U	31 U	100 U	16 U	230 U

Table 3.1-4 Summary of Complete Results for Sub-Slab Soil Vapor Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B100-SSA-01 11/14/2006	B100-SSA-02 11/14/2006	B100-SSA-03 11/14/2006	B140-SSA-01 11/14/2006	B140-SSA-02 11/14/2006	B140-SSA-03 11/14/2006	B70-SSA-01 09/13/2006	B70-SSA-010 09/13/2006
TO-15 (ug/m3)								
Carbon disulfide	7.8 U	20 U	59 U	4.0 U	62 U	200 U	31 U	470 U
Carbon tetrachloride	6.3 U	16 U	49 U	3.1 U	51 U	160 U	25 U	380 U
Chlorobenzene	4.6 U	12 U	36 U	2.3 U	37 U	120 U	18 U	280 U
Chloroethane	6.6 U	17 U	50 U	3.4 U	53 U	170 U	26 U	400 U
Chloroform	4.9 U	12 U	38 U	2.4 U	40 U	130 U	20 U	290 U
Chloromethane	5.2 U	13 U	39 U	2.7 U	41 U	130 U	21 U	310 U
cis-1,2-Dichloroethene	4.0 U	9.9 U	31 U	2.0 U	32 U	100 U	16 U	240 U
cis-1,3-Dichloropropene	4.5 U	11 U	35 U	2.3 U	37 U	120 U	18 U	270 U
Cyclohexane	3.4 U	**11**	27 U	1.7 U	28 U	89 U	14 U	210 U
Dibromochloromethane	8.5 U	21 U	66 U	4.3 U	69 U	220 U	34 U	510 U
Dichlorodifluoromethane	**490**	**1700**	**330**	6.4 U	99 U	320 U	49 U	740 U
Ethylbenzene	4.3 U	11 U	34 U	**13**	35 U	110 U	17 U	260 U
Freon TF	7.7 U	19 U	60 U	3.8 U	62 U	200 U	31 U	460 U
Heptane	4.1 U	10 U	32 U	2.0 U	33 U	110 U	16 U	250 U
Hexachlorobutadiene	11 U	27 U	83 U	5.3 U	86 U	280 U	43 U	640 U
Hexane	8.8 U	22 U	67 U	4.6 U	70 U	230 U	35 U	530 U
Isopropyl alcohol	61 U	150 U	470 U	32 U	490 U	1600 U	250 U	3700 U
Methyl ethyl ketone	**16**	**53**	56 U	**27**	**170**	**260**	29 U	440 U
Methyl isobutyl ketone	10 U	**29**	78 U	**9.0**	**86**	260 U	41 U	610 U
Methyl tert-butyl ether	9.0 U	23 U	69 U	4.7 U	72 U	230 U	36 U	540 U
Methylene chloride	8.7 U	22 U	66 U	4.5 U	69 U	220 U	35 U	520 U
o-Xylene	4.3 U	11 U	34 U	**4.8**	35 U	110 U	17 U	260 U
Styrene	4.3 U	11 U	33 U	2.1 U	35 U	110 U	17 U	260 U
Tetrachloroethene	**640**	**290**	**7500**	**600**	**9500**	**27000**	**2800 J**	**66000 J**
Tetrahydrofuran	74 U	190 U	560 U	38 U	590 U	1900 U	290 U	4400 U
Toluene	3.8 U	**75**	**75**	**9.8**	31 U	98 U	15 U	230 U
trans-1,2-Dichloroethene	4.0 U	9.9 U	31 U	2.0 U	32 U	100 U	16 U	240 U
trans-1,3-Dichloropropene	4.5 U	11 U	35 U	2.3 U	37 U	120 U	18 U	270 U
Trichloroethene	5.4 U	13 U	42 U	2.7 U	**590**	**350**	21 UJ	**590 J**
Trichlorofluoromethane	**160**	**190**	**280**	2.9 U	46 U	150 U	**84**	340 U
Vinyl chloride	2.6 U	6.4 U	20 U	1.3 U	21 U	66 U	10 U	150 U

Table 3.1-4 Summary of Complete Results for Sub-Slab Soil Vapor Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B70-SSA-011 09/13/2006	B70-SSA-012 09/13/2006	B70-SSA-090* 09/13/2006	B70-SSA-02 09/13/2006	B70-SSA-03 09/13/2006	B70-SSA-04 09/13/2006	B70-SSA-05 09/13/2006	B70-SSA-06 09/13/2006	B70-SSA-07 09/13/2006
TO-15 (ug/m3)									
1,1,1-Trichloroethane	870 U	53 U	320 U	11 U	44 U	**27**	16 U	16 U	4.4 U
1,1,2,2-Tetrachloroethane	1100 U	67 U	400 U	14 U	55 U	27 U	21 U	21 U	5.5 U
1,1,2-Trichloroethane	870 U	53 U	320 U	11 U	44 U	22 U	16 U	16 U	4.4 U
1,1-Dichloroethane	650 U	40 U	230 U	8.1 U	32 U	16 U	12 U	12 U	3.2 U
1,1-Dichloroethene	630 U	39 U	230 U	7.9 U	32 U	16 U	12 U	12 U	3.2 U
1,2,4-Trichlorobenzene	3000 U	190 U	1100 U	37 U	150 U	74 U	56 U	56 U	15 U
1,2,4-Trimethylbenzene	790 U	48 U	290 U	9.8 U	39 U	20 U	15 U	15 U	3.9 U
1,2-Dibromoethane	1200 U	75 U	450 U	15 U	61 U	31 U	23 U	23 U	6.1 U
1,2-Dichlorobenzene	960 U	59 U	350 U	12 U	48 U	24 U	18 U	18 U	4.8 U
1,2-Dichloroethane	650 U	40 U	230 U	8.1 U	32 U	16 U	12 U	12 U	3.2 U
1,2-Dichloropropane	740 U	45 U	270 U	9.2 U	37 U	18 U	14 U	14 U	3.7 U
1,2-Dichlorotetrafluoroethane	1100 U	69 U	410 U	14 U	56 U	28 U	21 U	21 U	5.6 U
1,3,5-Trimethylbenzene	790 U	48 U	290 U	9.8 U	39 U	20 U	15 U	15 U	3.9 U
1,3-Butadiene	880 U	55 U	330 U	11 U	44 U	22 U	17 U	17 U	4.4 U
1,3-Dichlorobenzene	960 U	59 U	350 U	12 U	48 U	24 U	18 U	18 U	4.8 U
1,4-Dichlorobenzene	960 U	59 U	350 U	12 U	48 U	24 U	18 U	18 U	4.8 U
1,4-Dioxane	14000 UJ	900 UJ	5400 UJ	180 UJ	720 UJ	360 UJ	270 UJ	270 U	72 UJ
2,2,4-Trimethylpentane	750 U	46 U	270 U	9.3 U	37 U	19 U	14 U	14 U	3.7 U
2-Hexanone	1600 U	100 U	610 U	**30**	82 U	**41**	31 U	31 U	8.2 U
3-Chloropropene	1300 U	78 U	470 U	16 U	63 U	31 U	23 U	23 U	6.3 U
4-Ethyltoluene	790 U	48 U	290 U	9.8 U	39 U	20 U	15 U	15 U	3.9 U
Acetone	9500 U	590 U	3600 U	**240**	480 U	240 U	**200**	**310**	**160**
Benzene	510 U	31 U	190 U	6.4 U	26 U	13 U	9.6 U	9.6 U	2.6 U
Bromodichloromethane	1100 U	66 U	390 U	13 U	54 U	27 U	20 U	20 U	5.4 U
Bromoethene	700 U	43 U	250 U	8.7 U	35 U	17 U	13 U	13 U	3.5 U
Bromoform	1700 U	100 U	600 U	**65**	83 U	41 U	31 U	31 U	8.3 U
Bromomethane	620 U	38 U	230 U	7.8 U	31 U	16 U	12 U	12 U	3.1 U

Table 3.1-4 Summary of Complete Results for Sub-Slab Soil Vapor Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B70-SSA-011 09/13/2006	B70-SSA-012 09/13/2006	B70-SSA-090* 09/13/2006	B70-SSA-02 09/13/2006	B70-SSA-03 09/13/2006	B70-SSA-04 09/13/2006	B70-SSA-05 09/13/2006	B70-SSA-06 09/13/2006	B70-SSA-07 09/13/2006
TO-15 (ug/m3)									
Carbon disulfide	1200 U	78 U	470 U	16 U	62 U	31 U	23 U	23 U	6.2 U
Carbon tetrachloride	1000 U	62 U	360 U	13 U	50 U	25 U	19 U	19 U	5.0 U
Chlorobenzene	740 U	45 U	270 U	9.2 U	37 U	18 U	14 U	14 U	3.7 U
Chloroethane	1100 U	66 U	400 U	13 U	53 U	26 U	20 U	20 U	5.3 U
Chloroform	780 U	48 U	280 U	9.8 U	39 U	20 U	15 U	15 U	3.9 U
Chloromethane	830 U	52 U	310 U	10 U	41 U	21 U	15 U	15 U	4.1 U
cis-1,2-Dichloroethene	**1100**	39 U	230 U	7.9 U	32 U	**36**	12 U	12 U	3.2 U
cis-1,3-Dichloropropene	730 U	44 U	260 U	9.1 U	36 U	18 U	14 U	14 U	3.6 U
Cyclohexane	550 U	34 U	200 U	6.9 U	28 U	14 U	10 U	10 U	2.8 U
Dibromochloromethane	1400 U	83 U	490 U	17 U	68 U	34 U	26 U	26 U	6.8 U
Dichlorodifluoromethane	2000 U	120 U	740 U	25 U	99 U	49 U	37 U	**130**	**310**
Ethylbenzene	690 U	43 U	250 U	8.7 U	35 U	17 U	13 U	13 U	3.5 U
Freon TF	1200 U	75 U	440 U	15 U	61 U	31 U	23 U	23 U	6.1 U
Heptane	660 U	40 U	240 U	8.2 U	33 U	16 U	12 U	12 U	3.3 U
Hexachlorobutadiene	1700 U	100 U	620 U	21 U	85 U	43 U	32 U	32 U	8.5 U
Hexane	1400 U	88 U	530 U	18 U	70 U	35 U	26 U	26 U	7.0 U
Isopropyl alcohol	9800 U	610 U	3700 U	120 U	490 U	**290**	**1200**	**1200**	**210**
Methyl ethyl ketone	1200 U	74 U	440 U	**290**	**190**	**170**	**130**	**35**	**9.4**
Methyl isobutyl ketone	1600 U	100 U	610 U	**86**	82 U	**49**	**33**	31 U	8.2 U
Methyl tert-butyl ether	1400 U	90 U	540 U	18 U	72 U	36 U	27 U	27 U	7.2 U
Methylene chloride	1400 U	87 U	520 U	17 U	69 U	35 U	26 U	26 U	6.9 U
o-Xylene	690 U	43 U	250 U	8.7 U	35 U	17 U	13 U	13 U	3.5 U
Styrene	680 U	42 U	250 U	8.5 U	34 U	17 U	13 U	13 U	3.4 U
Tetrachloroethene	**120000 J**	**8800 J**	**62000 J**	**1500 J**	**6500 J**	**3200 J**	**150 J**	**88 J**	**160 J**
Tetrahydrofuran	12000 U	740 U	4400 U	150 U	590 U	290 U	220 U	220 U	59 U
Toluene	600 U	**41**	220 U	**16**	30 U	**15**	**14**	**12**	**5.3**
trans-1,2-Dichloroethene	630 U	39 U	230 U	7.9 U	32 U	16 U	12 U	12 U	3.2 U
trans-1,3-Dichloropropene	730 U	44 U	260 U	9.1 U	36 U	18 U	14 U	14 U	3.6 U
Trichloroethene	**26000 J**	**190 J**	**1100 J**	11 UJ	**860 J**	**530 J**	16 UJ	16 UJ	4.3 UJ
Trichlorofluoromethane	900 U	**180**	330 U	**96**	**84**	**79**	**50**	**110**	**90**
Vinyl chloride	410 U	25 U	150 U	5.1 U	20 U	10 U	7.7 U	7.7 U	2.0 U

Table 3.1-4 Summary of Complete Results for Sub-Slab Soil Vapor Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B70-SSA-08 09/13/2006	B70-SSA-09 09/13/2006	B70-SSA-13 11/14/2006	B70-SSA-14 11/14/2006	B70-SSA-15 11/14/2006
TO-15 (ug/m3)					
1,1,1-Trichloroethane	8.7 U	22 U	**150**	130 U	**7.6**
1,1,2,2-Tetrachloroethane	11 U	27 U	6.9 U	160 U	6.9 U
1,1,2-Trichloroethane	8.7 U	22 U	5.5 U	130 U	5.5 U
1,1-Dichloroethane	6.5 U	16 U	**23**	93 U	4.0 U
1,1-Dichloroethene	6.3 U	16 U	**52**	91 U	4.0 U
1,2,4-Trichlorobenzene	30 U	74 U	19 U	420 U	19 U
1,2,4-Trimethylbenzene	7.9 U	20 U	4.9 U	110 U	4.9 U
1,2-Dibromoethane	12 U	31 U	7.7 U	180 U	7.7 U
1,2-Dichlorobenzene	9.6 U	24 U	6.0 U	140 U	6.0 U
1,2-Dichloroethane	6.5 U	16 U	4.0 U	93 U	4.0 U
1,2-Dichloropropane	7.4 U	18 U	4.6 U	110 U	4.6 U
1,2-Dichlorotetrafluoroethane	11 U	28 U	7.0 U	160 U	7.0 U
1,3,5-Trimethylbenzene	7.9 U	20 U	4.9 U	110 U	4.9 U
1,3-Butadiene	8.8 U	22 U	5.5 U	130 U	5.5 U
1,3-Dichlorobenzene	9.6 U	24 U	6.0 U	140 U	6.0 U
1,4-Dichlorobenzene	9.6 U	24 U	6.0 U	140 U	6.0 U
1,4-Dioxane	140 UJ	360 UJ	90 U	2100 U	90 U
2,2,4-Trimethylpentane	7.5 U	19 U	4.7 U	110 U	4.7 U
2-Hexanone	16 U	41 U	10 U	230 U	10 U
3-Chloropropene	13 U	31 U	7.8 U	180 U	7.8 U
4-Ethyltoluene	7.9 U	20 U	4.9 U	110 U	4.9 U
Acetone	**290**	**310**	59 U	1400 U	93 U
Benzene	5.1 U	13 U	3.2 U	73 U	3.2 U
Bromodichloromethane	11 U	27 U	6.7 U	150 U	6.7 U
Bromoethene	7.0 U	17 U	4.4 U	100 U	4.4 U
Bromoform	17 U	41 U	10 U	240 U	10 U
Bromomethane	6.2 U	16 U	3.9 U	89 U	3.9 U

Table 3.1-4 Summary of Complete Results for Sub-Slab Soil Vapor Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B70-SSA-08 09/13/2006	B70-SSA-09 09/13/2006	B70-SSA-13 11/14/2006	B70-SSA-14 11/14/2006	B70-SSA-15 11/14/2006
TO-15 (ug/m3)					
Carbon disulfide	12 U	31 U	7.8 U	180 U	7.8 U
Carbon tetrachloride	10 U	25 U	6.3 U	140 U	6.3 U
Chlorobenzene	7.4 U	18 U	4.6 U	110 U	4.6 U
Chloroethane	11 U	26 U	6.6 U	150 U	6.6 U
Chloroform	7.8 U	20 U	**23**	110 U	4.9 U
Chloromethane	8.3 U	21 U	5.2 U	120 U	5.2 U
cis-1,2-Dichloroethene	6.3 U	16 U	4.0 U	91 U	**4.0**
cis-1,3-Dichloropropene	7.3 U	18 U	4.5 U	100 U	4.5 U
Cyclohexane	5.5 U	14 U	**5.9**	79 U	3.4 U
Dibromochloromethane	14 U	34 U	8.5 U	200 U	8.5 U
Dichlorodifluoromethane	**480**	49 U	12 U	280 U	17 U
Ethylbenzene	6.9 U	17 U	4.3 U	100 U	4.3 U
Freon TF	12 U	31 U	7.7 U	180 U	7.7 U
Heptane	6.6 U	16 U	4.1 U	94 U	**4.1**
Hexachlorobutadiene	17 U	43 U	11 U	250 U	11 U
Hexane	14 U	35 U	8.8 U	200 U	8.8 U
Isopropyl alcohol	**120**	**1600**	61 U	1400 U	**130**
Methyl ethyl ketone	**17**	**86**	7.4 U	170 U	**41**
Methyl isobutyl ketone	16 U	41 U	10 U	230 U	**12**
Methyl tert-butyl ether	14 U	36 U	9.0 U	210 U	9.0 U
Methylene chloride	14 U	35 U	8.7 U	200 U	8.7 U
o-Xylene	6.9 U	17 U	4.3 U	100 U	4.3 U
Styrene	6.8 U	17 U	4.3 U	98 U	4.3 U
Tetrachloroethene	**1400 J**	**310 J**	**880**	**20000**	**880**
Tetrahydrofuran	120 U	290 U	74 U	1700 U	74 U
Toluene	**9.8**	15 U	3.8 U	87 U	**57**
trans-1,2-Dichloroethene	6.3 U	16 U	4.0 U	91 U	4.0 U
trans-1,3-Dichloropropene	7.3 U	18 U	4.5 U	100 U	4.5 U
Trichloroethene	**27 J**	21 UJ	**160**	**4200**	**28**
Trichlorofluoromethane	**84**	**79**	**90**	130 U	**33**
Vinyl chloride	4.1 U	10 U	2.6 U	59 U	2.6 U

Table 3.1-5 Summary of Complete Results for Ambient Air (Indoor and Outdoor Air) Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B100-IA-01 11/14/2006	B100-IA-02 11/14/2006	B100-IA-03 11/14/2006	B140-IA-01 11/14/2006	B140-IA-02 11/14/2006	B140-IA-03 11/14/2006
TO-15 (ug/m3)						
1,1,1-Trichloroethane	**0.23**	0.16 U	**0.055 R**	**0.27**	0.22 U	0.27 U
1,1,2,2-Tetrachloroethane	0.069 U	0.21 U	**0.069 R**	0.069 U	0.27 U	0.34 U
1,1,2-Trichloroethane	0.055 U	0.16 U	**0.055 R**	0.055 U	0.22 U	0.27 U
1,1-Dichloroethane	0.040 U	0.12 U	**0.040 R**	0.040 U	0.16 U	0.20 U
1,1-Dichloroethene	0.040 U	0.12 U	**0.040 R**	0.040 U	0.16 U	0.20 U
1,2-Dibromoethane	0.077 U	0.23 U	**0.077 R**	0.077 U	0.31 U	0.38 U
1,2-Dichloroethane	0.081 U	0.24 U	**0.081 R**	0.081 U	0.32 U	0.40 U
1,2-Dichloropropane	0.092 U	0.28 U	**0.092 R**	0.092 U	0.37 U	0.46 U
1,2-Dichlorotetrafluoroethane	**0.15**	0.21 U	**0.070 R**	**0.14**	0.28 U	0.35 U
1,3,5-Trimethylbenzene	**0.17**	**0.42 J-**	**0.049 R**	**0.40**	**0.38 J-**	**0.26 J-**
1,3-Butadiene	0.044 U	0.13 UJ	**0.044 R**	0.044 U	0.18 UJ	0.22 UJ
2,2,4-Trimethylpentane	**0.16**	**0.30**	**0.047 R**	**0.28**	**0.45**	0.23 U
3-Chloropropene	0.063 UJ	0.19 U	**0.063 R**	0.063 UJ	0.25 U	0.31 U
4-Ethyltoluene	**0.46**	**1.3**	**0.049 R**	**0.74**	**0.93**	**0.79**
Benzene	**0.45**	**0.61**	**0.032 R**	**0.67**	**1.2**	**0.89**
Bromodichloromethane	0.067 U	0.20 U	**0.067 R**	0.067 U	0.27 U	0.34 U
Bromoethene	0.087 U	0.26 U	**0.087 R**	0.087 U	0.35 U	0.44 U
Bromoform	0.10 U	0.31 U	**0.10 R**	0.10 U	0.41 U	0.52 U
Bromomethane	0.078 U	0.23 U	**0.078 R**	0.078 U	0.31 U	0.39 U
Carbon tetrachloride	**0.69**	**0.75**	**0.063 R**	**0.69**	**0.75**	**0.88**
Chloroethane	0.053 U	0.16 U	**0.053 R**	0.053 U	0.21 U	0.26 U
Chloroform	**0.093**	0.15 U	**0.049 R**	**0.13**	0.20 U	0.24 U
cis-1,2-Dichloroethene	0.040 U	0.12 U	**0.040 R**	**0.087**	**0.52**	**0.48**
cis-1,3-Dichloropropene	0.045 U	0.14 U	**0.045 R**	0.045 U	0.18 U	0.23 U
Cyclohexane	**0.11**	**0.22**	**0.034 R**	**0.89**	**0.65**	**0.45**
Dibromochloromethane	0.085 U	0.26 U	**0.085 R**	0.085 U	0.34 U	0.43 U
Dichlorodifluoromethane	**4.9 J**	**6.9**	**0.059 R**	**3.4**	**3.3**	**3.2**
Ethylbenzene	**0.26**	**0.42**	**0.043 R**	**0.69**	**1.7**	**1.2**
Heptane	**0.20 J-**	**0.39 J-**	**0.041 R**	**1.1 J-**	**0.78 J-**	**0.57 J-**
Hexane	**0.53**	**0.92 J-**	**0.070 R**	**1.1**	**1.8 J-**	**1.2 J-**
Methyl tert-butyl ether	**0.036**	0.11 U	**0.036 R**	**0.069**	0.14 U	0.18 U
o-Xylene	**0.33**	**0.52**	**0.043 R**	**0.87**	**1.7**	**1.2**
Tetrachloroethene	**1.2**	**15**	**0.068 R**	**4.4**	**19**	**24**
Toluene	**1.1**	**2.0**	**0.038 R**	**3.1**	**4.1**	**3.0**
trans-1,2-Dichloroethene	0.040 U	0.12 U	**0.040 R**	0.040 U	0.16 U	0.20 U
trans-1,3-Dichloropropene	0.045 U	0.14 U	**0.045 R**	0.045 U	0.18 U	0.23 U
Trichloroethene	**0.070**	**0.34**	**0.054 R**	**0.46**	**2.5**	**2.6**
Trichlorofluoromethane	**52 J**	**56 J**	**0.056 R**	**2.4**	**2.5**	**4.0**
Vinyl chloride	0.051 U	0.15 U	**0.051 R**	0.051 U	0.20 U	0.26 U

Table 3.1-5 Summary of Complete Results for Ambient Air (Indoor and Outdoor Air) Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	B70-IA-01 11/14/2006	B70-IA-02 11/14/2006	B70-IA-03 11/14/2006	OA-01 11/14/2006	OA-02 11/14/2006	OA-03 11/14/2006
TO-15 (ug/m3)						
1,1,1-Trichloroethane	**0.24**	**0.16**	**0.12**	**0.11**	**0.10**	**0.11**
1,1,2,2-Tetrachloroethane	0.14 U	0.14 U	0.069 U	0.069 U	0.069 U	0.069 U
1,1,2-Trichloroethane	0.11 U	0.11 U	0.055 U	0.055 U	0.055 U	0.055 U
1,1-Dichloroethane	0.081 U	0.081 U	0.040 U	0.040 U	0.040 U	0.040 U
1,1-Dichloroethene	0.079 U	0.079 U	0.040 U	0.040 U	0.040 U	0.040 U
1,2-Dibromoethane	0.15 U	0.15 U	0.077 U	0.077 U	0.077 U	0.077 U
1,2-Dichloroethane	0.16 U	0.16 U	0.081 U	0.081 U	0.081 U	0.081 U
1,2-Dichloropropane	0.18 U	0.18 U	0.092 U	0.092 U	0.092 U	0.092 U
1,2-Dichlorotetrafluoroethane	**0.15**	0.14 U	**0.15**	**0.15**	**0.14**	**0.16**
1,3,5-Trimethylbenzene	**0.38 J-**	**0.49 J-**	**0.29**	**0.12**	**0.11**	**0.093**
1,3-Butadiene	0.088 UJ	0.088 UJ	0.044 U	0.044 U	**0.080**	**0.077**
2,2,4-Trimethylpentane	**0.15**	**0.14**	**0.14**	**0.19**	**0.24**	**0.24**
3-Chloropropene	0.13 U	0.13 U	0.063 UJ	0.063 UJ	0.063 UJ	0.063 UJ
4-Ethyltoluene	**0.59**	**0.88**	**0.54**	**0.25**	**0.33**	**0.27**
Benzene	**0.45**	**0.42**	**0.38**	**0.42**	**0.51**	**0.51**
Bromodichloromethane	0.13 U	0.13 U	0.067 U	0.067 U	0.067 U	0.067 U
Bromoethene	0.17 U	0.17 U	0.087 U	0.087 U	0.087 U	0.087 U
Bromoform	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U
Bromomethane	0.16 U	0.16 U	0.078 U	0.078 U	0.078 U	0.078 U
Carbon tetrachloride	**0.75**	**0.75**	**0.75**	**0.69**	**0.69**	**0.69**
Chloroethane	0.11 U	0.11 U	0.053 U	0.053 U	0.053 U	0.053 U
Chloroform	**0.11**	**0.10**	**0.11**	**0.11**	**0.098**	**0.15**
cis-1,2-Dichloroethene	0.079 U	0.079 U	0.040 U	0.040 U	0.040 U	0.040 U
cis-1,3-Dichloropropene	0.091 U	0.091 U	0.045 U	0.045 U	0.045 U	0.045 U
Cyclohexane	**0.10**	**0.079 J**	**0.096**	**0.23**	**0.14**	**0.15**
Dibromochloromethane	0.17 U	0.17 U	0.085 U	0.085 U	0.085 U	0.085 U
Dichlorodifluoromethane	**3.4**	**6.4**	**9.9 J**	**3.2**	**3.2**	**3.2**
Ethylbenzene	**0.78**	**0.87**	**0.56**	**0.28**	**0.23**	**0.26**
Heptane	**0.22 J-**	**0.15 J**	**0.20 J-**	**0.25 J-**	**0.24 J-**	**0.25 J-**
Hexane	**0.39 J-**	**0.30 J**	**0.32**	**3.5 J**	**0.85**	**0.49**
Methyl tert-butyl ether	0.072 U	0.072 U	0.036 U	0.036 U	**0.040**	0.036 U
o-Xylene	**2.1**	**2.5**	**1.4**	**0.37**	**0.30**	**0.30**
Tetrachloroethene	**7.5**	**8.8**	**5.4**	**0.24**	**0.46**	**0.39**
Toluene	**1.4**	**0.87**	**2.3**	**1.3**	**1.4**	**2.3**
trans-1,2-Dichloroethene	0.079 U	0.079 U	0.040 U	0.040 U	0.040 U	0.040 U
trans-1,3-Dichloropropene	0.091 U	0.091 U	0.045 U	0.045 U	0.045 U	0.045 U
Trichloroethene	**0.51**	**0.97**	**0.40**	**0.064**	**0.075**	**0.091**
Trichlorofluoromethane	**28 J**	**19 J**	**12 J**	**1.9**	**1.9**	**1.7**
Vinyl chloride	0.10 U	0.10 U	0.051 U	0.051 U	0.051 U	0.051 U

Table 3.1-6 Summary of Complete Results for Transformer Pad Soil Samples, RI Phase I, Sylvania Corning FUSRAP Site

Analyte	NS-01 09/15/2006	NS-02 09/15/2006	NS-03 09/15/2006	NS-04 09/15/2006	SS-01 09/15/2006
PCBs SW8082 (ug/Kg)					
AROCLOR 1016	19 U	200 U	18 U	19 U	21 U
AROCLOR 1221	19 U	200 U	18 U	19 U	21 U
AROCLOR 1232	19 U	200 U	18 U	19 U	21 U
AROCLOR 1242	19 U	200 U	18 U	19 U	21 U
AROCLOR 1248	19 U	200 U	18 U	19 U	21 U
AROCLOR 1254	19 U	**1000**	**170**	**43**	21 U
AROCLOR 1260	**51**	200 U	**69**	**20**	**32**

Key for Tables 3.1-1 through 3.1-6

Key:
U: Not detected
UJ: Estimated/Not detected
J: Estimated
J-: Estimated low
J+: Estimated high
R: Rejected
ug/m3: microgram per cubic meter
ng: nanogram
ug/kg: microgram per kilogram

Table 3.2-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte	RB-01 05/21/2007	RB-02 05/22/2007	RB-03 05/24/2007	RB-04 05/24/2007	RB-05 05/29/2007	RB-06 05/30/2007	RB-07 06/06/2007	RB-08 06/06/2007
6010B (mg/kg)								
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
8260B (µg/kg)								
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U
2-Butanone	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	**160 J-**	**150**
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U

Table 3.2-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte	RB-01 05/21/2007	RB-02 05/22/2007	RB-03 05/24/2007	RB-04 05/24/2007	RB-05 05/29/2007	RB-06 05/30/2007	RB-07 06/06/2007	RB-08 06/06/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.54 J**	**1.2 J**	**1.1 J**
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
FREON 113	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylcyclohexane	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Methylene chloride	**8.5**	1.0 U	**8.1**	**8.1**	1.0 U	1.0 U	**40**	**55**
m-Xylene & p-Xylene	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ
Toluene	1.0 UJ	**0.28 J**	**0.30 J**	**0.25 J**	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3.2-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte	RB-09 06/08/2007	RB-09A 06/12/2007	RB-10 06/08/2007	RB-10A 06/12/2007	RB-11 06/11/2007	RB-12 06/11/2007	RB-13 06/13/2007	RB-14 06/13/2007
6010B (mg/kg)								
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
8260B (µg/kg)								
1,1,1-Trichloroethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane		80 U		80 U	80 U	80 U	80 U	80 U
2-Butanone		5.0 U		5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U
2-Hexanone		5.0 U		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone		5.0 U		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone		**19 J**		**21 J**	**230 JN**	**200 JN**	**160**	**220**
Benzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane		1.0 U		1.0 U	**0.59 J**	1.0 U	1.0 U	1.0 U
Bromodichloromethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane		2.0 U		2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U

Table 3.2-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte	RB-09 06/08/2007	RB-09A 06/12/2007	RB-10 06/08/2007	RB-10A 06/12/2007	RB-11 06/11/2007	RB-12 06/11/2007	RB-13 06/13/2007	RB-14 06/13/2007
Carbon disulfide		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane		2.0 U		2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U
Chloroform		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		**0.75 J**		2.0 U	**0.39 J**	**0.23 J**	**0.47 J**	**0.79 J**
cis-1,2-Dichloroethene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane		2.0 U		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
FREON 113		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate		5.0 U		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether		2.0 U		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylcyclohexane		4.0 U		4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Methylene chloride		**7.6**		**7.4**	**37**	**40**	**43**	**50**
m-Xylene & p-Xylene		2.0 U		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene		1.0 U		1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U
Toluene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3.2-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte	RB-15 06/15/2007	RB-16 06/15/2007	TB-01 05/21/2007	TB-02 05/15/2007	TB-03 05/24/2007	TB-04 05/15/2007	TB-05 05/15/2007	TB-06 05/15/2007
6010B (mg/kg)								
Nickel	40 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
8260B (µg/kg)								
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	80 U	80 U	80 U	80 U	80 U	80 U
1,4-Dioxane	80 U	80 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	**2.2**	2.0 U	**2.1 J**	2.0 UJ	2.0 U	2.0 U
Acetone	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ
Bromomethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3.2-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte	RB-15 06/15/2007	RB-16 06/15/2007	TB-01 05/21/2007	TB-02 05/15/2007	TB-03 05/24/2007	TB-04 05/15/2007	TB-05 05/15/2007	TB-06 05/15/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ
Chloroethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	2.0 UJ	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
FREON 113	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Methylcyclohexane	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	1.0 UJ	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m-Xylene & p-Xylene	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Tetrachloroethene	1.0 U	1.0 U	**0.10 J**	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	**0.15 J**	**0.30 J**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3.2-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte	TB-07 06/12/2007	TB-08 06/11/2007	TB-09 06/13/2007	TB-10 06/15/2007
6010B (mg/kg)				
Nickel	1.0 U	1.0 U	1.0 U	1.0 U
8260B (µg/kg)				
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	80 U	80 U	80 U	80 U
1,4-Dioxane	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U

Table 3.2-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte	TB-07 06/12/2007	TB-08 06/11/2007	TB-09 06/13/2007	TB-10 06/15/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	2.0 U	2.0 U	2.0 U	2.0 UJ
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	2.0 U	2.0 U	2.0 U	2.0 U
Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
FREON 113	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether	4.0 U	4.0 U	4.0 U	4.0 U
Methylcyclohexane	1.0 U	1.0 U	1.0 U	1.0 UJ
Methylene chloride	2.0 U	2.0 U	2.0 U	2.0 U
m-Xylene & p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	2.0 U	2.0 U	2.0 UJ	2.0 U

Table 3.2-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte Conc. Units:		Uranium 233/234 pCi/L					Uranium 235/236 pCi/L					Uranium-238 pCi/L				
Sample ID	Sample Date	Result			Qual	MDC	Result			Qual	MDC	Result			Qual	MDC
Rinsate Blanks																
RB-01	05/21/07	0.002	±	0.025	U	0.056	0.006	±	0.029	U	0.062	0.002	±	0.025	UJ	0.056
RB-02	05/22/07	0.002	±	0.024	U	0.052	-0.003	±	0.025	U	0.050	0.027	±	0.040	UJ	0.057
RB-03	05/24/07	0.021	±	0.031	U	0.044	0.0	±	0.0	U	0.03	0.008	±	0.023	U	0.022
RB-04	05/24/07	0.002	±	0.021	U	0.047	-0.002	±	0.022	U	0.045	0.01	±	0.026	U	0.046
RB-05	05/29/07	0.024	±	0.042	UJ	0.033	0.011	±	0.034	U	0.068	0.0	±	0.0	U	0.03
RB-06	05/30/07	0.013	±	0.026	U	0.046	-0.011	±	0.018	U	0.049	-0.004	±	0.019	U	0.046
RB-07	06/06/07	0.012	±	0.034	U	0.058	0.010	±	0.028	UJ	0.027	0.014	±	0.024	U	0.037
RB-08	06/06/07	0.009	±	0.024	U	0.043	0.0	±	0.0	U	0.02	-0.005	±	0.019	U	0.043
RB09	06/08/07	0.017	±	0.030	UJ	0.045	-0.005	±	0.023	U	0.050	0.002	±	0.020	U	0.045
RB-09A	06/12/07	0.045	±	0.042		0.043	0.0	±	0.0	U	0.03	0.0	±	0.0	U	0.02
RB10	06/08/07	0.025	±	0.034	UJ	0.046	-0.002	±	0.022	U	0.044	-0.008	±	0.022	U	0.049
RB-10A	06/12/07	0.022	±	0.039	UJ	0.058	-0.007	±	0.024	U	0.054	0.006	±	0.027	U	0.050
RB-11	06/11/07	-0.004	±	0.043	U	0.098	0.013	±	0.040	U	0.081	0.039	±	0.052	UJ	0.065
RB-12	06/11/07	0.018	±	0.061	U	0.11	-0.009	±	0.043	U	0.093	0.070	±	0.069		0.038
RB-13	06/13/07	0.028	±	0.034	UJ	0.043	0.0	±	0.0	U	0.03	0.010	±	0.027	U	0.047
RB-14	06/13/07	0.005	±	0.026	U	0.049	0.0	±	0.0	U	0.02	0.014	±	0.025	UJ	0.019
RB-15	06/15/07	0.006	±	0.029	U	0.054	0.015	±	0.031	U	0.052	0.012	±	0.025	U	0.042
RB-16	06/15/07	0.013	±	0.023	UJ	0.035	0.019	±	0.033	UJ	0.026	0.004	±	0.019	U	0.041

Table 3.2-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Analyte Conc. Units:		Thorium-228 pCi/L					Thorium-230 pCi/L					Thorium-232 pCi/L				
Sample ID	Sample Date	Result			Qual	MDC	Result			Qual	MDC	Result			Qual	MDC
Rinsate Blanks																
RB-01	05/21/07	0.012	±	0.043	U	0.074	0.027	±	0.035	UJ	0.044	-0.007	±	0.026	U	0.057
RB-02	05/22/07	0.012	±	0.042	U	0.073	0.113	±	0.070	J	0.044	0.0	±	0.0	U	0.03
RB-03	05/24/07	0.014	±	0.048	U	0.083	0.060	±	0.057	U	0.058	0.011	±	0.031	U	0.029
RB-04	05/24/07	0.0	±	0.0	U	0.07	0.048	±	0.050	U	0.056	-0.005	±	0.026	U	0.056
RB-05	05/29/07	0.0	±	0.0	U	0.07	0.005	±	0.026	U	0.057	-0.005	±	0.026	U	0.056
RB-06	05/30/07	0.005	±	0.036	U	0.069	0.051	±	0.034	J	0.034	-0.005	±	0.021	U	0.049
RB-07	06/06/07	0.022	±	0.042	U	0.064	0.076	±	0.056	UJ	0.047	-0.002	±	0.020	U	0.040
RB-08	06/06/07	0.035	±	0.037	U	0.041	0.089	±	0.056	UJ	0.041	0.014	±	0.032	U	0.053
RB09	06/08/07	0.023	±	0.041	UJ	0.061	0.046	±	0.041	J	0.021	-0.002	±	0.017	U	0.035
RB-09A	06/12/07	0.025	±	0.041	UJ	0.059	0.043	±	0.040	J	0.042	0.020	±	0.029	UJ	0.041
RB10	06/08/07	0.025	±	0.045	UJ	0.067	0.023	±	0.031	UJ	0.039	0.006	±	0.019	U	0.038
RB-10A	06/12/07	0.021	±	0.036	UJ	0.053	0.041	±	0.046	UJ	0.059	0.004	±	0.019	U	0.041
RB-11	06/11/07	0.088	±	0.092	UJ	0.10	0.29	±	0.16		0.09	0.01	±	0.047	U	0.10
RB-12	06/11/07	0.008	±	0.061	U	0.12	0.074	±	0.090	UJ	0.12	0.033	±	0.057	UJ	0.044
RB-13	06/13/07	0.033	±	0.061	UJ	0.090	0.072	±	0.055	U	0.051	-0.006	±	0.023	U	0.051
RB-14	06/13/07	0.062	±	0.061	UJ	0.075	0.026	±	0.035	UJ	0.047	-0.004	±	0.020	U	0.042
RB-15	06/15/07	0.016	±	0.032	UJ	0.051	0.046	±	0.040	J	0.036	-0.004	±	0.019	U	0.042
RB-16	06/15/07	0.064	±	0.056		0.062	0.069	±	0.055	J	0.055	0.009	±	0.024	UJ	0.023

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	100-10-Z2[1] 13-14 ft 06/08/2007	100-10-931-Z2[1] 13-14 ft 06/08/2007	100-11-Z1 3-4 ft 06/07/2007	100-11-930 3-4 ft 06/07/2007	100-01-Z1 0-2 ft 06/13/2007	100-932-Z1 0-2 ft 06/13/2007	100-04-Z1 3-5 ft 06/13/2007	100-933-Z1 3-5 ft 06/13/2007
6010B (mg/kg)								
Nickel	**2.2 J**	**3.6 J**	**50.3**	**45.9**	**5.8**	**5.0**	**8.7**	**9.7**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,1-Dichloroethane	5.1 U	5.1 U	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
1,1-Dichloroethene	5.1 UJ	5.1 UJ	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,2-Dibromo-3-chloropropane	10 U	10 U	11 UJ	11 UJ	11 U	10 U	11 U	11 U
1,2-Dibromoethane	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,2-Dichloroethane	5.1 U	5.1 U	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
1,2-Dichloropropane	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
1,4-Dioxane	410 U	410 U	430 UJ	430 UJ	420 U	420 U	430 U	430 U
2-Butanone	20 U	21 U	22 U	21 U	21 U	21 U	21 U	22 U
2-Hexanone	20 U	21 U	22 UJ	21 UJ	21 U	21 U	21 U	22 U
4-Methyl-2-Pentanone	20 U	21 U	22 UJ	21 UJ	21 U	21 U	21 U	22 U
Acetone	20 U	21 U	22 UJ	21 UJ	21 U	21 U	21 U	**29**
Benzene	5.1 U	5.1 U	5.4 UJ	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
Bromochloromethane	5.1 U	5.1 U	5.4 U	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Bromodichloromethane	5.1 U	5.1 U	5.4 UJ	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
Bromoform	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Bromomethane	10 U	10 U	11 U	11 U	11 U	10 U	11 U	11 U
Carbon disulfide	5.1 UJ	5.1 UJ	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
Carbon tetrachloride	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Chlorobenzene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Chloroethane	10 U	10 U	11 U	11 U	11 U	10 U	11 U	11 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	100-10-Z2[1] 13-14 ft 06/08/2007	100-10-931-Z2[1] 13-14 ft 06/08/2007	100-11-Z1 3-4 ft 06/07/2007	100-11-930 3-4 ft 06/07/2007	100-01-Z1 0-2 ft 06/13/2007	100-932-Z1 0-2 ft 06/13/2007	100-04-Z1 3-5 ft 06/13/2007	100-933-Z1 3-5 ft 06/13/2007
Chloroform	5.1 U	5.1 U	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
Chloromethane	10 U	10 U	11 U	11 U	11 U	10 U	11 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Cyclohexane	10 U	10 U	11 UJ	11 UJ	11 U	10 U	11 U	11 U
Dibromochloromethane	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Dichlorodifluoromethane	10 U	10 U	11 U	11 U	11 U	10 U	11 U	11 U
Ethylbenzene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
FREON 113	5.1 UJ	5.1 UJ	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
Isopropylbenzene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Methyl acetate	10 U	10 U	11 U	11 U	11 U	10 U	11 U	11 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
Methylcyclohexane	10 U	10 U	11 UJ	11 UJ	11 U	10 U	11 U	11 U
Methylene chloride	10 U	10 U	11 U	11 U	11 U	10 U	11 U	11 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
o-Xylene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Styrene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Tetrachloroethene	**0.77 J**	**0.59 J**	**630 J**	**580 J**	5.3 U	5.2 U	5.4 U	5.4 U
Toluene	5.1 UJ	5.1 UJ	5.4 UJ	5.4 UJ	5.3 UJ	5.2 UJ	5.4 U	5.4 U
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.4 UJ	5.4 UJ	5.3 U	5.2 U	5.4 U	5.4 U
Trichloroethene	5.1 U	5.1 U	**6.5 J**	**6.2 J**	5.3 U	5.2 U	5.4 U	5.4 U
Trichlorofluoromethane	5.1 U	5.1 U	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
Vinyl chloride	5.1 U	5.1 U	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	140-11-Z1 2-3 ft 06/07/2007	140-11-920 2-3 ft 06/07/2007	DR-L-Z1 5-6 ft 05/31/2007	DR-L-964-Z1 5-6 ft 05/31/2007	DR-O-Z1 2-3.5 ft 06/04/2007	DR-O-900-Z1 2-3.5 ft 06/04/2007	DRY-D-Z4 29-30 ft 06/05/2007	DRY-D-901 29-30 ft 06/05/2007
6010B (mg/kg)								
Nickel	**23.4**	**20.9**	**4.5**	**4.5**	**7.5**	**6.6**	**2.4 J**	**2.0 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,1-Dichloroethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,1-Dichloroethene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.3 U	5.4 UJ	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.3 U	5.4 UJ	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	11 U	11 UJ	10 U	10 U	11 U	11 U	10 U	10 U
1,2-Dibromoethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.3 U	5.4 UJ	5.1 U	**0.21 J**	**1.2 J**	5.4 U	5.1 U	5.1 U
1,2-Dichloroethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,2-Dichloropropane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.3 U	5.4 UJ	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.3 U	5.4 UJ	5.1 U	5.1 UJ	5.3 U	5.4 U	5.1 U	5.1 U
1,4-Dioxane	430 U	440 U	410 U	400 U	420 U	430 U	410 U	410 U
2-Butanone	21 U	22 U	20 U	20 U	21 U	21 U	21 U	20 U
2-Hexanone	21 U	22 U	20 U	20 U	21 U	21 U	21 U	20 U
4-Methyl-2-Pentanone	21 U	22 U	20 U	20 U	21 U	21 U	21 U	20 U
Acetone	21 U	22 U	20 U	20 U	21 U	21 U	21 U	20 U
Benzene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Bromochloromethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Bromodichloromethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Bromoform	5.3 U	5.4 UJ	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Bromomethane	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Carbon disulfide	5.3 U	5.4 U	5.1 U	**0.57 J**	5.3 U	5.4 U	5.1 UJ	5.1 U
Carbon tetrachloride	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Chlorobenzene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Chloroethane	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	140-11-Z1 2-3 ft 06/07/2007	140-11-920 2-3 ft 06/07/2007	DR-L-Z1 5-6 ft 05/31/2007	DR-L-964-Z1 5-6 ft 05/31/2007	DR-O-Z1 2-3.5 ft 06/04/2007	DR-O-900-Z1 2-3.5 ft 06/04/2007	DRY-D-Z4 29-30 ft 06/05/2007	DRY-D-901 29-30 ft 06/05/2007
Chloroform	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Chloromethane	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Cyclohexane	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Dibromochloromethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Dichlorodifluoromethane	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Ethylbenzene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
FREON 113	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Isopropylbenzene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Methyl acetate	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Methyl tert-butyl ether	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Methylcyclohexane	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Methylene chloride	11 U	11 U	10 U	10 U	11 U	11 U	5.1 U	5.1 U
m-Xylene & p-Xylene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
o-Xylene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Styrene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 UJ	5.1 U
Tetrachloroethene	**47**	**54**	5.1 U	5.1 U	**35 J+**	**21**	5.1 U	5.1 U
Toluene	**0.53 J**	**0.54 J**	5.1 UJ	5.1 UJ	**0.71 J**	**0.47 J**	5.1 UJ	5.1 U
trans-1,2-Dichloroethene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Trichloroethene	5.3 U	5.4 U	5.1 U	5.1 U	**4.3 J**	**2.8 J**	5.1 U	5.1 U
Trichlorofluoromethane	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U
Vinyl chloride	5.3 U	5.4 U	5.1 U	5.1 U	5.3 U	5.4 U	5.1 U	5.1 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DRYH-A-Z1 4-5 ft 06/05/2007	DRYH-A-902 4-5 ft 06/05/2007	EM-5-SO-01 0-2 ft 06/14/2007	EM-5-SO-991 0-2 ft 06/14/2007	GPR-F-SO-01 0-2 ft 06/12/2007	GPR-F-990 0-2 ft 06/12/2007	SMP-1-Z2 8-10 ft 06/07/2007	SMP-1-903-Z1 8-10 ft 06/07/2007
6010B (mg/kg)								
Nickel	**8.9**	**9.1**	**20.3**	**20.2**	**16.6**	**23.0**	**3.6 J**	**4.0**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,1-Dichloroethane	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,1-Dichloroethene	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.1 UJ	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.1 UJ	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 UJ	10 UJ	11 U	11 U	11 U	11 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.1 UJ	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,2-Dichloroethane	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,2-Dichloropropane	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.1 UJ	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.1 UJ	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
1,4-Dioxane	410 U	410 U	450 U	460 U	440 U	440 U	410 U	410 U
2-Butanone	20 U	21 U	23 U	23 U	22 U	22 U	20 U	20 U
2-Hexanone	20 U	21 UJ	23 U	23 U	22 U	22 U	20 U	20 U
4-Methyl-2-Pentanone	20 U	21 UJ	23 U	23 U	22 U	22 U	20 U	20 U
Acetone	**27 J**	**41 J+**	23 U	23 U	22 U	22 U	20 U	20 U
Benzene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Bromochloromethane	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Bromodichloromethane	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Bromoform	5.1 UJ	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Bromomethane	10 U	10 U	11 U	11 U	11 U	11 U	10 U	10 U
Carbon disulfide	5.1 U	5.2 UJ	5.7 UJ	5.7 UJ	5.5 U	5.6 U	5.1 U	5.1 U
Carbon tetrachloride	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Chlorobenzene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Chloroethane	10 U	10 U	11 U	11 U	11 U	11 U	10 U	10 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DRYH-A-Z1 4-5 ft 06/05/2007	DRYH-A-902 4-5 ft 06/05/2007	EM-5-SO-01 0-2 ft 06/14/2007	EM-5-SO-991 0-2 ft 06/14/2007	GPR-F-SO-01 0-2 ft 06/12/2007	GPR-F-990 0-2 ft 06/12/2007	SMP-1-Z2 8-10 ft 06/07/2007	SMP-1-903-Z1 8-10 ft 06/07/2007
Chloroform	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Chloromethane	10 U	10 U	11 U	11 U	11 U	11 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Cyclohexane	10 U	10 UJ	11 U	11 U	11 U	11 U	10 U	10 U
Dibromochloromethane	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	11 U	11 U	11 U	11 U	10 U	10 U
Ethylbenzene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
FREON 113	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Isopropylbenzene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Methyl acetate	**6.4 J**	10 U	11 U	11 U	11 U	11 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Methylcyclohexane	10 U	10 UJ	11 U	11 U	11 U	11 U	10 U	10 U
Methylene chloride	5.1 U	5.2 U	11 U	11 U	11 U	11 U	10 U	10 U
m-Xylene & p-Xylene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
o-Xylene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Styrene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Tetrachloroethene	**24 J**	**11 J**	**44**	**46**	5.5 U	5.6 U	5.1 U	5.1 U
Toluene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 UJ	5.1 U
trans-1,2-Dichloroethene	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.1 U	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Trichloroethene	**1.4 J**	5.2 UJ	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Trichlorofluoromethane	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U
Vinyl chloride	5.1 U	5.2 U	5.7 U	5.7 U	5.5 U	5.6 U	5.1 U	5.1 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU08-09-Z1 6-7 ft 06/06/2007	SU08-09-972 6-7 ft 06/06/2007	SU08-09-Z2 18-19 ft 06/06/2007	SU08-09-973 18-19 ft 06/06/2007	SU08-13-Z1 2-3 ft 06/06/2007	SU08-13-974 2-3 ft 06/06/2007	SU08-13-Z2 8-9 ft 06/06/2007	SU08-13-976 8-9 ft 06/06/2007
6010B (mg/kg)								
Nickel	**5.0**	**4.3**	**3.7 J**	**3.3 J**	**7.0**	**8.3**	**8.3**	**9.8**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
1,1,2,2-Tetrachloroethane	5.2 U	5.2 UJ	5.1 U	5.2 UJ	5.8 UJ	5.8 UJ	5.5 U	5.6 UJ
1,1,2-Trichloroethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
1,1-Dichloroethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
1,1-Dichloroethene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
1,2,3-Trichlorobenzene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 UJ	5.6 U
1,2,4-Trichlorobenzene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 UJ	5.6 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	12 UJ	12 U	11 UJ	11 U
1,2-Dibromoethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
1,2-Dichlorobenzene	5.2 UJ	5.2 U	5.1 UJ	5.2 U	5.8 UJ	5.8 U	5.5 UJ	5.6 U
1,2-Dichloroethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
1,2-Dichloropropane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
1,3-Dichlorobenzene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 UJ	5.6 U
1,4-Dichlorobenzene	5.2 UJ	5.2 U	5.1 UJ	5.2 U	5.8 UJ	5.8 U	5.5 UJ	5.6 U
1,4-Dioxane	410 U	410 U	410 U	410 U	460 U	460 U	440 U	450 U
2-Butanone	21 U	21 U	21 U	21 U	23 U	23 U	22 U	23 U
2-Hexanone	21 U	21 U	21 U	21 U	23 UJ	23 U	22 U	23 U
4-Methyl-2-Pentanone	21 U	21 U	21 U	21 U	23 UJ	23 U	22 U	23 U
Acetone	21 U	21 U	21 U	21 U	23 U	23 U	**4.8 J**	23 U
Benzene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Bromochloromethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
Bromodichloromethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Bromoform	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 UJ	5.6 U
Bromomethane	10 U	10 U	10 U	10 U	12 U	12 U	11 U	11 U
Carbon disulfide	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
Carbon tetrachloride	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Chlorobenzene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Chloroethane	10 U	10 U	10 U	10 U	12 U	12 U	11 U	11 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU08-09-Z1 6-7 ft 06/06/2007	SU08-09-972 6-7 ft 06/06/2007	SU08-09-Z2 18-19 ft 06/06/2007	SU08-09-973 18-19 ft 06/06/2007	SU08-13-Z1 2-3 ft 06/06/2007	SU08-13-974 2-3 ft 06/06/2007	SU08-13-Z2 8-9 ft 06/06/2007	SU08-13-976 8-9 ft 06/06/2007
Chloroform	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
Chloromethane	10 U	10 U	10 U	10 U	12 U	12 U	11 U	11 U
cis-1,2-Dichloroethene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
cis-1,3-Dichloropropene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Cyclohexane	10 U	10 U	10 U	10 U	12 UJ	12 U	11 U	11 U
Dibromochloromethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	12 U	12 U	11 U	11 U
Ethylbenzene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
FREON 113	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
Isopropylbenzene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Methyl acetate	10 U	10 U	10 U	10 U	12 U	12 U	11 U	11 U
Methyl tert-butyl ether	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
Methylcyclohexane	10 U	10 U	10 U	10 U	12 UJ	12 U	11 U	11 U
Methylene chloride	10 U	10 U	10 U	10 U	12 U	12 U	11 U	11 U
m-Xylene & p-Xylene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
o-Xylene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Styrene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Tetrachloroethene	5.2 U	5.2 U	5.1 U	5.2 U	**24 J**	**35 J+**	5.5 U	5.6 U
Toluene	5.2 UJ	5.2 U	5.1 UJ	5.2 U	5.8 UJ	5.8 U	5.5 UJ	**0.78 J**
trans-1,2-Dichloroethene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
trans-1,3-Dichloropropene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	5.8 U	5.5 U	5.6 U
Trichloroethene	5.2 U	5.2 U	5.1 U	5.2 U	5.8 UJ	**1.5 J**	5.5 U	5.6 U
Trichlorofluoromethane	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U
Vinyl chloride	5.2 U	5.2 U	5.1 U	5.2 U	5.8 U	5.8 U	5.5 U	5.6 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU08-01-Z1 5-8 ft 06/12/2007	SU08-978-Z1 5-8 ft 06/12/2007	SU08-01-Z2 12-14 ft 06/12/2007	SU08-979-Z2 12-14 ft 06/12/2007	SU09-08/D-Z5 46-47.5 ft 05/15/2007	SU09-950-Z1 46-47.5 ft 05/15/2007	SU09-10-Z5 36-37 ft 05/17/2007	SU09-951-Z1 36-37 ft 05/17/2007
6010B (mg/kg)								
Nickel	**4.4**	**4.4**	**3.3 J**	**5.8**	**1.3 J**	**1.6 J**	**3.5 J**	**2.0 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
1,1,2,2-Tetrachloroethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
1,1,2-Trichloroethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
1,1-Dichloroethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
1,1-Dichloroethene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
1,2,3-Trichlorobenzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 UJ	5.6 UJ	5.2 U	5.2 U
1,2,4-Trichlorobenzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 UJ	5.6 UJ	5.2 U	5.2 U
1,2-Dibromo-3-chloropropane	11 U	10 U	10 U	10 U	11 UJ	11 UJ	10 U	10 U
1,2-Dibromoethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
1,2-Dichlorobenzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 UJ	5.6 UJ	5.2 U	5.2 U
1,2-Dichloroethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
1,2-Dichloropropane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
1,3-Dichlorobenzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 UJ	5.6 UJ	5.2 U	5.2 U
1,4-Dichlorobenzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 UJ	5.6 UJ	5.2 U	5.2 U
1,4-Dioxane	430 U	410 U	410 U	410 U	450 U	450 U	420 U	420 U
2-Butanone	21 U	21 U	20 U	20 U	23 U	23 U	21 U	21 U
2-Hexanone	21 U	21 U	20 U	20 U	23 U	23 UJ	21 U	21 U
4-Methyl-2-Pentanone	21 U	21 U	20 U	20 U	23 U	23 UJ	21 U	21 U
Acetone	21 U	21 U	20 U	20 U	23 U	23 U	21 U	21 U
Benzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
Bromochloromethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
Bromodichloromethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Bromoform	5.3 U	5.2 U	5.1 U	5.1 U	5.6 UJ	5.6 UJ	5.2 U	5.2 U
Bromomethane	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U
Carbon disulfide	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
Carbon tetrachloride	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Chlorobenzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Chloroethane	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU08-01-Z1 5-8 ft 06/12/2007	SU08-978-Z1 5-8 ft 06/12/2007	SU08-01-Z2 12-14 ft 06/12/2007	SU08-979-Z2 12-14 ft 06/12/2007	SU09-08/D-Z5 46-47.5 ft 05/15/2007	SU09-950-Z1 46-47.5 ft 05/15/2007	SU09-10-Z5 36-37 ft 05/17/2007	SU09-951-Z1 36-37 ft 05/17/2007
Chloroform	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
Chloromethane	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
cis-1,3-Dichloropropene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Cyclohexane	11 U	10 U	10 U	10 U	11 U	11 UJ	10 U	10 U
Dibromochloromethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Dichlorodifluoromethane	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U
Ethylbenzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
FREON 113	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
Isopropylbenzene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Methyl acetate	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U
Methyl tert-butyl ether	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
Methylcyclohexane	11 U	10 U	10 U	10 U	11 U	11 UJ	10 U	10 U
Methylene chloride	11 U	10 U	10 U	10 U	5.6 U	5.6 U	**4.7 J**	**3.6 J**
m-Xylene & p-Xylene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
o-Xylene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Styrene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Tetrachloroethene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Toluene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 UJ	5.6 UJ	5.2 U	5.2 U
trans-1,2-Dichloroethene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
trans-1,3-Dichloropropene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Trichloroethene	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U
Trichlorofluoromethane	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 U	5.2 U	5.2 U
Vinyl chloride	5.3 U	5.2 U	5.1 U	5.1 U	5.6 U	5.6 UJ	5.2 U	5.2 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-06-Z2 14-15.5 ft 05/21/2007	SU09-952-Z1 14-15.5 ft 05/21/2007	SU10-05-Z2 10-12 ft 05/25/2007	SU10-961-Z1 10-12 ft 05/25/2007	SU10-12-Z1 6-8 ft 05/30/2007	SU10-963-Z1 6-8 ft 05/30/2007	SU10-08-Z1 0-2 ft 05/29/2007	SU10-966-Z1 0-2 ft 05/29/2007
6010B (mg/kg)								
Nickel	**3.0 J**	**2.9 J**	**6.5**	**6.4**	**8.6**	**9.8**	**12.0 J**	**12.0 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,1,2-Trichloroethane	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,1-Dichloroethane	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,1-Dichloroethene	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,2,3-Trichlorobenzene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,2,4-Trichlorobenzene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,2-Dibromo-3-chloropropane	10 U	10 UJ	11 U	11 U	12 U	12 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,2-Dichlorobenzene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,2-Dichloroethane	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,2-Dichloropropane	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,3-Dichlorobenzene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
1,4-Dichlorobenzene	5.1 U	5.1 UJ	**0.21 J**	5.3 U	5.9 UJ	5.9 U	5.2 U	5.2 U
1,4-Dioxane	400 U	410 U	420 U	420 U	470 U	470 U	410 U	410 U
2-Butanone	20 U	20 U	21 U	21 U	24 U	23 U	21 U	21 U
2-Hexanone	20 U	20 UJ	21 U	21 U	24 U	23 U	21 U	21 U
4-Methyl-2-Pentanone	20 U	20 UJ	21 U	21 U	24 U	23 U	21 U	21 U
Acetone	20 U	20 UJ	21 U	21 U	24 U	23 U	21 U	21 U
Benzene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Bromochloromethane	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Bromodichloromethane	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Bromoform	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Bromomethane	10 U	10 U	11 U	11 U	12 U	12 U	10 UJ	10 UJ
Carbon disulfide	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Carbon tetrachloride	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Chlorobenzene	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Chloroethane	10 U	10 UJ	11 U	11 U	12 U	12 U	10 UJ	10 UJ

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-06-Z2 14-15.5 ft 05/21/2007	SU09-952-Z1 14-15.5 ft 05/21/2007	SU10-05-Z2 10-12 ft 05/25/2007	SU10-961-Z1 10-12 ft 05/25/2007	SU10-12-Z1 6-8 ft 05/30/2007	SU10-963-Z1 6-8 ft 05/30/2007	SU10-08-Z1 0-2 ft 05/29/2007	SU10-966-Z1 0-2 ft 05/29/2007
Chloroform	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Chloromethane	10 U	10 U	11 U	11 U	12 U	12 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
cis-1,3-Dichloropropene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Cyclohexane	10 U	10 UJ	11 U	11 U	12 U	12 U	10 U	10 U
Dibromochloromethane	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Dichlorodifluoromethane	10 U	10 U	11 U	11 U	12 U	12 U	10 UJ	10 UJ
Ethylbenzene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
FREON 113	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Isopropylbenzene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Methyl acetate	10 U	10 U	11 U	11 U	12 U	12 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Methylcyclohexane	10 U	10 UJ	11 U	11 U	12 U	12 U	10 U	10 U
Methylene chloride	10 U	10 U	11 U	11 U	12 U	12 U	10 U	10 U
m-Xylene & p-Xylene	5.1 U	5.1 UJ	5.3 UJ	**8.6 J+**	5.9 U	5.9 U	5.2 U	5.2 U
o-Xylene	5.1 U	5.1 UJ	5.3 UJ	**9.1 J+**	5.9 U	5.9 U	5.2 U	5.2 U
Styrene	5.1 U	5.1 UJ	5.3 UJ	5.3 U	5.9 U	5.9 U	5.2 UJ	5.2 UJ
Tetrachloroethene	5.1 U	5.1 UJ	5.3 U	5.3 U	**5.5 J**	**25**	**450 J+**	**8.7 J+**
Toluene	5.1 UJ	5.1 UJ	5.3 U	5.3 UJ	5.9 UJ	5.9 UJ	5.2 U	5.2 U
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
trans-1,3-Dichloropropene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.2 U
Trichloroethene	5.1 U	5.1 UJ	5.3 U	5.3 U	5.9 U	5.9 U	**24 J**	5.2 UJ
Trichlorofluoromethane	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 UJ	5.2 UJ
Vinyl chloride	5.1 U	5.1 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 UJ	5.2 UJ

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-17-Z1 5-6 ft 06/04/2007	SU10-967-Z1 5-6 ft 06/04/2007	SU10-14-Z1 7-8 ft 06/04/2007	SU10-968-Z1 7-8 ft 06/04/2007	SU10-03-Z1[10] 6-8 ft 06/08/2007	SU10-977-Z1[2] 6-8 ft 06/08/2007
6010B (mg/kg)						
Nickel	**6.0**	**5.5**	**4.2**	**3.1 J**	**4.4**	**3.4 J**
8260B (µg/kg)						
1,1,1-Trichloroethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,1-Dichloroethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,1-Dichloroethene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 UJ	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,2-Dichloroethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,2-Dichloropropane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
1,4-Dioxane	410 U	410 U	410 UJ	420 U	410 U	410 U
2-Butanone	21 U	21 U	21 UJ	21 U	21 U	20 U
2-Hexanone	21 U	21 U	21 UJ	21 U	21 U	20 U
4-Methyl-2-Pentanone	21 U	21 U	21 UJ	21 U	21 U	20 U
Acetone	21 U	21 U	**150 J**	**110 J+**	21 U	20 U
Benzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Bromochloromethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Bromodichloromethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Bromoform	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Bromomethane	10 U	10 U	10 UJ	10 U	10 U	10 U
Carbon disulfide	5.1 U	5.1 U	5.2 UJ	**0.87 J**	5.1 U	5.1 U
Carbon tetrachloride	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Chlorobenzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Chloroethane	10 U	10 U	10 UJ	10 U	10 U	10 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-17-Z1 5-6 ft 06/04/2007	SU10-967-Z1 5-6 ft 06/04/2007	SU10-14-Z1 7-8 ft 06/04/2007	SU10-968-Z1 7-8 ft 06/04/2007	SU10-03-Z1[10] 6-8 ft 06/08/2007	SU10-977-Z1[2] 6-8 ft 06/08/2007
Chloroform	5.1 U	5.1 U	5.2 UJ	**0.30 J**	5.1 U	5.1 U
Chloromethane	10 U	10 U	10 UJ	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Cyclohexane	10 U	10 U	10 UJ	10 U	10 U	10 U
Dibromochloromethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 UJ	10 U	10 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
FREON 113	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Isopropylbenzene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Methyl acetate	10 U	10 U	10 UJ	10 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Methylcyclohexane	10 U	10 U	10 UJ	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 UJ	10 U	10 U	10 U
m-Xylene & p-Xylene	**3.3 J**	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
o-Xylene	**2.1 J**	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Styrene	**2.3 J**	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Tetrachloroethene	**0.40 J**	5.1 U	**18 J**	**27 J+**	5.1 U	5.1 U
Toluene	5.1 UJ	5.1 UJ	5.2 UJ	5.2 UJ	**0.82 J**	**0.40 J**
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Trichloroethene	5.1 U	5.1 U	**4.1 J**	**19 J+**	5.1 U	5.1 U
Trichlorofluoromethane	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U
Vinyl chloride	5.1 U	5.1 U	5.2 UJ	5.2 U	5.1 U	5.1 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-17-Z2 14-16 ft 06/05/2007	SU11-965-Z1 14-16 ft 06/05/2007	SU11-21-Z1 3-5 ft 06/05/2007	SU11-969-Z1 3-5 ft 06/05/2007	SU11-10-Z1 5-6.5 ft 06/05/2007	SU11-970-Z1 5-6.5 ft 06/05/2007	SU11-11-Z1 5-7 ft 06/06/2007	SU11-971-Z1 5-7 ft 06/06/2007
6010B (mg/kg)								
Nickel	**1.9 J**	**2.5 J**	**3.6 J**	**3.8 J**	**2.7 J**	**2.5 J**	**1.9 J**	**1.3 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	25 UR	5.1 U	5.0 U	5.1 U	5.0 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,2-Dichlorobenzene	**0.19 J**	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
1,4-Dioxane	410 U	410 U	410 U	2000 U	410 U	400 U	400 U	400 U
2-Butanone	20 U	20 U	20 U	100 U	20 U	20 U	20 U	20 U
2-Hexanone	20 U	20 U	20 U	100 U	20 U	20 U	20 U	20 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	100 U	20 U	20 U	20 U	20 U
Acetone	20 U	20 U	20 U	100 U	20 U	20 U	20 U	20 U
Benzene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Bromoform	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Bromomethane	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U
Carbon disulfide	5.1 UJ	5.1 UJ	5.1 UJ	25 U	5.1 UJ	5.0 UJ	5.1 U	5.0 U
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Chlorobenzene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Chloroethane	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-17-Z2 14-16 ft 06/05/2007	SU11-965-Z1 14-16 ft 06/05/2007	SU11-21-Z1 3-5 ft 06/05/2007	SU11-969-Z1 3-5 ft 06/05/2007	SU11-10-Z1 5-6.5 ft 06/05/2007	SU11-970-Z1 5-6.5 ft 06/05/2007	SU11-11-Z1 5-7 ft 06/06/2007	SU11-971-Z1 5-7 ft 06/06/2007
Chloroform	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Chloromethane	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Cyclohexane	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Dichlorodifluoromethane	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
FREON 113	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Methyl acetate	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Methylcyclohexane	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U
Methylene chloride	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	10 U	10 U
m-Xylene & p-Xylene	5.1 U	**3.2 J**	**3.5 J**	25 U	5.1 U	5.0 U	5.1 U	5.0 U
o-Xylene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Styrene	5.1 UJ	5.1 UJ	5.1 UJ	25 U	5.1 UJ	5.0 UJ	5.1 U	5.0 U
Tetrachloroethene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Toluene	5.1 UJ	5.1 UJ	5.1 UJ	25 U	5.1 UJ	5.0 UJ	5.1 UJ	5.0 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Trichloroethene	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U
Vinyl chloride	5.1 U	5.1 U	5.1 U	25 U	5.1 U	5.0 U	5.1 U	5.0 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-05/D-Z1 6-8 ft 06/06/2007	SU11-975-Z1 6-8 ft 06/06/2007	SU12-13-Z2 10-12 ft 05/24/2007	SU12-960-Z1 10-12 ft 05/24/2007	SU12-15-Z1 0-8 ft 05/29/2007	SU12-962-Z1[3] 0-8 ft 05/29/2007	SU13-14-Z1 0-8 ft 05/21/2007	SU13-953-Z1 0-8 ft 05/21/2007
6010B (mg/kg)								
Nickel	**2.8 J**	**2.7 J**	**2.7 J**	**2.9 J**	**2.7 J**	**4.3 J**	**6.8**	**6.5**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,1,2-Trichloroethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,1-Dichloroethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
1,1-Dichloroethene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	11 U	11 U		10 U	10 UJ
1,2-Dibromoethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,2-Dichlorobenzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,2-Dichloroethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
1,2-Dichloropropane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,3-Dichlorobenzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,4-Dichlorobenzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
1,4-Dioxane	410 U	410 U	400 U	430 U	450 U		410 U	420 U
2-Butanone	20 U	20 U	20 U	21 U	22 U		21 U	21 U
2-Hexanone	20 U	20 U	20 U	21 U	22 U		21 U	21 UJ
4-Methyl-2-Pentanone	20 U	20 U	20 U	21 U	22 U		21 U	21 UJ
Acetone	20 U	20 U	20 U	21 U	22 U		21 U	21 U
Benzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Bromochloromethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
Bromodichloromethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Bromoform	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Bromomethane	10 U	10 U	10 UJ	11 UJ	11 UJ		10 U	10 U
Carbon disulfide	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
Carbon tetrachloride	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Chlorobenzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Chloroethane	10 U	10 U	10 U	11 U	11 UJ		10 U	10 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-05/D-Z1 6-8 ft 06/06/2007	SU11-975-Z1 6-8 ft 06/06/2007	SU12-13-Z2 10-12 ft 05/24/2007	SU12-960-Z1 10-12 ft 05/24/2007	SU12-15-Z1 0-8 ft 05/29/2007	SU12-962-Z1[3] 0-8 ft 05/29/2007	SU13-14-Z1 0-8 ft 05/21/2007	SU13-953-Z1 0-8 ft 05/21/2007
Chloroform	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
Chloromethane	10 U	10 U	10 U	11 U	11 U		10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Cyclohexane	10 U	10 U	10 U	11 U	11 U		10 U	10 UJ
Dibromochloromethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Dichlorodifluoromethane	10 U	10 U	10 U	11 U	11 UJ		10 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
FREON 113	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
Isopropylbenzene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Methyl acetate	10 U	10 U	10 U	11 U	11 U		10 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
Methylcyclohexane	10 U	10 U	10 U	11 U	11 U		10 U	10 UJ
Methylene chloride	10 U	10 U	10 U	11 U	11 U		10 U	10 U
m-Xylene & p-Xylene	5.1 UJ	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
o-Xylene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Styrene	5.1 U	5.1 UJ	5.0 U	5.3 UJ	5.6 UJ		5.2 U	5.2 UJ
Tetrachloroethene	5.1 U	5.1 U	**0.28 J**	5.3 U	5.6 U		5.2 U	5.2 UJ
Toluene	5.1 U	5.1 U	5.0 UJ	5.3 U	5.6 UJ		5.2 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 U		5.2 U	5.2 UJ
Trichloroethene	5.1 U	5.1 U	5.0 U	5.3 U	5.6 UJ		5.2 U	5.2 UJ
Trichlorofluoromethane	5.1 U	5.1 U	5.0 U	5.3 U	5.6 UJ		5.2 U	5.2 U
Vinyl chloride	5.1 U	5.1 U	5.0 U	5.3 U	5.6 UJ		5.2 U	5.2 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU13-04-Z1 6-7 ft 05/22/2007	SU13-955-Z1 6-7 ft 05/22/2007	SU13-09-Z1 5-6 ft 05/22/2007	SU13-956-Z1 5-6 ft 05/22/2007	SU14-17-Z1 3-5 ft 05/22/2007	SU14-954-Z1 3-5 ft 05/22/2007	SU14-12-Z1 6-8 ft 05/23/2007	SU14-957-Z1 6-8 ft 05/23/2007
6010B (mg/kg)								
Nickel	**5.6**	**6.6**	**6.8**	**7.5**	**7.6**	**5.8**	**4.1**	**3.5 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
1,1,2,2-Tetrachloroethane	5.2 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.3 U	5.1 U
1,1,2-Trichloroethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
1,1-Dichloroethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
1,1-Dichloroethene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
1,2,3-Trichlorobenzene	5.2 U	5.1 U	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.3 UJ	5.1 UJ
1,2,4-Trichlorobenzene	5.2 U	5.1 U	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.3 UJ	5.1 UJ
1,2-Dibromo-3-chloropropane	10 U	10 U	10 UJ	10 UJ	10 U	10 U	11 UJ	10 UJ
1,2-Dibromoethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
1,2-Dichlorobenzene	5.2 U	5.1 U	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.3 UJ	5.1 UJ
1,2-Dichloroethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
1,2-Dichloropropane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
1,3-Dichlorobenzene	5.2 U	5.1 U	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.3 UJ	5.1 UJ
1,4-Dichlorobenzene	5.2 U	5.1 U	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.3 UJ	5.1 UJ
1,4-Dioxane	420 U	410 U	420 U	420 U	410 U	410 U	420 U	410 U
2-Butanone	21 U	20 U	21 U	21 U	21 U	21 U	21 U	21 U
2-Hexanone	21 U	20 U	21 U	21 U	21 U	21 U	21 U	21 U
4-Methyl-2-Pentanone	21 U	20 U	21 U	21 U	21 U	21 U	21 U	21 U
Acetone	21 U	20 U	21 U	21 U	21 U	21 U	21 U	21 U
Benzene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Bromochloromethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Bromodichloromethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Bromoform	5.2 U	5.1 U	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.3 UJ	5.1 UJ
Bromomethane	10 U	10 U	10 U	10 U	10 UJ	10 UJ	11 U	10 U
Carbon disulfide	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	**0.83 J**
Carbon tetrachloride	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Chlorobenzene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU13-04-Z1 6-7 ft 05/22/2007	SU13-955-Z1 6-7 ft 05/22/2007	SU13-09-Z1 5-6 ft 05/22/2007	SU13-956-Z1 5-6 ft 05/22/2007	SU14-17-Z1 3-5 ft 05/22/2007	SU14-954-Z1 3-5 ft 05/22/2007	SU14-12-Z1 6-8 ft 05/23/2007	SU14-957-Z1 6-8 ft 05/23/2007
Chloroform	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
cis-1,3-Dichloropropene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U
Dibromochloromethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U
Ethylbenzene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
FREON 113	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Isopropylbenzene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Methyl acetate	10 U	10 U	10 U	**3.1 J**	10 U	10 U	11 U	10 U
Methyl tert-butyl ether	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U
m-Xylene & p-Xylene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
o-Xylene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Styrene	5.2 U	5.1 U	5.2 U	5.2 U	**1.5 J**	5.2 U	5.3 U	5.1 U
Tetrachloroethene	5.2 U	5.1 U	**2.1 J**	**3.0 J**	5.2 U	5.2 U	5.3 U	5.1 U
Toluene	5.2 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 UJ	5.2 U	5.3 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
trans-1,3-Dichloropropene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Trichloroethene	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Trichlorofluoromethane	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U
Vinyl chloride	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.3 U	5.1 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU14-20-Z1 1-3 ft 05/23/2007	SU14-958-Z1 1-3 ft 05/23/2007	SU14-02-Z2 12-13 ft 05/23/2007	SU14-959-Z1 12-13 ft 05/23/2007
6010B (mg/kg)				
Nickel	**10.1 J**	**5.0 J**	**2.6 J**	**2.5 J**
8260B (µg/kg)				
1,1,1-Trichloroethane	5.7 U	5.2 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.7 U	5.2 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.7 U	5.2 U	5.1 U	5.1 U
1,1-Dichloroethane	5.7 U	5.2 U	5.1 U	5.1 U
1,1-Dichloroethene	5.7 U	5.2 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.7 U	5.2 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.7 U	5.2 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	11 U	10 U	10 U	10 U
1,2-Dibromoethane	5.7 U	5.2 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.7 U	5.2 U	5.1 U	5.1 U
1,2-Dichloroethane	5.7 U	5.2 U	5.1 U	5.1 U
1,2-Dichloropropane	5.7 U	5.2 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.7 U	5.2 U	**0.15 J**	5.1 U
1,4-Dichlorobenzene	5.7 U	5.2 U	5.1 U	5.1 U
1,4-Dioxane	450 U	410 U	410 U	410 U
2-Butanone	23 U	21 U	20 U	20 U
2-Hexanone	23 U	21 U	20 U	20 U
4-Methyl-2-Pentanone	23 U	21 U	20 U	20 U
Acetone	23 U	21 U	20 U	20 U
Benzene	5.7 U	5.2 U	5.1 U	5.1 U
Bromochloromethane	5.7 U	5.2 U	5.1 U	5.1 U
Bromodichloromethane	5.7 U	5.2 U	5.1 U	5.1 U
Bromoform	5.7 U	5.2 U	5.1 U	5.1 U
Bromomethane	11 UJ	10 UJ	10 U	10 U
Carbon disulfide	5.7 U	5.2 U	5.1 U	5.1 U
Carbon tetrachloride	5.7 U	5.2 U	5.1 U	5.1 U
Chlorobenzene	5.7 U	5.2 U	5.1 U	5.1 U
Chloroethane	11 U	10 U	10 U	10 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU14-20-Z1 1-3 ft 05/23/2007	SU14-958-Z1 1-3 ft 05/23/2007	SU14-02-Z2 12-13 ft 05/23/2007	SU14-959-Z1 12-13 ft 05/23/2007
Chloroform	5.7 U	5.2 U	5.1 U	5.1 U
Chloromethane	11 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.7 U	5.2 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.7 U	5.2 U	5.1 U	5.1 U
Cyclohexane	11 U	10 U	10 U	10 U
Dibromochloromethane	5.7 U	5.2 U	5.1 U	5.1 U
Dichlorodifluoromethane	11 U	10 U	10 U	10 U
Ethylbenzene	5.7 U	5.2 U	5.1 U	5.1 U
FREON 113	5.7 U	5.2 U	5.1 U	5.1 U
Isopropylbenzene	5.7 U	5.2 U	5.1 U	5.1 U
Methyl acetate	11 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.7 U	5.2 U	5.1 U	5.1 U
Methylcyclohexane	11 U	10 U	10 U	10 U
Methylene chloride	11 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.7 U	5.2 U	5.1 U	5.1 U
o-Xylene	5.7 U	5.2 U	5.1 U	5.1 U
Styrene	5.7 U	5.2 U	**1.8 J**	5.1 U
Tetrachloroethene	**0.97 J**	5.2 U	5.1 U	5.1 U
Toluene	5.7 UJ	5.2 U	5.1 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.7 U	5.2 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.7 U	5.2 U	5.1 U	5.1 U
Trichloroethene	5.7 U	5.2 U	5.1 U	5.1 U
Trichlorofluoromethane	5.7 U	5.2 U	5.1 U	5.1 U
Vinyl chloride	5.7 U	5.2 U	5.1 U	5.1 U

Table 3.2-2a Summary of Complete Results for Nickel and VOC Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU14-12-Z1 6-8 ft 05/23/2007	SU14-957-Z1 6-8 ft 05/23/2007
8082 (µg/kg)		
Aroclor 1016	35 U	34 U
Aroclor 1221	14 U	13 U
Aroclor 1232	35 U	34 U
Aroclor 1242	35 U	34 U
Aroclor 1248	35 U	34 U
Aroclor 1254	35 U	34 U
Aroclor 1260	35 U	34 U

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Uranium 233/234 pCi/g			Uranium 235/236 pCi/g			Uranium-238 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-11-Z1	2-3 ft	06/07/07	2.29 ± 0.35		0.02	0.126 ± 0.052		0.013	2.10 ± 0.33		0.02
140-11-920	2-3 ft	06/07/07	2.47 ± 0.37		0.02	0.155 ± 0.057		0.024	2.25 ± 0.34		0.02
100-11-Z1	3-4 ft	06/07/07	35.2 ± 5.9	J	0.5	2.24 ± 0.995		0.51	39.2 ± 6.4		0.4
100-11-930	3-4 ft	06/07/07	38.9 ± 6.1	J	0.2	1.59 ± 0.63		0.24	35.9 ± 5.7		0.3
100-10-Z2	13-14 ft	06/08/07	0.133 ± 0.049		0.025	0.0 ± 0.0	U	0.03	0.203 ± 0.061		0.023
100-10-931	13-14 ft	06/08/07	0.132 ± 0.049		0.027	0.005 ± 0.013	UJ	0.013	0.148 ± 0.051		0.017
100-01-Z1	0-2 ft	06/13/07	0.398 ± 0.093		0.026	0.008 ± 0.014	U	0.021	0.47 ± 0.10		0.01
100-932-Z1	4-5 ft	06/13/07	0.430 ± 0.097		0.019	0.021 ± 0.022	UJ	0.024	0.368 ± 0.088		0.025
100-04-Z1	3-5 ft	06/13/07	1.48 ± 0.24		0.03	0.070 ± 0.038		0.027	1.31 ± 0.22		0.02
100-933-Z1	3-5 ft	06/13/07	1.54 ± 0.26		0.03	0.095 ± 0.047		0.027	1.45 ± 0.25		0.02
SU08-09-Z1	6-7 ft	06/06/07	0.53 ± 0.11		0.02	0.028 ± 0.026		0.027	0.400 ± 0.093		0.019
SU08-09-972	6-7 ft	06/06/07	0.444 ± 0.099		0.026	0.022 ± 0.021		0.021	0.398 ± 0.092		0.01
SU08-09-Z2	18-19 ft	06/06/07	0.161 ± 0.052		0.023	0.0 ± 0.0	U	0.01	0.134 ± 0.047		0.009
SU08-09-973	18-19 ft	06/06/07	0.158 ± 0.055		0.021	0.01 ± 0.017	UJ	0.014	0.178 ± 0.059		0.021
SU08-13-Z1	2-3 ft	06/06/07	5.40 ± 0.75		0.02	0.235 ± 0.072		0.024	3.39 ± 0.49		0.02
SU08-13-974	2-3 ft	06/06/07	5.60 ± 0.79		0.02	0.272 ± 0.082		0.026	3.62 ± 0.53		0.03
SU08-13-Z2	8-9 ft	06/06/07	0.57 ± 0.12		0.02	0.057 ± 0.035		0.013	0.57 ± 0.12		0.02
SU08-13-976	8-9 ft	06/06/07	0.56 ± 0.11		0.02	0.026 ± 0.023		0.012	0.62 ± 0.12		0.03
SU08-01-Z1	5-8 ft	06/12/07	0.248 ± 0.071		0.026	0.026 ± 0.024		0.025	0.327 ± 0.083		0.026
SU08-978-Z1	5-8 ft	06/12/07	0.293 ± 0.076		0.026	0.008 ± 0.013	UJ	0.020	0.266 ± 0.071		0.01
SU08-01-Z2	12-14 ft	06/12/07	0.174 ± 0.058		0.028	0.015 ± 0.020	UJ	0.013	0.174 ± 0.057		0.018
SU08-979-Z2	12-14 ft	06/12/07	0.247 ± 0.070		0.026	0.027 ± 0.024		0.021	0.269 ± 0.073		0.017
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.53 ± 0.11		0.02	0.028 ± 0.025		0.013	0.45 ± 0.10		0.02
SU09-950-Z1	46-47.5 ft	05/15/07	0.454 ± 0.099		0.020	0.045 ± 0.030		0.023	0.408 ± 0.092		0.020
SU09-10-Z5	36-37 ft	05/17/07	0.196 ± 0.060		0.022	0.007 ± 0.015	UJ	0.024	0.195 ± 0.060		0.01
SU09-951-Z1	36-37 ft	05/17/07	0.144 ± 0.050		0.016	0.014 ± 0.018	UJ	0.012	0.150 ± 0.051		0.019
SU09-06-Z2	14-15.5 ft	05/21/07	0.149 ± 0.052		0.021	0.005 ± 0.014	UJ	0.013	0.165 ± 0.055		0.018
SU09-952-Z1	14-15.5 ft	05/21/07	0.092 ± 0.039		0.021	0.024 ± 0.022		0.023	0.113 ± 0.043		0.021
SU13-14-Z1	0-8 ft	05/21/07	1.20 ± 0.25		0.03	0.040 ± 0.039		0.038	1.12 ± 0.24		0.04
SU13-953-Z1	0-8 ft	05/21/07	1.28 ± 0.23		0.03	0.055 ± 0.038		0.031	1.24 ± 0.23		0.01
SU13-04-Z1	6-7 ft	05/22/07	0.47 ± 0.11		0.02	0.045 ± 0.032		0.023	0.50 ± 0.11		0.02
SU13-955-Z1	6-7 ft	05/22/07	0.61 ± 0.13		0.02	0.035 ± 0.028		0.023	0.62 ± 0.13		0.02
SU13-09-Z1	5-6 ft	05/22/07	0.61 ± 0.13		0.01	0.019 ± 0.022	UJ	0.024	0.54 ± 0.12		0.01
SU13-956-Z1	5-6 ft	05/22/07	0.70 ± 0.14		0.02	0.026 ± 0.025		0.014	0.68 ± 0.14		0.02
SU14-17-Z1	3-5 ft	05/22/07	0.74 ± 0.14		0.02	0.021 ± 0.022	UJ	0.025	0.79 ± 0.15		0.01
SU14-954-Z1	3-5 ft	05/22/07	0.85 ± 0.16		0.02	0.018 ± 0.019	UJ	0.021	0.84 ± 0.16		0.01
SU14-12-Z1	6-8 ft	05/23/07	0.255 ± 0.071		0.020	0.005 ± 0.014	UJ	0.013	0.236 ± 0.068		0.017
SU14-957-Z1	6-8 ft	05/23/07	0.404 ± 0.096		0.026	0.026 ± 0.025		0.025	0.295 ± 0.078		0.020
SU14-20-Z1	1-3 ft	05/23/07	1.20 ± 0.21		0.02	0.066 ± 0.037		0.013	0.91 ± 0.17		0.02
SU14-958-Z1	1-3 ft	05/23/07	0.350 ± 0.088		0.027	0.005 ± 0.017	U	0.031	0.291 ± 0.078		0.025
SU14-02-Z2	12-13 ft	05/23/07	0.166 ± 0.055		0.022	0.012 ± 0.018	UJ	0.025	0.173 ± 0.056		0.022
SU14-959-Z1	12-13 ft	05/23/07	0.199 ± 0.061		0.022	0.001 ± 0.012	U	0.027	0.220 ± 0.064		0.017

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Uranium 233/234 pCi/g			Uranium 235/236 pCi/g			Uranium-238 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-05-Z2	10-12 ft	05/25/07	0.58 ± 0.12		0.02	0.033 ± 0.027		0.013	0.50 ± 0.11		0.01
SU10-05-961-Z1	10-12 ft	05/25/07	0.57 ± 0.12		0.01	0.015 ± 0.021	UJ	0.028	0.56 ± 0.12		0.01
SU10-12-Z1	6-8 ft	05/30/07	0.99 ± 0.18		0.02	0.056 ± 0.034		0.022	0.94 ± 0.17		0.02
SU10-963-Z1	6-8 ft	05/30/07	0.87 ± 0.16		0.02	0.045 ± 0.031		0.025	1.08 ± 0.19		0.01
SU10-08-Z1	0-2 ft	05/29/07	3.41 ± 0.50		0.02	0.081 ± 0.041		0.022	1.91 ± 0.30		0.01
SU10-966-Z1	0-2 ft	05/29/07	2.87 ± 0.42		0.02	0.150 ± 0.056		0.020	1.82 ± 0.28		0.02
SU10-17-Z1	5-6 ft	06/04/07	0.329 ± 0.081		0.021	0.011 ± 0.017	UJ	0.024	0.314 ± 0.079		0.021
SU10-967-Z1	5-6 ft	06/04/07	0.350 ± 0.087		0.021	0.011 ± 0.019	UJ	0.028	0.391 ± 0.093		0.023
SU10-14-Z1	7-8 ft	06/04/07	0.305 ± 0.077		0.019	0.013 ± 0.018	UJ	0.012	0.323 ± 0.080		0.016
SU10-968-Z1	7-8 ft	06/04/07	0.320 ± 0.082		0.023	0.017 ± 0.020	UJ	0.025	0.373 ± 0.090		0.023
SU10-03-Z1	6-8 ft	06/08/07	0.253 ± 0.072		0.025	0.011 ± 0.019	UJ	0.029	0.266 ± 0.074		0.021
SU10-977-Z1	6-8 ft	06/08/07	0.237 ± 0.068		0.025	0.014 ± 0.019	U	0.013	0.253 ± 0.070		0.010
SU11-17-Z2	14-16 ft	06/05/07	0.182 ± 0.061		0.022	0.005 ± 0.015	UJ	0.014	0.167 ± 0.058		0.011
SU11-965-Z1	14-16 ft	06/05/07	0.203 ± 0.068		0.027	0.021 ± 0.024	UJ	0.026	0.194 ± 0.066		0.027
SU11-21-Z1	3-5 ft	06/05/07	0.298 ± 0.084		0.027	0.008 ± 0.018	U	0.030	0.305 ± 0.085		0.012
SU11-969-Z1	3-5 ft	06/05/07	0.372 ± 0.090		0.020	0.015 ± 0.021	UJ	0.028	0.301 ± 0.079		0.022
SU11-10-Z1	5-6.5 ft	06/05/07	0.208 ± 0.066		0.020	0.020 ± 0.022	UJ	0.025	0.288 ± 0.081		0.023
SU11-970-Z1	5-6.5 ft	06/05/07	0.243 ± 0.069		0.010	0.007 ± 0.015	U	0.025	0.258 ± 0.071		0.010
SU11-11-Z1	5-7 ft	06/06/07	0.201 ± 0.063		0.029	0.009 ± 0.016	UJ	0.013	0.195 ± 0.060		0.017
SU11-971-Z1	5-7 ft	06/06/07	0.218 ± 0.074		0.027	0.019 ± 0.025	UJ	0.017	0.216 ± 0.073		0.014
SU11-05/D-Z1	6-8 ft	06/06/07	0.181 ± 0.060		0.022	0.010 ± 0.018	U	0.014	0.233 ± 0.069		0.021
SU11-975-Z1	6-8 ft	06/06/07	0.275 ± 0.075		0.021	0.017 ± 0.021	UJ	0.026	0.419 ± 0.098		0.027
SU12-13-Z2	10-12 ft	05/24/07	0.172 ± 0.054		0.021	0.012 ± 0.016	UJ	0.020	0.223 ± 0.063		0.022
SU12-960-Z1	10-12 ft	05/24/07	0.234 ± 0.065		0.018	0.009 ± 0.015	UJ	0.012	0.225 ± 0.063		0.009
SU12-15-Z1	0-8 ft	05/29/07	0.207 ± 0.061		0.019	0.004 ± 0.012	UJ	0.012	0.152 ± 0.051		0.01
SU12-962-Z1	0-8 ft	05/29/07	0.217 ± 0.063		0.021	0.007 ± 0.014	UJ	0.023	0.188 ± 0.057		0.01
DR-L-Z1	5-6 ft	05/31/07	1.86 ± 0.31		0.02	0.082 ± 0.042		0.013	0.353 ± 0.089		0.021
DR-L-964-Z1	5-6 ft	05/31/07	2.04 ± 0.33		0.03	0.091 ± 0.043		0.021	0.431 ± 0.099		0.010
DRY-D-Z4	29-30 ft	06/05/07	0.160 ± 0.057		0.028	0.013 ± 0.019	UJ	0.027	0.162 ± 0.057		0.031
DRY-D-901	29-30 ft	06/05/07	0.167 ± 0.058		0.028	0.015 ± 0.023	UJ	0.033	0.197 ± 0.064		0.026
DRYH-A-Z1	4-5 ft	06/05/07	8.3 ± 1.1		0.03	0.43 ± 0.11		0.02	7.7 ± 1.1		0.02
DRYH-A-902	4-5 ft	06/05/07	9.6 ± 1.3		0.03	0.58 ± 0.13		0.03	9.3 ± 1.3		0.01
DR-O-Z1	2-3.5 ft	06/04/07	1.75 ± 0.29		0.02	0.138 ± 0.058		0.014	1.74 ± 0.29		0.01
DR-O-900-Z1	2-3.5 ft	06/04/07	1.62 ± 0.26		0.02	0.091 ± 0.042		0.020	1.65 ± 0.26		0.02
SMP-1-Z2	8-10 ft	06/07/07	0.275 ± 0.074		0.029	0.006 ± 0.015	U	0.027	0.251 ± 0.070		0.025
SMP-1-903-Z1	8-10 ft	06/07/07	0.304 ± 0.077		0.019	0.022 ± 0.022		0.012	0.314 ± 0.079		0.021
EM-5-SO-01	0-2 ft	06/14/07	2.76 ± 0.41		0.03	0.155 ± 0.059		0.013	2.43 ± 0.37		0.02
EM-5-SO-991	0-2 ft	06/14/07	2.31 ± 0.34		0.02	0.099 ± 0.044		0.022	2.11 ± 0.32		0.03
GPR-F-SO-01	0-2 ft	06/12/07	41.2 ± 6.3	J	0.3	2.17 ± 0.95		0.24	94 ± 13		0.4
GPR-F-990	0-2 ft	06/12/07	50.2 ± 7.6	J	0.4	4.0 ± 1.3		0.4	143 ± 20		0.2

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Thorium-228 pCi/g			Thorium-230 pCi/g			Thorium-232 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-11-Z1	2-3 ft	06/07/07	1.04 ± 0.19		0.02	0.78 ± 0.15		0.02	1.06 ± 0.19		0.02
140-11-920	2-3 ft	06/07/07	0.87 ± 0.17		0.02	0.73 ± 0.15		0.02	0.86 ± 0.17		0.02
100-11-Z1	3-4 ft	06/07/07	4.52 ± 0.68		0.03	1.23 ± 0.22	J	0.02	4.37 ± 0.66		0.02
100-11-930	3-4 ft	06/07/07	4.15 ± 0.63		0.05	1.02 ± 0.19		0.02	4.77 ± 0.72		0.02
100-10-Z2	13-14 ft	06/08/07	0.197 ± 0.063		0.033	0.159 ± 0.053	J	0.019	0.191 ± 0.060		0.026
100-10-931	13-14 ft	06/08/07	0.142 ± 0.053		0.024	0.160 ± 0.056		0.021	0.164 ± 0.057		0.018
100-01-Z1	0-2 ft	06/13/07	0.62 ± 0.19	J	0.07	0.85 ± 0.24	J	0.05	0.71 ± 0.21	J	0.05
100-932-Z1	4-5 ft	06/13/07	0.56 ± 0.13		0.03	0.52 ± 0.12	J	0.03	0.50 ± 0.12		0.01
100-04-Z1	3-5 ft	06/13/07	0.57 ± 0.13		0.04	0.53 ± 0.12	J	0.03	0.58 ± 0.13		0.02
100-933-Z1	3-5 ft	06/13/07	0.67 ± 0.14		0.04	0.56 ± 0.13	J	0.02	0.58 ± 0.13		0.02
SU08-09-Z1	6-7 ft	06/06/07	0.51 ± 0.12		0.03	0.394 ± 0.099		0.032	0.46 ± 0.11		0.01
SU08-09-972	6-7 ft	06/06/07	0.29 ± 0.10		0.05	0.33 ± 0.11	J	0.05	0.33 ± 0.11		0.05
SU08-09-Z2	18-19 ft	06/06/07	0.157 ± 0.057		0.033	0.191 ± 0.061	J	0.021	0.161 ± 0.055		0.017
SU08-09-973	18-19 ft	06/06/07	0.121 ± 0.053		0.044	0.140 ± 0.052		0.029	0.111 ± 0.045		0.024
SU08-13-Z1	2-3 ft	06/06/07	0.57 ± 0.13		0.04	0.51 ± 0.11		0.02	0.56 ± 0.12		0.03
SU08-13-974	2-3 ft	06/06/07	0.60 ± 0.14		0.03	0.39 ± 0.10		0.02	0.62 ± 0.14		0.03
SU08-13-Z2	8-9 ft	06/06/07	0.92 ± 0.17		0.03	0.69 ± 0.14	J	0.02	0.88 ± 0.17		0.03
SU08-13-976	8-9 ft	06/06/07	0.93 ± 0.19		0.04	0.65 ± 0.14		0.03	0.77 ± 0.16		0.03
SU08-01-Z1	5-8 ft	06/12/07	0.357 ± 0.090		0.032	0.319 ± 0.083	J	0.020	0.322 ± 0.083		0.017
SU08-978-Z1	5-8 ft	06/12/07	0.362 ± 0.097		0.040	0.363 ± 0.095	J	0.027	0.386 ± 0.099		0.029
SU08-01-Z2	12-14 ft	06/12/07	0.162 ± 0.065		0.048	0.224 ± 0.071		0.012	0.117 ± 0.049		0.020
SU08-979-Z2	12-14 ft	06/12/07	0.310 ± 0.083		0.043	0.252 ± 0.070		0.019	0.342 ± 0.085		0.021
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.90 ± 0.17		0.05	0.61 ± 0.13		0.02	0.92 ± 0.17		0.02
SU09-950-Z1	46-47.5 ft	05/15/07	0.77 ± 0.16		0.04	0.68 ± 0.14		0.02	0.68 ± 0.14		0.02
SU09-10-Z5	36-37 ft	05/17/07	0.245 ± 0.071		0.026	0.181 ± 0.059		0.010	0.209 ± 0.064		0.017
SU09-951-Z1	36-37 ft	05/17/07	0.162 ± 0.055		0.027	0.192 ± 0.061		0.025	0.163 ± 0.056		0.029
SU09-06-Z2	14-15.5 ft	05/21/07	0.270 ± 0.092		0.035	0.200 ± 0.079		0.043	0.279 ± 0.094		0.038
SU09-952-Z1	14-15.5 ft	05/21/07	0.224 ± 0.086		0.065	0.188 ± 0.072		0.038	0.196 ± 0.072		0.031
SU13-14-Z1	0-8 ft	05/21/07	0.64 ± 0.15		0.05	0.50 ± 0.12	J	0.02	0.76 ± 0.16		0.03
SU13-953-Z1	0-8 ft	05/21/07	0.73 ± 0.16		0.03	0.58 ± 0.14		0.03	0.73 ± 0.16		0.03
SU13-04-Z1	6-7 ft	05/22/07	0.43 ± 0.10		0.03	0.319 ± 0.082		0.017	0.49 ± 0.11		0.02
SU13-955-Z1	6-7 ft	05/22/07	0.45 ± 0.10		0.02	0.330 ± 0.086		0.025	0.369 ± 0.092		0.026
SU13-09-Z1	5-6 ft	05/22/07	0.41 ± 0.10		0.03	0.355 ± 0.090		0.018	0.396 ± 0.097		0.018
SU13-956-Z1	5-6 ft	05/22/07	0.61 ± 0.13		0.03	0.42 ± 0.10		0.02	0.59 ± 0.13		0.01
SU14-17-Z1	3-5 ft	05/22/07	0.338 ± 0.092		0.049	0.268 ± 0.077		0.029	0.400 ± 0.098		0.023
SU14-954-Z1	3-5 ft	05/22/07	0.45 ± 0.11		0.04	0.319 ± 0.084		0.021	0.344 ± 0.088		0.023
SU14-12-Z1	6-8 ft	05/23/07	0.328 ± 0.086		0.025	0.263 ± 0.075		0.021	0.384 ± 0.095		0.021
SU14-957-Z1	6-8 ft	05/23/07	0.65 ± 0.15		0.05	0.44 ± 0.11		0.03	0.73 ± 0.16		0.03
SU14-20-Z1	1-3 ft	05/23/07	0.63 ± 0.14		0.03	0.63 ± 0.13		0.03	0.69 ± 0.14		0.02
SU14-958-Z1	1-3 ft	05/23/07	0.50 ± 0.11		0.02	0.357 ± 0.091		0.027	0.54 ± 0.12		0.02
SU14-02-Z2	12-13 ft	05/23/07	0.297 ± 0.083		0.027	0.207 ± 0.066		0.022	0.211 ± 0.067		0.019
SU14-959-Z1	12-13 ft	05/23/07	0.223 ± 0.071		0.032	0.278 ± 0.080		0.025	0.243 ± 0.074		0.025

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Thorium-228 pCi/g			Thorium-230 pCi/g			Thorium-232 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-05-Z2	10-12 ft	05/25/07	0.43 ± 0.11		0.04	0.45 ± 0.11		0.02	0.49 ± 0.12		0.02
SU10-05-961-Z1	10-12 ft	05/25/07	0.60 ± 0.13		0.03	0.54 ± 0.12		0.02	0.53 ± 0.12		0.02
SU10-12-Z1	6-8 ft	05/30/07	1.19 ± 0.22		0.03	0.96 ± 0.18	J	0.02	1.12 ± 0.21		0.02
SU10-963-Z1	6-8 ft	05/30/07	1.30 ± 0.24		0.03	1.01 ± 0.19	J	0.02	1.28 ± 0.23		0.02
SU10-08-Z1	0-2 ft	05/29/07	1.49 ± 0.30		0.06	0.54 ± 0.14		0.03	1.29 ± 0.27		0.02
SU10-966-Z1	0-2 ft	05/29/07	1.55 ± 0.28		0.05	0.47 ± 0.11		0.03	1.38 ± 0.25		0.02
SU10-17-Z1	5-6 ft	06/04/07	0.71 ± 0.16		0.03	0.54 ± 0.13		0.03	0.53 ± 0.13		0.03
SU10-967-Z1	5-6 ft	06/04/07	0.72 ± 0.14		0.03	0.48 ± 0.11		0.02	0.62 ± 0.13		0.02
SU10-14-Z1	7-8 ft	06/04/07	0.47 ± 0.11		0.03	0.309 ± 0.080		0.017	0.44 ± 0.10		0.02
SU10-968-Z1	7-8 ft	06/04/07	0.42 ± 0.11		0.04	0.50 ± 0.12		0.02	0.51 ± 0.12		0.01
SU10-03-Z1	6-8 ft	06/08/07	0.271 ± 0.077		0.041	0.278 ± 0.075	J	0.020	0.248 ± 0.070		0.025
SU10-977-Z1	6-8 ft	06/08/07	0.305 ± 0.082		0.039	0.269 ± 0.073		0.01	0.278 ± 0.074		0.016
SU11-17-Z2	14-16 ft	06/05/07	0.170 ± 0.062		0.038	0.155 ± 0.056		0.011	0.099 ± 0.044		0.024
SU11-965-Z1	14-16 ft	06/05/07	0.130 ± 0.052		0.032	0.202 ± 0.065		0.022	0.178 ± 0.061		0.011
SU11-21-Z1	3-5 ft	06/05/07	0.40 ± 0.10		0.03	0.309 ± 0.087		0.024	0.364 ± 0.097		0.023
SU11-969-Z1	3-5 ft	06/05/07	0.66 ± 0.16		0.04	0.44 ± 0.12		0.03	0.46 ± 0.12		0.02
SU11-10-Z1	5-6.5 ft	06/05/07	0.54 ± 0.13		0.04	0.381 ± 0.098		0.020	0.53 ± 0.12		0.01
SU11-970-Z1	5-6.5 ft	06/05/07	0.44 ± 0.11		0.03	0.330 ± 0.090		0.028	0.46 ± 0.11		0.01
SU11-11-Z1	5-7 ft	06/06/07	0.284 ± 0.084		0.040	0.233 ± 0.073		0.026	0.263 ± 0.079		0.031
SU11-971-Z1	5-7 ft	06/06/07	0.396 ± 0.096		0.036	0.246 ± 0.070		0.022	0.47 ± 0.11		0.03
SU11-05/D-Z1	6-8 ft	06/06/07	0.40 ± 0.10		0.03	0.299 ± 0.086	J	0.029	0.378 ± 0.099		0.012
SU11-975-Z1	6-8 ft	06/06/07	0.40 ± 0.10		0.03	0.349 ± 0.092	J	0.031	0.44 ± 0.11		0.03
SU12-13-Z2	10-12 ft	05/24/07	0.205 ± 0.067		0.042	0.246 ± 0.070		0.017	0.201 ± 0.063		0.024
SU12-960-Z1	10-12 ft	05/24/07	0.201 ± 0.067		0.039	0.218 ± 0.067		0.018	0.226 ± 0.069		0.011
SU12-15-Z1	0-8 ft	05/29/07	0.210 ± 0.072		0.037	0.199 ± 0.068		0.025	0.171 ± 0.062		0.021
SU12-962-Z1	0-8 ft	05/29/07	0.225 ± 0.069		0.030	0.214 ± 0.066		0.021	0.227 ± 0.068		0.011
DR-L-Z1	5-6 ft	05/31/07	0.292 ± 0.082		0.038	0.391 ± 0.096		0.018	0.308 ± 0.082		0.011
DR-L-964-Z1	5-6 ft	05/31/07	0.50 ± 0.11		0.03	0.322 ± 0.082		0.017	0.49 ± 0.11		0.02
DRY-D-Z4	29-30 ft	06/05/07	0.179 ± 0.060		0.028	0.205 ± 0.064		0.023	0.176 ± 0.059		0.011
DRY-D-901	29-30 ft	06/05/07	0.140 ± 0.056		0.032	0.191 ± 0.066		0.028	0.165 ± 0.060		0.023
DRYH-A-Z1	4-5 ft	06/05/07	0.70 ± 0.15		0.03	0.45 ± 0.11		0.02	0.61 ± 0.13		0.02
DRYH-A-902	4-5 ft	06/05/07	0.78 ± 0.15		0.02	0.369 ± 0.089		0.019	0.67 ± 0.13		0.02
DR-O-Z1	2-3.5 ft	06/04/07	0.64 ± 0.14		0.03	0.49 ± 0.11		0.02	0.55 ± 0.12		0.02
DR-O-900-Z1	2-3.5 ft	06/04/07	0.63 ± 0.13		0.03	0.408 ± 0.097		0.017	0.48 ± 0.11		0.02
SMP-1-Z2	8-10 ft	06/07/07	0.296 ± 0.081		0.028	0.230 ± 0.068		0.021	0.321 ± 0.084		0.023
SMP-1-903-Z1	8-10 ft	06/07/07	0.411 ± 0.100		0.028	0.406 ± 0.099		0.023	0.415 ± 0.099		0.011
EM-5-SO-01	0-2 ft	06/14/07	0.79 ± 0.19		0.04	0.77 ± 0.18		0.03	0.74 ± 0.18		0.04
EM-5-SO-991	0-2 ft	06/14/07	0.72 ± 0.16		0.03	0.75 ± 0.16		0.03	0.73 ± 0.16		0.01
GPR-F-SO-01	0-2 ft	06/12/07	0.73 ± 0.15		0.04	0.78 ± 0.16		0.03	0.58 ± 0.12		0.02
GPR-F-990	0-2 ft	06/12/07	0.69 ± 0.14		0.03	0.68 ± 0.14		0.02	0.71 ± 0.14		0.02

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Radium-226 pCi/g			Radium-228 pCi/g			Radium-224 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-11-Z1	2-3 ft	06/07/07	0.90 ± 0.19		0.12	0.81 ± 0.24		0.39	--		
140-11-920	2-3 ft	06/07/07	0.77 ± 0.22		0.21	0.72 ± 0.25		0.47	--		
100-11-Z1	3-4 ft	06/07/07	0.29 ± 0.15		0.22	3.37 ± 0.46		0.11	--		
100-11-930	3-4 ft	06/07/07	0.46 ± 0.18		0.25	3.28 ± 0.40		0.15	--		
100-10-Z2	13-14 ft	06/08/07	0.091 ± 0.076	UJ	0.12	0.08 ± 0.12	UJ	0.21	--		
100-10-931	13-14 ft	06/08/07	0.093 ± 0.076	UJ	0.13	0.16 ± 0.13	UJ	0.20	--		
100-01-Z1	0-2 ft	06/13/07	0.31 ± 0.11	J	0.14	0.32 ± 0.14	J	0.21	--		
100-932-Z1	4-5 ft	06/13/07	0.34 ± 0.11	J	0.12	0.43 ± 0.20	J	0.26	--		
100-04-Z1	3-5 ft	06/13/07	0.49 ± 0.13		0.1	0.33 ± 0.17	UJ	0.35	--		
100-933-Z1	3-5 ft	06/13/07	0.61 ± 0.14		0.08	0.52 ± 0.19		0.30	--		
SU08-09-Z1	6-7 ft	06/06/07	0.33 ± 0.11	J	0.13	0.37 ± 0.16		0.21	--		
SU08-09-972	6-7 ft	06/06/07	0.251 ± 0.090		0.12	0.30 ± 0.15		0.21	--		
SU08-09-Z2	18-19 ft	06/06/07	0.095 ± 0.066	UJ	0.11	0.111 ± 0.099	UJ	0.16	--		
SU08-09-973	18-19 ft	06/06/07	1.91 ± 0.35		0.15	65.7 ± 6.7	J	0.4	--		
SU08-13-Z1	2-3 ft	06/06/07	0.29 ± 0.10	J	0.14	0.42 ± 0.17		0.23	--		
SU08-13-974	2-3 ft	06/06/07	0.31 ± 0.11		0.12	0.14 ± 0.17	UJ	0.27	--		
SU08-13-Z2	8-9 ft	06/06/07	0.59 ± 0.16	J	0.16	0.60 ± 0.19		0.33	--		
SU08-13-976	8-9 ft	06/06/07	0.46 ± 0.12		0.14	0.55 ± 0.16		0.21	--		
SU08-01-Z1	5-8 ft	06/12/07	0.19 ± 0.10		0.14	0.15 ± 0.15	U	0.25	--		
SU08-978-Z1	5-8 ft	06/12/07	0.193 ± 0.087		0.12	0.22 ± 0.14		0.19	--		
SU08-01-Z2	12-14 ft	06/12/07	0.143 ± 0.085		0.12	0.21 ± 0.15	UJ	0.23	--		
SU08-979-Z2	12-14 ft	06/12/07	0.122 ± 0.067		0.085	0.06 ± 0.17	U	0.29	--		
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.55 ± 0.12	J	0.13	0.63 ± 0.18	J	0.16	--		
SU09-950-Z1	46-47.5 ft	05/15/07	0.50 ± 0.12	J	0.04	0.76 ± 0.16	J	0.10	--		
SU09-10-Z5	36-37 ft	05/17/07	0.122 ± 0.090	UJ	0.14	0.10 ± 0.14	UJ	0.25	--		
SU09-951-Z1	36-37 ft	05/17/07	0.075 ± 0.070		0.050	0.14 ± 0.13		0.09	--		
SU09-06-Z2	14-15.5 ft	05/21/07	0.119 ± 0.091	U	0.14	0.09 ± 0.18	U	0.33	--		
SU09-952-Z1	14-15.5 ft	05/21/07	0.19 ± 0.11		0.15	0.11 ± 0.14	U	0.25	--		
SU13-14-Z1	0-8 ft	05/21/07	0.45 ± 0.12		0.16	0.47 ± 0.15		0.25	--		
SU13-953-Z1	0-8 ft	05/21/07	0.30 ± 0.13		0.15	0.27 ± 0.16	UJ	0.31	--		
SU13-04-Z1	6-7 ft	05/22/07	0.42 ± 0.12		0.1	0.33 ± 0.17		0.27	--		
SU13-955-Z1	6-7 ft	05/22/07	0.374 ± 0.084		0.045	0.16 ± 0.13	UJ	0.20	--		
SU13-09-Z1	5-6 ft	05/22/07	0.27 ± 0.10		0.14	0.40 ± 0.16		0.21	--		
SU13-956-Z1	5-6 ft	05/22/07	0.55 ± 0.16		0.11	0.47 ± 0.22		0.27	--		
SU14-17-Z1	3-5 ft	05/22/07	0.163 ± 0.080		0.11	0.17 ± 0.15	UJ	0.24	--		
SU14-954-Z1	3-5 ft	05/22/07	0.39 ± 0.10		0.07	0.11 ± 0.15	U	0.25	--		
SU14-12-Z1	6-8 ft	05/23/07	0.26 ± 0.10	J	0.12	0.29 ± 0.14	J	0.27	--		
SU14-957-Z1	6-8 ft	05/23/07	0.44 ± 0.11	J	0.07	0.40 ± 0.16	J	0.28	--		
SU14-20-Z1	1-3 ft	05/23/07	0.45 ± 0.12		0.15	0.65 ± 0.18		0.24	--		
SU14-958-Z1	1-3 ft	05/23/07	0.47 ± 0.11	J	0.07	0.28 ± 0.15	J	0.28	--		
SU14-02-Z2	12-13 ft	05/23/07	0.119 ± 0.086	UJ	0.13	0.08 ± 0.17	UJ	0.31	--		
SU14-959-Z1	12-13 ft	05/23/07	0.111 ± 0.070	J	0.10	0.18 ± 0.11	J	0.16	--		

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Radium-226 pCi/g			Radium-228 pCi/g			Radium-224 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-05-Z2	10-12 ft	05/25/07	0.60 ± 0.12	J	0.07	0.47 ± 0.14	J	0.23	--		
SU10-05-961-Z1	10-12 ft	05/25/07	0.51 ± 0.13	J	0.13	0.57 ± 0.17	J	0.22	--		
SU10-12-Z1	6-8 ft	05/30/07	0.94 ± 0.20		0.19	0.81 ± 0.22		0.30	--		
SU10-963-Z1	6-8 ft	05/30/07	0.77 ± 0.19		0.21	1.46 ± 0.24		0.20	--		
SU10-08-Z1	0-2 ft	05/29/07	0.51 ± 0.12	J	0.08	1.29 ± 0.22	J	0.08	1.36 ± 0.76	J	1.2
SU10-966-Z1	0-2 ft	05/29/07	0.27 ± 0.11	J	0.15	0.85 ± 0.19	J	0.26	--		
SU10-17-Z1	5-6 ft	06/04/07	0.240 ± 0.093		0.13	0.32 ± 0.14		0.22	--		
SU10-967-Z1	5-6 ft	06/04/07	0.43 ± 0.14		0.16	0.23 ± 0.15	UJ	0.32	--		
SU10-14-Z1	7-8 ft	06/04/07	0.28 ± 0.10		0.14	0.25 ± 0.12		0.21	--		
SU10-968-Z1	7-8 ft	06/04/07	0.40 ± 0.13		0.11	0.15 ± 0.18	U	0.30	--		
SU10-03-Z1	6-8 ft	06/08/07	0.24 ± 0.10	J	0.13	0.24 ± 0.18	UJ	0.27	--		
SU10-977-Z1	6-8 ft	06/08/07	0.218 ± 0.086	J	0.11	0.17 ± 0.12	UJ	0.17	--		
SU11-17-Z2	14-16 ft	06/05/07	0.179 ± 0.094		0.12	0.15 ± 0.17	UJ	0.28	--		
SU11-965-Z1	14-16 ft	06/05/07	0.050 ± 0.085	U	0.15	0.04 ± 0.15	U	0.29	--		
SU11-21-Z1	3-5 ft	06/05/07	0.24 ± 0.12		0.16	0.27 ± 0.20	UJ	0.31	--		
SU11-969-Z1	3-5 ft	06/05/07	0.33 ± 0.13		0.15	0.39 ± 0.18		0.25	--		
SU11-10-Z1	5-6.5 ft	06/05/07	0.24 ± 0.10		0.15	0.34 ± 0.15		0.23	--		
SU11-970-Z1	5-6.5 ft	06/05/07	0.24 ± 0.14		0.20	0.25 ± 0.16	UJ	0.32	--		
SU11-11-Z1	5-7 ft	06/06/07	0.46 ± 0.11	J	0.07	-0.03 ± 0.95	UJ	0.42	--		
SU11-971-Z1	5-7 ft	06/06/07	0.163 ± 0.092	J	0.15	0.23 ± 0.12	UJ	0.24	--		
SU11-05/D-Z1	6-8 ft	06/06/07	0.38 ± 0.14		0.13	0.45 ± 0.18		0.29	--		
SU11-975-Z1	6-8 ft	06/06/07	0.69 ± 0.17		0.12	0.33 ± 0.25	UJ	0.39	--		
SU12-13-Z2	10-12 ft	05/24/07	0.178 ± 0.091	J	0.13	0.03 ± 0.12	UJ	0.23	--		
SU12-960-Z1	10-12 ft	05/24/07	0.240 ± 0.068	J	0.068	0.1 ± 0.11	UJ	0.18	--		
SU12-15-Z1	0-8 ft	05/29/07	0.191 ± 0.087	J	0.13	0.11 ± 0.13	UJ	0.21	--		
SU12-962-Z1	0-8 ft	05/29/07	0.21 ± 0.11	J	0.16	0.08 ± 0.13	UJ	0.24	--		
DR-L-Z1	5-6 ft	05/31/07	0.250 ± 0.093	J	0.13	0.21 ± 0.14	UJ	0.22	--		
DR-L-964-Z1	5-6 ft	05/31/07	0.120 ± 0.087	UJ	0.14	0.115 ± 0.086	UJ	0.25	--		
DRY-D-Z4	29-30 ft	06/05/07	0.23 ± 0.11		0.15	0.14 ± 0.18	U	0.31	--		
DRY-D-901	29-30 ft	06/05/07	0.141 ± 0.077		0.11	0.06 ± 0.12	U	0.21	--		
DRYH-A-Z1	4-5 ft	06/05/07	0.271 ± 0.087		0.075	0.41 ± 0.15		0.28	--		
DRYH-A-902	4-5 ft	06/05/07	0.47 ± 0.12	J	0.07	0.39 ± 0.19	J	0.34	--		
DR-O-Z1	2-3.5 ft	06/04/07	0.47 ± 0.15	J	0.13	0.29 ± 0.18	UJ	0.37	--		
DR-O-900-Z1	2-3.5 ft	06/04/07	0.44 ± 0.12	J	0.09	0.46 ± 0.20		0.25	--		
SMP-1-Z2	8-10 ft	06/07/07	0.41 ± 0.11	J	0.09	0.27 ± 0.13	J	0.22	--		
SMP-1-903-Z1	8-10 ft	06/07/07	0.210 ± 0.095	J	0.14	0.23 ± 0.13	J	0.21	--		
EM-5-SO-01	0-2 ft	06/14/07	0.50 ± 0.15	J	0.17	0.49 ± 0.19		0.33	--		
EM-5-SO-991	0-2 ft	06/14/07	0.51 ± 0.15	J	0.19	0.62 ± 0.21		0.31	--		
GPR-F-SO-01	0-2 ft	06/12/07	0.44 ± 0.14		0.13	0.31 ± 0.20		0.30	--		
GPR-F-990	0-2 ft	06/12/07	0.68 ± 0.20	J	0.16	0.21 ± 0.18	UJ	0.29	--		

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Actinium-228 pCi/g			Bismuth-212 pCi/g			Bismuth-214 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-11-Z1	2-3 ft	06/07/07	0.81 ± 0.24		0.39	--			0.90 ± 0.19		0.12
140-11-920	2-3 ft	06/07/07	0.72 ± 0.25		0.47	1.03 ± 0.58		0.76	0.77 ± 0.22		0.21
100-11-Z1	3-4 ft	06/07/07	3.37 ± 0.46		0.11	1.65 ± 0.68		0.94	0.29 ± 0.15		0.22
100-11-930	3-4 ft	06/07/07	3.28 ± 0.40		0.15	1.68 ± 0.70		0.93	0.46 ± 0.18		0.25
100-10-Z2	13-14 ft	06/08/07	--			--			±		
100-10-931	13-14 ft	06/08/07	--			--			±		
100-01-Z1	0-2 ft	06/13/07	0.32 ± 0.14	J	0.21	0.42 ± 0.28	J	0.39	0.31 ± 0.11	J	0.14
100-932-Z1	4-5 ft	06/13/07	0.43 ± 0.20	J	0.26	--			0.34 ± 0.11	J	0.12
100-04-Z1	3-5 ft	06/13/07	--			--			0.49 ± 0.13		0.1
100-933-Z1	3-5 ft	06/13/07	0.52 ± 0.19		0.30	--			0.61 ± 0.14		0.08
SU08-09-Z1	6-7 ft	06/06/07	0.37 ± 0.16		0.21	--			0.33 ± 0.11	J	0.13
SU08-09-972	6-7 ft	06/06/07	0.30 ± 0.15		0.21	--			0.251 ± 0.090		0.12
SU08-09-Z2	18-19 ft	06/06/07	--			--			±		
SU08-09-973	18-19 ft	06/06/07	--			--			±		
SU08-13-Z1	2-3 ft	06/06/07	0.42 ± 0.17		0.23	--			0.29 ± 0.10	J	0.14
SU08-13-974	2-3 ft	06/06/07	0.14 ± 0.083	UJ	0.274	--			0.31 ± 0.11		0.12
SU08-13-Z2	8-9 ft	06/06/07	0.60 ± 0.19		0.33	0.84 ± 0.31		0.21	0.59 ± 0.16	J	0.16
SU08-13-976	8-9 ft	06/06/07	0.55 ± 0.16		0.21	0.214 ± 0.156	UJ	0.522	0.46 ± 0.12		0.14
SU08-01-Z1	5-8 ft	06/12/07	--			--			0.19 ± 0.10		0.14
SU08-978-Z1	5-8 ft	06/12/07	0.22 ± 0.14		0.19	--			0.193 ± 0.087		0.12
SU08-01-Z2	12-14 ft	06/12/07	--			--			0.143 ± 0.085		0.12
SU08-979-Z2	12-14 ft	06/12/07	--			--			0.122 ± 0.067		0.085
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.63 ± 0.18	J	0.16	--			0.55 ± 0.12	J	0.13
SU09-950-Z1	46-47.5 ft	05/15/07	0.76 ± 0.16	J	0.10	0.29 ± 0.27	J	0.18	0.50 ± 0.12	J	0.04
SU09-10-Z5	36-37 ft	05/17/07	--			--			±		
SU09-951-Z1	36-37 ft	05/17/07	0.14 ± 0.13		0.09	--			0.075 ± 0.070		0.050
SU09-06-Z2	14-15.5 ft	05/21/07	--			--			±		
SU09-952-Z1	14-15.5 ft	05/21/07	--			--			0.19 ± 0.11		0.15
SU13-14-Z1	0-8 ft	05/21/07	0.47 ± 0.15		0.25	--			0.45 ± 0.12		0.16
SU13-953-Z1	0-8 ft	05/21/07	--			--			0.30 ± 0.13		0.15
SU13-04-Z1	6-7 ft	05/22/07	0.33 ± 0.17		0.27	--			0.42 ± 0.12		0.1
SU13-955-Z1	6-7 ft	05/22/07	--			--			0.374 ± 0.084		0.045
SU13-09-Z1	5-6 ft	05/22/07	0.40 ± 0.16		0.21	--			0.27 ± 0.10		0.14
SU13-956-Z1	5-6 ft	05/22/07	0.47 ± 0.22		0.27	--			0.55 ± 0.16		0.11
SU14-17-Z1	3-5 ft	05/22/07	--			--			0.163 ± 0.080		0.11
SU14-954-Z1	3-5 ft	05/22/07	--			--			0.39 ± 0.10		0.07
SU14-12-Z1	6-8 ft	05/23/07	0.29 ± 0.14	J	0.27	--			0.26 ± 0.10	J	0.12
SU14-957-Z1	6-8 ft	05/23/07	0.40 ± 0.16	J	0.28	--			0.44 ± 0.11	J	0.07
SU14-20-Z1	1-3 ft	05/23/07	0.65 ± 0.18		0.24	1.10 ± 0.41		0.29	0.45 ± 0.12		0.15
SU14-958-Z1	1-3 ft	05/23/07	0.28 ± 0.15	J	0.28	--			0.47 ± 0.11	J	0.07
SU14-02-Z2	12-13 ft	05/23/07	--			--			--		
SU14-959-Z1	12-13 ft	05/23/07	0.18 ± 0.11	J	0.16	--			0.111 ± 0.070	J	0.10

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Actinium-228 pCi/g			Bismuth-212 pCi/g			Bismuth-214 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-05-Z2	10-12 ft	05/25/07	0.47 ± 0.14	J	0.23	--			0.60 ± 0.12	J	0.07
SU10-05-961-Z1	10-12 ft	05/25/07	0.57 ± 0.17	J	0.22	--			0.51 ± 0.13	J	0.13
SU10-12-Z1	6-8 ft	05/30/07	0.81 ± 0.22		0.30	--			0.94 ± 0.20		0.19
SU10-963-Z1	6-8 ft	05/30/07	1.46 ± 0.24		0.20	--			0.77 ± 0.19		0.21
SU10-08-Z1	0-2 ft	05/29/07	1.29 ± 0.22	J	0.08	--			0.51 ± 0.12	J	0.08
SU10-966-Z1	0-2 ft	05/29/07	0.85 ± 0.19	J	0.26	0.65 ± 0.42	J	0.62	0.27 ± 0.11	J	0.15
SU10-17-Z1	5-6 ft	06/04/07	0.32 ± 0.14		0.22	--			0.240 ± 0.093		0.13
SU10-967-Z1	5-6 ft	06/04/07	0.23 ± 0.21	UJ	0.32	--			0.43 ± 0.14		0.16
SU10-14-Z1	7-8 ft	06/04/07	0.25 ± 0.12		0.21	--			0.28 ± 0.10		0.14
SU10-968-Z1	7-8 ft	06/04/07	0.15 ± 0.21	UJ	0.32	--			0.40 ± 0.13		0.11
SU10-03-Z1	6-8 ft	06/08/07	--			--			0.24 ± 0.10	J	0.13
SU10-977-Z1	6-8 ft	06/08/07	--			--			0.218 ± 0.086	J	0.11
SU11-17-Z2	14-16 ft	06/05/07	--			--			0.179 ± 0.094		0.12
SU11-965-Z1	14-16 ft	06/05/07	--			--			--		
SU11-21-Z1	3-5 ft	06/05/07	--			--			0.24 ± 0.12		0.16
SU11-969-Z1	3-5 ft	06/05/07	0.39 ± 0.18		0.25	--			0.33 ± 0.13		0.15
SU11-10-Z1	5-6.5 ft	06/05/07	0.34 ± 0.15		0.23	--			0.24 ± 0.10		0.15
SU11-970-Z1	5-6.5 ft	06/05/07	--			--			0.24 ± 0.14		0.20
SU11-11-Z1	5-7 ft	06/06/07	--			--			0.46 ± 0.11	J	0.07
SU11-971-Z1	5-7 ft	06/06/07	--			--			0.163 ± 0.092	J	0.15
SU11-05/D-Z1	6-8 ft	06/06/07	0.45 ± 0.18		0.29	--			0.38 ± 0.14		0.13
SU11-975-Z1	6-8 ft	06/06/07	0.33 ± 1.752	UJ	0.394	--			0.69 ± 0.17		0.12
SU12-13-Z2	10-12 ft	05/24/07	--			--			0.178 ± 0.091	J	0.13
SU12-960-Z1	10-12 ft	05/24/07	--			--			0.240 ± 0.068	J	0.068
SU12-15-Z1	0-8 ft	05/29/07	--			--			0.191 ± 0.087	J	0.13
SU12-962-Z1	0-8 ft	05/29/07	--			--			0.21 ± 0.11	J	0.16
DR-L-Z1	5-6 ft	05/31/07	--			--			0.250 ± 0.093	J	0.13
DR-L-964-Z1	5-6 ft	05/31/07	--			--			--		
DRY-D-Z4	29-30 ft	06/05/07	--			--			0.23 ± 0.11		0.15
DRY-D-901	29-30 ft	06/05/07	--			--			0.141 ± 0.077		0.11
DRYH-A-Z1	4-5 ft	06/05/07	0.41 ± 0.15		0.28	--			--		
DRYH-A-902	4-5 ft	06/05/07	0.39 ± 0.19	J	0.34	--			--		
DR-O-Z1	2-3.5 ft	06/04/07	--			--			0.47 ± 0.15	J	0.13
DR-O-900-Z1	2-3.5 ft	06/04/07	0.46 ± 0.20		0.25	--			0.44 ± 0.12	J	0.09
SMP-1-Z2	8-10 ft	06/07/07	0.27 ± 0.13	J	0.22	±			0.41 ± 0.11	J	0.09
SMP-1-903-Z1	8-10 ft	06/07/07	0.23 ± 0.13	J	0.21	--			0.210 ± 0.095	J	0.14
EM-5-SO-01	0-2 ft	06/14/07	0.49 ± 0.19		0.33	--			0.50 ± 0.15	J	0.17
EM-5-SO-991	0-2 ft	06/14/07	0.62 ± 0.21		0.31	0.58 ± 0.39		0.57	0.51 ± 0.15	J	0.19
GPR-F-SO-01	0-2 ft	06/12/07	0.31 ± 0.20		0.30	--			0.44 ± 0.14		0.13
GPR-F-990	0-2 ft	06/12/07	--			0.76 ± 0.45	J	0.45	0.68 ± 0.20	J	0.16

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Cesium-137 pCi/g			Potassium-40 pCi/g			Lead-210 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-11-Z1	2-3 ft	06/07/07	--			10.0 ± 1.8		0.7	--		
140-11-920	2-3 ft	06/07/07	--			9.4 ± 2.0		1.6	--		
100-11-Z1	3-4 ft	06/07/07	--			10.9 ± 1.6		0.5	--		
100-11-930	3-4 ft	06/07/07	--			9.3 ± 1.6		0.6	--		
100-10-Z2	13-14 ft	06/08/07	--			5.4 ± 1.1	J	0.4	--		
100-10-931	13-14 ft	06/08/07	--			4.76 ± 0.94	J	0.76	--		
100-01-Z1	0-2 ft	06/13/07	--			7.1 ± 1.1	J	0.7	--		
100-932-Z1	4-5 ft	06/13/07	--			7.0 ± 1.3	J	0.8	--		
100-04-Z1	3-5 ft	06/13/07	--			8.4 ± 1.6		0.6	--		
100-933-Z1	3-5 ft	06/13/07	--			8.8 ± 1.6		0.5	--		
SU08-09-Z1	6-7 ft	06/06/07	--			6.8 ± 1.2		0.4	--		
SU08-09-972	6-7 ft	06/06/07	--			6.7 ± 1.0		0.5	--		
SU08-09-Z2	18-19 ft	06/06/07	--			4.22 ± 0.88		0.82	--		
SU08-09-973	18-19 ft	06/06/07	--			4.75 ± 0.87		0.69	--		
SU08-13-Z1	2-3 ft	06/06/07	--			5.45 ± 0.98		0.76	--		
SU08-13-974	2-3 ft	06/06/07	--			4.8 ± 1.1		0.9	--		
SU08-13-Z2	8-9 ft	06/06/07	--			8.8 ± 1.5		0.9	0.5 ± 6.1	U	11
SU08-13-976	8-9 ft	06/06/07	--			11.1 ± 1.5		0.6	1.749 ± 0.686		1.745
SU08-01-Z1	5-8 ft	06/12/07	--			6.9 ± 1.3		0.5	-0.2 ± 1.4	UJ	1.7
SU08-978-Z1	5-8 ft	06/12/07	--			6.9 ± 1.1		0.4	--		
SU08-01-Z2	12-14 ft	06/12/07	--			6.7 ± 1.2		0.4	--		
SU08-979-Z2	12-14 ft	06/12/07	--			4.6 ± 1.0		0.9	--		
SU09-08/D-Z5	46-47.5 ft	05/15/07	--			5.40 ± 0.99	J	0.74	--		
SU09-950-Z1	46-47.5 ft	05/15/07	--			4.7 ± 1.0	J	0.3	--		
SU09-10-Z5	36-37 ft	05/17/07	--			2.41 ± 0.89	J	0.90	--		
SU09-951-Z1	36-37 ft	05/17/07	--			2.10 ± 0.74		0.29	--		
SU09-06-Z2	14-15.5 ft	05/21/07	--			4.1 ± 1.0		0.5	--		
SU09-952-Z1	14-15.5 ft	05/21/07	--			4.4 ± 1.2		0.8	--		
SU13-14-Z1	0-8 ft	05/21/07	--			7.3 ± 1.2		1.0	--		
SU13-953-Z1	0-8 ft	05/21/07	--			7.5 ± 1.4		0.6	--		
SU13-04-Z1	6-7 ft	05/22/07	--			7.5 ± 1.4		0.6	--		
SU13-955-Z1	6-7 ft	05/22/07	--			8.3 ± 1.3		0.3	--		
SU13-09-Z1	5-6 ft	05/22/07	--			7.3 ± 1.1		0.6	--		
SU13-956-Z1	5-6 ft	05/22/07	--			8.0 ± 1.4		0.4	--		
SU14-17-Z1	3-5 ft	05/22/07	--			6.1 ± 1.2		0.9	--		
SU14-954-Z1	3-5 ft	05/22/07	--			6.1 ± 1.2		0.4	--		
SU14-12-Z1	6-8 ft	05/23/07	--			5.9 ± 1.1	J	0.7	--		
SU14-957-Z1	6-8 ft	05/23/07	--			6.3 ± 1.3	J	0.7	--		
SU14-20-Z1	1-3 ft	05/23/07	--			8.3 ± 1.3		0.9	--		
SU14-958-Z1	1-3 ft	05/23/07	--			6.3 ± 1.3	J	0.6	--		
SU14-02-Z2	12-13 ft	05/23/07	--			6.9 ± 1.4	J	0.9	--		
SU14-959-Z1	12-13 ft	05/23/07	--			6.2 ± 1.1	J	0.3	--		

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Cesium-137 pCi/g			Potassium-40 pCi/g			Lead-210 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-05-Z2	10-12 ft	05/25/07	--			9.9 ± 1.4	J	0.3	--		
SU10-05-961-Z1	10-12 ft	05/25/07	--			8.7 ± 1.4	J	0.5	--		
SU10-12-Z1	6-8 ft	05/30/07	--			10.7 ± 1.8		0.8	--		
SU10-963-Z1	6-8 ft	05/30/07	--			12.1 ± 1.7		0.7	--		
SU10-08-Z1	0-2 ft	05/29/07	--			7.3 ± 1.3	J	0.8	--		
SU10-966-Z1	0-2 ft	05/29/07	--			7.4 ± 1.2	J	0.4	--		
SU10-17-Z1	5-6 ft	06/04/07	--			5.9 ± 1.1		1	--		
SU10-967-Z1	5-6 ft	06/04/07	--			8.4 ± 1.6		1	--		
SU10-14-Z1	7-8 ft	06/04/07	--			7.7 ± 1.2		0.6	--		
SU10-968-Z1	7-8 ft	06/04/07	--			6.7 ± 1.4		1.1	--		
SU10-03-Z1	6-8 ft	06/08/07	--			6.2 ± 1.2	J	0.6	--		
SU10-977-Z1	6-8 ft	06/08/07	--			7.3 ± 1.2	J	0.4	--		
SU11-17-Z2	14-16 ft	06/05/07	--			4.1 ± 1.1		1	--		
SU11-965-Z1	14-16 ft	06/05/07	--			5.7 ± 1.3		0.7	--		
SU11-21-Z1	3-5 ft	06/05/07	--			7.4 ± 1.5		0.5	--		
SU11-969-Z1	3-5 ft	06/05/07	--			6.3 ± 1.2		0.8	--		
SU11-10-Z1	5-6.5 ft	06/05/07	--			5.3 ± 1.1		1.1	--		
SU11-970-Z1	5-6.5 ft	06/05/07	--			8.6 ± 1.6		0.7	--		
SU11-11-Z1	5-7 ft	06/06/07	--			5.3 ± 1.2	J	0.9	--		
SU11-971-Z1	5-7 ft	06/06/07	--			6.2 ± 1.0	J	0.8	--		
SU11-05/D-Z1	6-8 ft	06/06/07	--			8.1 ± 1.5		0.6	2.0 ± 1.7		1.9
SU11-975-Z1	6-8 ft	06/06/07	--			7.1 ± 1.5		1.1	2.5 ± 2.1		2.4
SU12-13-Z2	10-12 ft	05/24/07	--			3.91 ± 0.93	J	0.76	--		
SU12-960-Z1	10-12 ft	05/24/07	--			7.2 ± 1.1	J	0.5	--		
SU12-15-Z1	0-8 ft	05/29/07	--			6.6 ± 1.1	J	0.9	--		
SU12-962-Z1	0-8 ft	05/29/07	--			5.8 ± 1.3	J	0.9	--		
DR-L-Z1	5-6 ft	05/31/07	--			8.1 ± 1.2	J	0.5	--		
DR-L-964-Z1	5-6 ft	05/31/07	--			7.0 ± 1.2		0.3	--		
DRY-D-Z4	29-30 ft	06/05/07	--			5.6 ± 1.3		0.5	--		
DRY-D-901	29-30 ft	06/05/07	--			4.9 ± 1.0		0.5	--		
DRYH-A-Z1	4-5 ft	06/05/07	--			6.3 ± 1.2		0.7	--		
DRYH-A-902	4-5 ft	06/05/07	--			7.4 ± 1.4	J	0.6	--		
DR-O-Z1	2-3.5 ft	06/04/07	--			7.7 ± 1.5		0.5	--		
DR-O-900-Z1	2-3.5 ft	06/04/07	--			4.6 ± 1.1		0.8	--		
SMP-1-Z2	8-10 ft	06/07/07	--			5.6 ± 1.1	J	0.7	--		
SMP-1-903-Z1	8-10 ft	06/07/07	--			5.6 ± 1.0	J	0.8	--		
EM-5-SO-01	0-2 ft	06/14/07	--			10.1 ± 1.7		0.6	--		
EM-5-SO-991	0-2 ft	06/14/07	--			10.0 ± 1.5		0.7	--		
GPR-F-SO-01	0-2 ft	06/12/07	--			5.6 ± 1.3		1.0	--		
GPR-F-990	0-2 ft	06/12/07	--			6.4 ± 1.2	J	0.9	--		

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Protoactinium-234m pCi/g			Lead-212 pCi/g			Lead-214 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-11-Z1	2-3 ft	06/07/07	--			0.92 ± 0.17		0.14	0.82 ± 0.15		0.15
140-11-920	2-3 ft	06/07/07	--			1.33 ± 0.24		0.18	0.93 ± 0.18		0.20
100-11-Z1	3-4 ft	06/07/07	18.2 ± 8.5		11	3.44 ± 0.36		0.22	0.40 ± 0.16		0.24
100-11-930	3-4 ft	06/07/07	31 ± 11		13	3.03 ± 0.37		0.25	0.52 ± 0.15		0.20
100-10-Z2	13-14 ft	06/08/07	--			0.117 ± 0.052	J	0.066	0.124 ± 0.076	J	0.11
100-10-931	13-14 ft	06/08/07	--			0.208 ± 0.077	J	0.085	0.157 ± 0.073	J	0.10
100-01-Z1	0-2 ft	06/13/07	--			0.51 ± 0.12	J	0.12	0.46 ± 0.11	J	0.10
100-932-Z1	4-5 ft	06/13/07	--			0.57 ± 0.13	J	0.10	0.341 ± 0.094	J	0.12
100-04-Z1	3-5 ft	06/13/07	--			0.53 ± 0.10		0.09	0.51 ± 0.13		0.16
100-933-Z1	3-5 ft	06/13/07	--			0.59 ± 0.14		0.13	0.51 ± 0.14		0.16
SU08-09-Z1	6-7 ft	06/06/07	--			0.54 ± 0.12		0.1	0.252 ± 0.082		0.12
SU08-09-972	6-7 ft	06/06/07	--			0.291 ± 0.069		0.077	0.294 ± 0.077	J	0.12
SU08-09-Z2	18-19 ft	06/06/07	--			0.264 ± 0.084		0.079	0.112 ± 0.058		0.085
SU08-09-973	18-19 ft	06/06/07	--			0.174 ± 0.063		0.072	0.141 ± 0.068	J	0.10
SU08-13-Z1	2-3 ft	06/06/07	--			0.55 ± 0.15		0.13	0.246 ± 0.078		0.13
SU08-13-974	2-3 ft	06/06/07	--			0.55 ± 0.14		0.11	0.330 ± 0.095	J	0.13
SU08-13-Z2	8-9 ft	06/06/07	-0.1 ± 5.6	U	11	0.92 ± 0.20		0.16	0.58 ± 0.13		0.13
SU08-13-976	8-9 ft	06/06/07	0.024 ± 2.443		9.034	0.85 ± 0.14		0.11	0.73 ± 0.14	J	0.12
SU08-01-Z1	5-8 ft	06/12/07	--			0.313 ± 0.091		0.094	0.342 ± 0.089		0.087
SU08-978-Z1	5-8 ft	06/12/07	--			0.366 ± 0.083		0.073	0.329 ± 0.077		0.090
SU08-01-Z2	12-14 ft	06/12/07	--			0.199 ± 0.067		0.068	0.134 ± 0.063		0.093
SU08-979-Z2	12-14 ft	06/12/07	--			0.221 ± 0.080		0.076	0.150 ± 0.058		0.079
SU09-08/D-Z5	46-47.5 ft	05/15/07	--			0.94 ± 0.17	J	0.13	0.43 ± 0.10	J	0.15
SU09-950-Z1	46-47.5 ft	05/15/07	--			0.84 ± 0.13	J	0.04	0.462 ± 0.096	J	0.052
SU09-10-Z5	36-37 ft	05/17/07	--			0.23 ± 0.10	J	0.10	--		
SU09-951-Z1	36-37 ft	05/17/07	--			0.155 ± 0.057		0.029	0.161 ± 0.070		0.042
SU09-06-Z2	14-15.5 ft	05/21/07	--			0.180 ± 0.075		0.081	0.135 ± 0.081		0.12
SU09-952-Z1	14-15.5 ft	05/21/07	--			0.199 ± 0.081		0.086	0.190 ± 0.081		0.10
SU13-14-Z1	0-8 ft	05/21/07	--			0.80 ± 0.14		0.11	0.49 ± 0.10		0.13
SU13-953-Z1	0-8 ft	05/21/07	--			0.62 ± 0.11		0.09	0.44 ± 0.12		0.15
SU13-04-Z1	6-7 ft	05/22/07	--			0.302 ± 0.081		0.083	0.351 ± 0.089		0.13
SU13-955-Z1	6-7 ft	05/22/07	--			0.351 ± 0.067		0.058	0.342 ± 0.081		0.069
SU13-09-Z1	5-6 ft	05/22/07	--			0.456 ± 0.093		0.089	0.56 ± 0.12		0.11
SU13-956-Z1	5-6 ft	05/22/07	--			0.48 ± 0.14		0.13	0.340 ± 0.094		0.14
SU14-17-Z1	3-5 ft	05/22/07	--			0.37 ± 0.11		0.10	0.194 ± 0.075		0.11
SU14-954-Z1	3-5 ft	05/22/07	--			0.36 ± 0.10		0.1	0.169 ± 0.071		0.12
SU14-12-Z1	6-8 ft	05/23/07	--			0.62 ± 0.13	J	0.1	0.267 ± 0.090	J	0.12
SU14-957-Z1	6-8 ft	05/23/07	--			0.355 ± 0.081	J	0.074	0.300 ± 0.092	J	0.11
SU14-20-Z1	1-3 ft	05/23/07	--			0.66 ± 0.14		0.13	0.61 ± 0.14		0.11
SU14-958-Z1	1-3 ft	05/23/07	--			0.339 ± 0.092	J	0.090	0.282 ± 0.087	J	0.11
SU14-02-Z2	12-13 ft	05/23/07	--			0.178 ± 0.067	J	0.079	0.136 ± 0.082	J	0.12
SU14-959-Z1	12-13 ft	05/23/07	--			0.220 ± 0.073	J	0.069	0.133 ± 0.071	J	0.11

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Protoactinium-234m pCi/g			Lead-212 pCi/g			Lead-214 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-05-Z2	10-12 ft	05/25/07	--			0.57 ± 0.11	J	0.09	0.57 ± 0.10	J	0.10
SU10-05-961-Z1	10-12 ft	05/25/07	--			0.58 ± 0.11	J	0.09	0.46 ± 0.10	J	0.12
SU10-12-Z1	6-8 ft	05/30/07	--			1.35 ± 0.24		0.19	1.25 ± 0.19		0.15
SU10-963-Z1	6-8 ft	05/30/07	--			1.54 ± 0.24		0.17	1.27 ± 0.23		0.17
SU10-08-Z1	0-2 ft	05/29/07	--			0.98 ± 0.12	J	0.09	0.43 ± 0.10	J	0.09
SU10-966-Z1	0-2 ft	05/29/07	--			1.06 ± 0.19	J	0.14	0.35 ± 0.11	J	0.14
SU10-17-Z1	5-6 ft	06/04/07	--			0.61 ± 0.13		0.11	0.42 ± 0.12		0.12
SU10-967-Z1	5-6 ft	06/04/07	--			0.54 ± 0.11		0.11	0.42 ± 0.12		0.16
SU10-14-Z1	7-8 ft	06/04/07	--			0.55 ± 0.11		0.10	0.286 ± 0.092		0.14
SU10-968-Z1	7-8 ft	06/04/07	--			0.326 ± 0.084		0.087	0.32 ± 0.11		0.14
SU10-03-Z1	6-8 ft	06/08/07	--			0.242 ± 0.087	J	0.091	0.288 ± 0.083	J	0.086
SU10-977-Z1	6-8 ft	06/08/07	--			0.257 ± 0.062	J	0.058	0.193 ± 0.070	J	0.093
SU11-17-Z2	14-16 ft	06/05/07	--			0.217 ± 0.068		0.086	0.171 ± 0.078	J	0.10
SU11-965-Z1	14-16 ft	06/05/07	--			0.145 ± 0.086		0.098	--		
SU11-21-Z1	3-5 ft	06/05/07	--			0.58 ± 0.15		0.12	0.42 ± 0.12	J	0.15
SU11-969-Z1	3-5 ft	06/05/07	--			0.43 ± 0.10		0.09	0.326 ± 0.093	J	0.14
SU11-10-Z1	5-6.5 ft	06/05/07	--			0.50 ± 0.11		0.11	0.33 ± 0.10		0.13
SU11-970-Z1	5-6.5 ft	06/05/07	--			0.41 ± 0.11		0.11	0.329 ± 0.099		0.13
SU11-11-Z1	5-7 ft	06/06/07	--			0.33 ± 0.10	J	0.1	0.240 ± 0.088	J	0.11
SU11-971-Z1	5-7 ft	06/06/07	--			0.320 ± 0.088	J	0.091	0.320 ± 0.092	J	0.11
SU11-05/D-Z1	6-8 ft	06/06/07	--			0.52 ± 0.11		0.10	0.33 ± 0.11		0.13
SU11-975-Z1	6-8 ft	06/06/07	--			0.49 ± 0.11		0.11	0.39 ± 0.12		0.17
SU12-13-Z2	10-12 ft	05/24/07	--			0.189 ± 0.076	J	0.082	0.167 ± 0.071	J	0.12
SU12-960-Z1	10-12 ft	05/24/07	--			0.249 ± 0.080	J	0.086	0.158 ± 0.059	J	0.099
SU12-15-Z1	0-8 ft	05/29/07	--			0.317 ± 0.096	J	0.096	0.257 ± 0.077	J	0.092
SU12-962-Z1	0-8 ft	05/29/07	--			0.273 ± 0.082	J	0.088	0.241 ± 0.091	J	0.12
DR-L-Z1	5-6 ft	05/31/07	--			0.37 ± 0.10	J	0.10	0.316 ± 0.081	J	0.12
DR-L-964-Z1	5-6 ft	05/31/07	--			0.34 ± 0.11		0.11	0.329 ± 0.090		0.11
DRY-D-Z4	29-30 ft	06/05/07	--			0.273 ± 0.097		0.10	0.218 ± 0.079		0.12
DRY-D-901	29-30 ft	06/05/07	--			0.187 ± 0.060		0.065	0.183 ± 0.061		0.094
DRYH-A-Z1	4-5 ft	06/05/07	--			0.56 ± 0.13		0.10	--		
DRYH-A-902	4-5 ft	06/05/07	--			0.52 ± 0.12	J	0.11	--		
DR-O-Z1	2-3.5 ft	06/04/07	--			0.56 ± 0.12		0.10	0.44 ± 0.14		0.17
DR-O-900-Z1	2-3.5 ft	06/04/07	--			0.52 ± 0.10		0.09	0.52 ± 0.10		0.07
SMP-1-Z2	8-10 ft	06/07/07	--			0.46 ± 0.12	J	0.10	0.38 ± 0.10	J	0.12
SMP-1-903-Z1	8-10 ft	06/07/07	--			0.48 ± 0.12	J	0.11	0.298 ± 0.085	J	0.10
EM-5-SO-01	0-2 ft	06/14/07	--			0.83 ± 0.14		0.12	0.67 ± 0.16		0.18
EM-5-SO-991	0-2 ft	06/14/07	--			1.13 ± 0.18		0.15	0.70 ± 0.14		0.17
GPR-F-SO-01	0-2 ft	06/12/07	95 ± 16		4	0.42 ± 0.13		0.13	0.45 ± 0.13		0.16
GPR-F-990	0-2 ft	06/12/07	154 ± 18	J	3	0.44 ± 0.12	J	0.13	0.42 ± 0.11	J	0.16

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Thallium-208 pCi/g			Thorium-234 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC
140-11-Z1	2-3 ft	06/07/07	0.484 ± 0.093		0.056	2.97 ± 0.93		1.7
140-11-920	2-3 ft	06/07/07	0.46 ± 0.11		0.07	3.7 ± 1.2		2.0
100-11-Z1	3-4 ft	06/07/07	1.21 ± 0.17		0.09	19.1 ± 2.4		5.1
100-11-930	3-4 ft	06/07/07	1.22 ± 0.20		0.13	19.0 ± 2.1		2.9
100-10-Z2	13-14 ft	06/08/07	--			--		
100-10-931	13-14 ft	06/08/07	--			--		
100-01-Z1	0-2 ft	06/13/07	0.211 ± 0.053	J	0.047	0.79 ± 0.93	UJ	1.2
100-932-Z1	4-5 ft	06/13/07	--			--		
100-04-Z1	3-5 ft	06/13/07	0.272 ± 0.078		0.058	1.78 ± 0.77		1.4
100-933-Z1	3-5 ft	06/13/07	0.315 ± 0.073		0.038	2.31 ± 0.80		1.5
SU08-09-Z1	6-7 ft	06/06/07	0.089 ± 0.043		0.060	--		
SU08-09-972	6-7 ft	06/06/07	0.114 ± 0.043		0.045	--		
SU08-09-Z2	18-19 ft	06/06/07	--			--		
SU08-09-973	18-19 ft	06/06/07	--			--		
SU08-13-Z1	2-3 ft	06/06/07	0.094 ± 0.042		0.055	1.84 ± 0.54		1.0
SU08-13-974	2-3 ft	06/06/07	0.118 ± 0.051		0.066	1.19 ± 0.286	UJ	2.643
SU08-13-Z2	8-9 ft	06/06/07	0.255 ± 0.077		0.089	0.6 ± 1.8	U	3.1
SU08-13-976	8-9 ft	06/06/07	0.266 ± 0.059		0.044	0.203 ± 0.923	UJ	0.146
SU08-01-Z1	5-8 ft	06/12/07	0.073 ± 0.048	J	0.071	0.15 ± 0.58	UJ	1.0
SU08-978-Z1	5-8 ft	06/12/07	0.095 ± 0.040	J	0.054	--		
SU08-01-Z2	12-14 ft	06/12/07	--			--		
SU08-979-Z2	12-14 ft	06/12/07	--			--		
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.305 ± 0.056	J	0.033	--		
SU09-950-Z1	46-47.5 ft	05/15/07	0.323 ± 0.059	J	0.009	--		
SU09-10-Z5	36-37 ft	05/17/07	0.098 ± 0.058	J	0.084	--		
SU09-951-Z1	36-37 ft	05/17/07	0.040 ± 0.034		0.023	--		
SU09-06-Z2	14-15.5 ft	05/21/07	--			--		
SU09-952-Z1	14-15.5 ft	05/21/07	--			--		
SU13-14-Z1	0-8 ft	05/21/07	0.221 ± 0.060		0.055	2.5 ± 1.2		1.3
SU13-953-Z1	0-8 ft	05/21/07	0.246 ± 0.071		0.054	1.51 ± 0.56		1.2
SU13-04-Z1	6-7 ft	05/22/07	0.088 ± 0.056		0.083	--		
SU13-955-Z1	6-7 ft	05/22/07	0.170 ± 0.042		0.025	--		
SU13-09-Z1	5-6 ft	05/22/07	0.271 ± 0.064		0.045	--		
SU13-956-Z1	5-6 ft	05/22/07	0.142 ± 0.059		0.073	--		
SU14-17-Z1	3-5 ft	05/22/07	0.139 ± 0.039		0.027	--		
SU14-954-Z1	3-5 ft	05/22/07	0.131 ± 0.041		0.023	1.63 ± 0.81		0.94
SU14-12-Z1	6-8 ft	05/23/07	0.111 ± 0.050	J	0.068	--		
SU14-957-Z1	6-8 ft	05/23/07	0.138 ± 0.053	J	0.060	--		
SU14-20-Z1	1-3 ft	05/23/07	0.281 ± 0.066		0.051	--		
SU14-958-Z1	1-3 ft	05/23/07	0.150 ± 0.046	J	0.034	--		
SU14-02-Z2	12-13 ft	05/23/07	--			--		
SU14-959-Z1	12-13 ft	05/23/07	0.094 ± 0.032	J	0.027	--		

Table 3.2-2b Summary of Complete Radiological Results for Field Duplicates Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte Conc. Units:	Thallium-208 pCi/g			Thorium-234 pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC
SU10-05-Z2	10-12 ft	05/25/07	0.234 ± 0.055	J	0.037	--		
SU10-05-961-Z1	10-12 ft	05/25/07	0.206 ± 0.060	J	0.044	1.06 ± 0.62	J	0.94
SU10-12-Z1	6-8 ft	05/30/07	0.427 ± 0.098		0.063	--		
SU10-963-Z1	6-8 ft	05/30/07	0.439 ± 0.085		0.056	--		
SU10-08-Z1	0-2 ft	05/29/07	0.397 ± 0.099	J	0.068	2.5 ± 1.1	J	1.3
SU10-966-Z1	0-2 ft	05/29/07	0.308 ± 0.073	J	0.076	--		
SU10-17-Z1	5-6 ft	06/04/07	0.165 ± 0.052		0.047	--		
SU10-967-Z1	5-6 ft	06/04/07	0.106 ± 0.068		0.10	--		
SU10-14-Z1	7-8 ft	06/04/07	0.139 ± 0.055		0.075	--		
SU10-968-Z1	7-8 ft	06/04/07	0.160 ± 0.059		0.053	--		
SU10-03-Z1	6-8 ft	06/08/07	--			--		
SU10-977-Z1	6-8 ft	06/08/07	--			--		
SU11-17-Z2	14-16 ft	06/05/07	--			--		
SU11-965-Z1	14-16 ft	06/05/07	--			--		
SU11-21-Z1	3-5 ft	06/05/07	--			--		
SU11-969-Z1	3-5 ft	06/05/07	--			--		
SU11-10-Z1	5-6.5 ft	06/05/07	0.205 ± 0.059		0.059	--		
SU11-970-Z1	5-6.5 ft	06/05/07	--			--		
SU11-11-Z1	5-7 ft	06/06/07	0.171 ± 0.062	J	0.052	--		
SU11-971-Z1	5-7 ft	06/06/07	0.092 ± 0.047	J	0.072	--		
SU11-05/D-Z1	6-8 ft	06/06/07	0.158 ± 0.068	J	0.066	--		
SU11-975-Z1	6-8 ft	06/06/07	0.098 ± 0.055	J	0.084	--		
SU12-13-Z2	10-12 ft	05/24/07	--			--		
SU12-960-Z1	10-12 ft	05/24/07	--			--		
SU12-15-Z1	0-8 ft	05/29/07	0.076 ± 0.043	J	0.065	--		
SU12-962-Z1	0-8 ft	05/29/07	--			--		
DR-L-Z1	5-6 ft	05/31/07	0.142 ± 0.042	J	0.038	--		
DR-L-964-Z1	5-6 ft	05/31/07	0.090 ± 0.046		0.061	1.02 ± 0.50		1.0
DRY-D-Z4	29-30 ft	06/05/07	--			--		
DRY-D-901	29-30 ft	06/05/07	--			--		
DRYH-A-Z1	4-5 ft	06/05/07	0.123 ± 0.055		0.077	--		
DRYH-A-902	4-5 ft	06/05/07	0.153 ± 0.067	J	0.091	--		
DR-O-Z1	2-3.5 ft	06/04/07	0.112 ± 0.067		0.10	--		
DR-O-900-Z1	2-3.5 ft	06/04/07	0.199 ± 0.052		0.044	--		
SMP-1-Z2	8-10 ft	06/07/07	0.098 ± 0.049	J	0.069	--		
SMP-1-903-Z1	8-10 ft	06/07/07	0.096 ± 0.044	J	0.063	--		
EM-5-SO-01	0-2 ft	06/14/07	0.248 ± 0.090		0.12	--		
EM-5-SO-991	0-2 ft	06/14/07	0.245 ± 0.065		0.063	2.71 ± 0.997		1.7
GPR-F-SO-01	0-2 ft	06/12/07	0.205 ± 0.083	J	0.076	50.4 ± 5.8	J	3.9
GPR-F-990	0-2 ft	06/12/07	0.133 ± 0.067	J	0.10	93.1 ± 7.3	J	4.5

Table 3.2-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	140-01-Z1 0-1 ft 06/18/2007	140-01-Z2 8-9 ft 06/18/2007	140-02-Z1 1-3 ft 06/14/2007	140-02-Z2 8-10 ft 06/14/2007	140-03-Z1 1-3 ft 06/13/2007	140-03-Z2 8-9 ft 06/13/2007	140-04-Z1 2.5-4 ft 06/14/2007	140-04-Z2 9-11 ft 06/14/2007
6010B (mg/kg)								
Nickel	**12.6**	**4.8**	**9.4**	**2.7 J**	**7.3**	**3.6 J**	**5.7**	**3.9 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
1,1,2,2-Tetrachloroethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
1,1,2-Trichloroethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
1,1-Dichloroethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
1,1-Dichloroethene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
1,2,3-Trichlorobenzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 UJ
1,2,4-Trichlorobenzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 UJ
1,2-Dibromo-3-chloropropane	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 UJ
1,2-Dibromoethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
1,2-Dichlorobenzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 UJ
1,2-Dichloroethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
1,2-Dichloropropane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
1,3-Dichlorobenzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 UJ
1,4-Dichlorobenzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 UJ
1,4-Dioxane	420 U	410 U	420 U	410 U	450 U	410 U	460 U	420 U
2-Butanone	21 U	21 U	21 U	20 U	23 U	21 U	23 U	21 U
2-Hexanone	21 U	21 U	21 U	20 U	23 U	21 U	23 U	21 U
4-Methyl-2-Pentanone	21 U	21 U	21 U	20 U	23 U	21 U	23 U	21 U
Acetone	21 U	21 U	21 U	20 U	23 U	21 U	23 U	**11 J**
Benzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Bromochloromethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Bromodichloromethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Bromoform	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 UJ
Bromomethane	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U

Table 3.2-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	140-01-Z1 0-1 ft 06/18/2007	140-01-Z2 8-9 ft 06/18/2007	140-02-Z1 1-3 ft 06/14/2007	140-02-Z2 8-10 ft 06/14/2007	140-03-Z1 1-3 ft 06/13/2007	140-03-Z2 8-9 ft 06/13/2007	140-04-Z1 2.5-4 ft 06/14/2007	140-04-Z2 9-11 ft 06/14/2007
Carbon disulfide	5.3 U	5.2 U	5.3 UJ	5.1 UJ	5.6 U	5.2 U	5.7 UJ	5.2 UJ
Carbon tetrachloride	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Chlorobenzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Chloroethane	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Chloroform	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Chloromethane	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
cis-1,3-Dichloropropene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Cyclohexane	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Dibromochloromethane	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Dichlorodifluoromethane	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Ethylbenzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
FREON 113	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Isopropylbenzene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Methyl acetate	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Methyl tert-butyl ether	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Methylcyclohexane	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Methylene chloride	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
m-Xylene & p-Xylene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
o-Xylene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Styrene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Tetrachloroethene	**11 J+**	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Toluene	**3.8 J**	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
trans-1,2-Dichloroethene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
trans-1,3-Dichloropropene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Trichloroethene	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Trichlorofluoromethane	**6.1 J+**	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U
Vinyl chloride	5.3 U	5.2 U	5.3 U	5.1 U	5.6 U	5.2 U	5.7 U	5.2 U

Table 3.2-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	140-05-Z1 1-3 ft 06/13/2007	140-05-Z2 8-10 ft 06/13/2007	140-06-Z1 2-7.5 ft 06/12/2007	140-06-Z2 8-10 ft 06/12/2007	140-08-Z1 3.5-7.5 ft 06/12/2007	140-08-Z2 8-10 ft 06/12/2007	140-09-Z1 1-2 ft 06/18/2007	140-09-Z2 8-9 ft 06/18/2007
6010B (mg/kg)								
Nickel	**7.2**	**12.3**	**133**	**2.6 J**	**3.9 J**	**3.5 J**	**9.4**	**6.5**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,1,2,2-Tetrachloroethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,1,2-Trichloroethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,1-Dichloroethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,1-Dichloroethene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,2,3-Trichlorobenzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	**1.1 J**	5.2 U	5.5 U
1,2,4-Trichlorobenzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,2-Dibromo-3-chloropropane	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U
1,2-Dibromoethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,2-Dichlorobenzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,2-Dichloroethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,2-Dichloropropane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,3-Dichlorobenzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
1,4-Dichlorobenzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	**0.60 J**	5.2 U	5.5 U
1,4-Dioxane	450 U	460 U	450 U	410 U	410 U	410 U	420 U	440 U
2-Butanone	23 U	23 U	23 U	21 U	20 U	21 U	21 U	22 U
2-Hexanone	23 U	23 U	23 U	21 U	20 U	21 U	21 U	22 U
4-Methyl-2-Pentanone	23 U	23 U	23 U	21 U	20 U	21 U	21 U	22 U
Acetone	23 U	23 U	23 U	21 U	20 U	21 U	21 U	22 U
Benzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Bromochloromethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Bromodichloromethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Bromoform	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Bromomethane	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U

Table 3.2-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	140-05-Z1 1-3 ft 06/13/2007	140-05-Z2 8-10 ft 06/13/2007	140-06-Z1 2-7.5 ft 06/12/2007	140-06-Z2 8-10 ft 06/12/2007	140-08-Z1 3.5-7.5 ft 06/12/2007	140-08-Z2 8-10 ft 06/12/2007	140-09-Z1 1-2 ft 06/18/2007	140-09-Z2 8-9 ft 06/18/2007
Carbon disulfide	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Carbon tetrachloride	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Chlorobenzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Chloroethane	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U
Chloroform	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Chloromethane	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U
cis-1,2-Dichloroethene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
cis-1,3-Dichloropropene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Cyclohexane	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U
Dibromochloromethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Dichlorodifluoromethane	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U
Ethylbenzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
FREON 113	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Isopropylbenzene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Methyl acetate	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U
Methyl tert-butyl ether	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Methylcyclohexane	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U
Methylene chloride	11 U	12 U	11 U	10 U	10 U	10 U	10 U	11 U
m-Xylene & p-Xylene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
o-Xylene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Styrene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Tetrachloroethene	5.7 U	5.8 U	5.7 U	5.2 U	**3.8 J**	5.2 U	**8.0**	**1.8 J**
Toluene	5.7 U	5.8 U	5.7 UJ	5.2 UJ	5.1 UJ	5.2 U	5.2 U	5.5 U
trans-1,2-Dichloroethene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
trans-1,3-Dichloropropene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Trichloroethene	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Trichlorofluoromethane	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U
Vinyl chloride	5.7 U	5.8 U	5.7 U	5.2 U	5.1 U	5.2 U	5.2 U	5.5 U

Table 3.2-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	140-10-Z1 3-4 ft 06/07/2007	140-10-Z2 15-16 ft 06/07/2007	140-11-Z1 2-3 ft 06/07/2007	140-11-Z2 14-15 ft 06/07/2007
6010B (mg/kg)				
Nickel	**6.6**	**2.3 J**	**23.4**	**3.2 J**
8260B (µg/kg)				
1,1,1-Trichloroethane	5.6 U	5.1 U	5.3 U	5.1 U
1,1,2,2-Tetrachloroethane	5.6 U	5.1 U	5.3 U	5.1 U
1,1,2-Trichloroethane	5.6 U	5.1 U	5.3 U	5.1 U
1,1-Dichloroethane	5.6 U	5.1 U	5.3 U	5.1 U
1,1-Dichloroethene	5.6 U	5.1 U	5.3 U	5.1 U
1,2,3-Trichlorobenzene	5.6 U	5.1 U	5.3 U	5.1 UJ
1,2,4-Trichlorobenzene	5.6 U	5.1 U	5.3 U	5.1 UJ
1,2-Dibromo-3-chloropropane	11 U	10 U	11 U	10 UJ
1,2-Dibromoethane	5.6 U	5.1 U	5.3 U	5.1 U
1,2-Dichlorobenzene	5.6 U	5.1 U	5.3 U	5.1 UJ
1,2-Dichloroethane	5.6 U	5.1 U	5.3 U	5.1 U
1,2-Dichloropropane	5.6 U	5.1 U	5.3 U	5.1 UJ
1,3-Dichlorobenzene	5.6 U	5.1 U	5.3 U	5.1 UJ
1,4-Dichlorobenzene	5.6 U	5.1 U	5.3 U	5.1 UJ
1,4-Dioxane	450 U	410 U	430 U	410 U
2-Butanone	22 U	21 U	21 U	21 U
2-Hexanone	22 U	21 U	21 U	21 U
4-Methyl-2-Pentanone	22 U	21 U	21 U	21 U
Acetone	22 U	21 U	21 U	21 U
Benzene	5.6 U	5.1 U	5.3 U	5.1 U
Bromochloromethane	5.6 U	5.1 U	5.3 U	5.1 U
Bromodichloromethane	5.6 U	5.1 U	5.3 U	5.1 U
Bromoform	5.6 U	5.1 U	5.3 U	5.1 UJ
Bromomethane	11 U	10 U	11 U	10 U

Table 3.2-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	140-10-Z1 3-4 ft 06/07/2007	140-10-Z2 15-16 ft 06/07/2007	140-11-Z1 2-3 ft 06/07/2007	140-11-Z2 14-15 ft 06/07/2007
Carbon disulfide	5.6 U	5.1 U	5.3 U	5.1 U
Carbon tetrachloride	5.6 U	5.1 U	5.3 U	5.1 U
Chlorobenzene	5.6 U	5.1 U	5.3 U	5.1 U
Chloroethane	11 U	10 U	11 U	10 U
Chloroform	5.6 U	5.1 U	5.3 U	5.1 U
Chloromethane	11 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.6 U	5.1 U	5.3 U	5.1 U
cis-1,3-Dichloropropene	5.6 U	5.1 U	5.3 U	5.1 U
Cyclohexane	11 U	10 U	11 U	10 U
Dibromochloromethane	5.6 U	5.1 U	5.3 U	5.1 U
Dichlorodifluoromethane	11 U	10 U	11 U	10 U
Ethylbenzene	5.6 U	5.1 U	5.3 U	5.1 U
FREON 113	5.6 U	5.1 U	5.3 U	5.1 U
Isopropylbenzene	5.6 U	5.1 U	5.3 U	5.1 U
Methyl acetate	11 U	10 U	11 U	10 U
Methyl tert-butyl ether	5.6 U	5.1 U	5.3 U	5.1 U
Methylcyclohexane	11 U	10 U	11 U	10 U
Methylene chloride	11 U	10 U	11 U	10 U
m-Xylene & p-Xylene	5.6 U	5.1 U	5.3 U	5.1 U
o-Xylene	5.6 U	5.1 U	5.3 U	5.1 U
Styrene	5.6 U	5.1 U	5.3 U	5.1 U
Tetrachloroethene	**4.1 J**	5.1 U	**47**	5.1 U
Toluene	5.6 U	**0.46 J**	**0.53 J**	5.1 U
trans-1,2-Dichloroethene	5.6 U	5.1 U	5.3 U	5.1 U
trans-1,3-Dichloropropene	5.6 U	5.1 U	5.3 U	5.1 U
Trichloroethene	5.6 U	5.1 U	5.3 U	5.1 U
Trichlorofluoromethane	5.6 U	5.1 U	5.3 U	5.1 U
Vinyl chloride	5.6 U	5.1 U	5.3 U	5.1 U

Table 3.2-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	100-01-Z1 0-2 ft 06/13/2007	100-01-Z2 9-11 ft 06/13/2007	100-02-Z1 1-2 ft 06/18/2007	100-02-Z2 9-10 ft 06/18/2007	100-03-Z1 3-4 ft 06/18/2007	100-03-Z2 9-10 ft 06/18/2007	100-04-Z1 3-5 ft 06/13/2007	100-04-Z2 8-9 ft 06/13/2007
6010B (mg/kg)								
Nickel	**5.8**	**5.8**	**5.2**	**6.1**	**7.5**	**4.8**	**8.7**	**2.2 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,1,2,2-Tetrachloroethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,1,2-Trichloroethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,1-Dichloroethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,1-Dichloroethene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,2,3-Trichlorobenzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,2,4-Trichlorobenzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,2-Dibromo-3-chloropropane	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
1,2-Dibromoethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,2-Dichlorobenzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,2-Dichloroethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,2-Dichloropropane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,3-Dichlorobenzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,4-Dichlorobenzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
1,4-Dioxane	420 U	420 U	430 U	430 U	430 U	420 U	430 U	400 U
2-Butanone	21 U	21 U	21 U	22 U	21 U	21 U	21 U	20 U
2-Hexanone	21 U	21 U	21 U	22 U	21 U	21 U	21 U	20 U
4-Methyl-2-Pentanone	21 U	21 U	21 U	22 U	21 U	21 U	21 U	20 U
Acetone	21 U	21 U	21 U	22 U	**5.7 J**	**14 J**	21 U	20 U
Benzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Bromochloromethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Bromodichloromethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Bromoform	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Bromomethane	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U

Table 3.2-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	100-01-Z1 0-2 ft 06/13/2007	100-01-Z2 9-11 ft 06/13/2007	100-02-Z1 1-2 ft 06/18/2007	100-02-Z2 9-10 ft 06/18/2007	100-03-Z1 3-4 ft 06/18/2007	100-03-Z2 9-10 ft 06/18/2007	100-04-Z1 3-5 ft 06/13/2007	100-04-Z2 8-9 ft 06/13/2007
Carbon disulfide	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Carbon tetrachloride	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Chlorobenzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Chloroethane	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
Chloroform	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Chloromethane	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
cis-1,3-Dichloropropene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Cyclohexane	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
Dibromochloromethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Dichlorodifluoromethane	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
Ethylbenzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
FREON 113	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Isopropylbenzene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Methyl acetate	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
Methyl tert-butyl ether	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Methylcyclohexane	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
Methylene chloride	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
m-Xylene & p-Xylene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
o-Xylene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Styrene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Tetrachloroethene	5.3 U	5.3 U	5.3 U	**1.2 J**	5.3 U	**0.83 J**	5.4 U	5.0 U
Toluene	5.3 UJ	5.3 U	**0.32 J**	5.4 U	**0.43 J**	**0.47 J**	5.4 U	5.0 U
trans-1,2-Dichloroethene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
trans-1,3-Dichloropropene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Trichloroethene	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Trichlorofluoromethane	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U
Vinyl chloride	5.3 U	5.3 U	5.3 U	5.4 U	5.3 U	5.3 U	5.4 U	5.0 U

Table 3.2-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	100-05-Z1 3-5 ft 06/13/2007	100-05-Z2 9-11 ft 06/13/2007	100-07-Z1 2-3 ft 06/07/2007	100-07-Z2 8-9 ft 06/07/2007	100-08-Z1 6-7 ft 06/07/2007	100-08-Z2 13-14 ft 06/07/2007
6010B (mg/kg)						
Nickel	**25.2**	**8.5**	**21.4**	**2.6 J**	**3.8 J**	**3.8 J**
8260B (µg/kg)						
1,1,1-Trichloroethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.7 U	6.0 U	5.3 UJ	5.1 UJ	5.1 U	5.1 UJ
1,2,4-Trichlorobenzene	5.7 U	6.0 U	5.3 UJ	5.1 UJ	5.1 U	5.1 UJ
1,2-Dibromo-3-chloropropane	11 U	12 U	11 UJ	10 UJ	10 U	10 UJ
1,2-Dibromoethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.7 U	6.0 U	5.3 UJ	5.1 UJ	5.1 U	5.1 UJ
1,2-Dichloroethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
1,2-Dichloropropane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.7 U	6.0 U	5.3 UJ	5.1 UJ	5.1 U	5.1 UJ
1,4-Dichlorobenzene	5.7 U	6.0 U	5.3 UJ	5.1 UJ	5.1 U	5.1 UJ
1,4-Dioxane	460 U	480 U	420 UJ	410 UJ	410 UJ	410 UJ
2-Butanone	23 U	24 U	21 U	21 U	20 U	20 U
2-Hexanone	23 U	24 U	21 U	21 U	20 U	20 U
4-Methyl-2-Pentanone	23 U	24 U	21 U	21 U	20 U	20 U
Acetone	23 U	24 U	21 U	21 U	20 U	20 U
Benzene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Bromochloromethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Bromodichloromethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Bromoform	5.7 U	6.0 U	5.3 UJ	5.1 UJ	5.1 U	5.1 UJ
Bromomethane	11 U	12 U	11 U	10 U	10 U	10 U

Table 3.2-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	100-05-Z1 3-5 ft 06/13/2007	100-05-Z2 9-11 ft 06/13/2007	100-07-Z1 2-3 ft 06/07/2007	100-07-Z2 8-9 ft 06/07/2007	100-08-Z1 6-7 ft 06/07/2007	100-08-Z2 13-14 ft 06/07/2007
Carbon disulfide	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	**2.4 J**
Carbon tetrachloride	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Chlorobenzene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Chloroethane	11 U	12 U	11 U	10 U	10 U	10 U
Chloroform	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Chloromethane	11 U	12 U	11 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Cyclohexane	11 U	12 U	11 U	10 U	10 U	10 U
Dibromochloromethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Dichlorodifluoromethane	11 U	12 U	11 U	10 U	10 U	10 U
Ethylbenzene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
FREON 113	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Isopropylbenzene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Methyl acetate	11 U	12 U	11 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Methylcyclohexane	11 U	12 U	11 U	10 U	10 U	10 U
Methylene chloride	11 U	12 U	11 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
o-Xylene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Styrene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Tetrachloroethene	**4700 J**	6.0 U	**40**	5.1 U	5.1 U	5.1 U
Toluene	5.7 U	6.0 U	5.3 U	5.1 UJ	5.1 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Trichloroethene	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Trichlorofluoromethane	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U
Vinyl chloride	5.7 U	6.0 U	5.3 U	5.1 U	5.1 U	5.1 U

Table 3.2-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	100-09-Z1 4-5 ft 06/07/2007	100-09-Z2 15-16 ft 06/07/2007	100-10-Z1[4] 4-5 ft 06/08/2007	100-10-Z2[4] 13-14 ft 06/08/2007	100-11-Z1 3-4 ft 06/07/2007	100-11-Z2 8-9 ft 06/07/2007
6010B (mg/kg)						
Nickel	**3.5 J**	**1.7 J**	**12.0**	**2.2 J**	**50.3**	**270**
8260B (µg/kg)						
1,1,1-Trichloroethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,1,2,2-Tetrachloroethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,1,2-Trichloroethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,1-Dichloroethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U
1,1-Dichloroethene	5.1 U	5.2 U	5.5 UJ	5.1 UJ	5.4 U	5.3 U
1,2,3-Trichlorobenzene	5.1 U	5.2 UJ	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,2,4-Trichlorobenzene	5.1 U	5.2 UJ	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,2-Dibromo-3-chloropropane	10 U	10 UJ	11 U	10 U	11 UJ	11 UJ
1,2-Dibromoethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,2-Dichlorobenzene	5.1 U	5.2 UJ	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,2-Dichloroethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U
1,2-Dichloropropane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,3-Dichlorobenzene	5.1 U	5.2 UJ	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,4-Dichlorobenzene	5.1 U	5.2 UJ	5.5 U	5.1 U	5.4 UJ	5.3 UJ
1,4-Dioxane	410 UJ	410 U	440 U	410 U	430 UJ	420 UJ
2-Butanone	20 U	21 U	22 U	20 U	22 U	21 U
2-Hexanone	20 U	21 U	22 U	20 U	22 UJ	21 UJ
4-Methyl-2-Pentanone	20 U	21 U	22 U	20 U	22 UJ	21 UJ
Acetone	20 U	**6.5 J**	22 U	20 U	22 UJ	21 UJ
Benzene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Bromochloromethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U
Bromodichloromethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Bromoform	5.1 U	5.2 UJ	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Bromomethane	10 U	10 U	11 U	10 U	11 U	11 U

Table 3.2-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	100-09-Z1 4-5 ft 06/07/2007	100-09-Z2 15-16 ft 06/07/2007	100-10-Z1[4] 4-5 ft 06/08/2007	100-10-Z2[4] 13-14 ft 06/08/2007	100-11-Z1 3-4 ft 06/07/2007	100-11-Z2 8-9 ft 06/07/2007
Carbon disulfide	5.1 U	5.2 U	5.5 UJ	5.1 UJ	5.4 U	5.3 U
Carbon tetrachloride	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Chlorobenzene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Chloroethane	10 U	10 U	11 U	10 U	11 U	11 U
Chloroform	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U
Chloromethane	10 U	10 U	11 U	10 U	11 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U
cis-1,3-Dichloropropene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Cyclohexane	10 U	10 U	11 U	10 U	11 UJ	11 UJ
Dibromochloromethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Dichlorodifluoromethane	10 U	10 U	11 U	10 U	11 U	11 U
Ethylbenzene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
FREON 113	5.1 U	5.2 U	5.5 UJ	5.1 UJ	5.4 U	5.3 U
Isopropylbenzene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Methyl acetate	10 U	10 U	11 U	10 U	11 U	11 U
Methyl tert-butyl ether	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U
Methylcyclohexane	10 U	10 U	11 U	10 U	11 UJ	11 UJ
Methylene chloride	10 U	10 U	11 U	10 U	11 U	11 U
m-Xylene & p-Xylene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
o-Xylene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Styrene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Tetrachloroethene	**2.6 J**	**0.80 J**	**140**	**0.77 J**	**630 J**	**110 J**
Toluene	5.1 UJ	**0.54 J**	5.5 UJ	5.1 UJ	5.4 UJ	**0.43 J**
trans-1,2-Dichloroethene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U
trans-1,3-Dichloropropene	5.1 U	5.2 U	5.5 U	5.1 U	5.4 UJ	5.3 UJ
Trichloroethene	5.1 U	5.2 U	**2.1 J**	5.1 U	**6.5 J**	**1.7 J**
Trichlorofluoromethane	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U
Vinyl chloride	5.1 U	5.2 U	5.5 U	5.1 U	5.4 U	5.3 U

Table 3.2-3c Complete Nickel and VOC Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU08-01-Z1 5-8 ft 06/12/2007	SU08-01-Z2 12-14 ft 06/12/2007	SU08-03-Z1 6-8 ft 06/11/2007	SU08-03-Z2 14-16 ft 06/11/2007	SU08-04-Z1 6-8 ft 06/11/2007	SU08-04-Z2 10-12 ft 06/11/2007	SU08-05-Z1 3-7 ft 06/11/2007	SU08-05-Z2 14-16 ft 06/11/2007
6010B (mg/kg)								
Nickel	**4.4**	**3.3 J**	**4.5**	**2.2 J**	**2.9 J**	**1.7 J**	**12.7**	**2.0 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,1,2,2-Tetrachloroethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,1,2-Trichloroethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,1-Dichloroethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,1-Dichloroethene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2,3-Trichlorobenzene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2,4-Trichlorobenzene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2-Dibromo-3-chloropropane	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2-Dichlorobenzene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2-Dichloroethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2-Dichloropropane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,3-Dichlorobenzene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,4-Dichlorobenzene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
1,4-Dioxane	430 U	410 U	430 UR	410 U	410 U	410 U	420 U	410 U
2-Butanone	21 U	20 U	21 UR	21 U	20 U	21 U	21 U	21 U
2-Hexanone	21 U	20 U	21 UR	21 U	20 U	21 U	21 U	21 U
4-Methyl-2-Pentanone	21 U	20 U	21 UR	21 U	20 U	21 U	21 U	21 U
Acetone	21 U	20 U	21 UR	21 U	20 U	21 U	21 U	21 U
Benzene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Bromochloromethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Bromodichloromethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Bromoform	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Bromomethane	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U

Table 3.2-3c Complete Nickel and VOC Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU08-01-Z1 5-8 ft 06/12/2007	SU08-01-Z2 12-14 ft 06/12/2007	SU08-03-Z1 6-8 ft 06/11/2007	SU08-03-Z2 14-16 ft 06/11/2007	SU08-04-Z1 6-8 ft 06/11/2007	SU08-04-Z2 10-12 ft 06/11/2007	SU08-05-Z1 3-7 ft 06/11/2007	SU08-05-Z2 14-16 ft 06/11/2007
Carbon disulfide	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Carbon tetrachloride	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Chlorobenzene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Chloroethane	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U
Chloroform	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Chloromethane	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
cis-1,3-Dichloropropene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Cyclohexane	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Dichlorodifluoromethane	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.3 U	5.1 U	**0.82 J**	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
FREON 113	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Isopropylbenzene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Methyl acetate	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Methylcyclohexane	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U
Methylene chloride	11 U	10 U	11 UR	10 U	10 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.3 U	5.1 U	**1.3 J**	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
o-Xylene	5.3 U	5.1 U	**0.37 J**	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Styrene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Tetrachloroethene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Toluene	5.3 U	5.1 U	5.3 UJ	5.2 UJ	5.1 U	5.1 U	5.2 U	5.1 UJ
trans-1,2-Dichloroethene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
trans-1,3-Dichloropropene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Trichloroethene	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Trichlorofluoromethane	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U
Vinyl chloride	5.3 U	5.1 U	5.3 UR	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U

Table 3.2-3c Complete Nickel and VOC Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU08-06-Z1 5-7 ft 06/11/2007	SU08-06-Z2 13-15 ft 06/11/2007	SU08-07-Z1[5] 2-3 ft 06/08/2007	SU08-07-Z2[5] 14-15 ft 06/08/2007	SU08-08-Z1[6] 3-4 ft 06/08/2007	SU08-08-Z2[6] 11-12 ft 06/08/2007	SU08-09-Z1 6-7 ft 06/06/2007	SU08-09-Z2 18-19 ft 06/06/2007
6010B (mg/kg)								
Nickel	**4.8**	**4.8**	**4.9**	**2.6 J**	**7.4**	**2.6 J**	**5.0**	**3.7 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,1,2,2-Tetrachloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,1,2-Trichloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,1-Dichloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,1-Dichloroethene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,2,3-Trichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,2,4-Trichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,2-Dichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.1 UJ
1,2-Dichloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,2-Dichloropropane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,3-Dichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
1,4-Dichlorobenzene	**0.50 J**	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.1 UJ
1,4-Dioxane	420 U	420 U	410 U	410 U	410 U	410 U	410 U	410 U
2-Butanone	21 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U
2-Hexanone	21 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U
4-Methyl-2-Pentanone	21 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U
Acetone	21 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U
Benzene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Bromochloromethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Bromodichloromethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Bromoform	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 3.2-3c Complete Nickel and VOC Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

	SU08-06-Z1	SU08-06-Z2	SU08-07-Z1[5]	SU08-07-Z2[5]	SU08-08-Z1[6]	SU08-08-Z2[6]	SU08-09-Z1	SU08-09-Z2
Sample Depth:	5-7 ft	13-15 ft	2-3 ft	14-15 ft	3-4 ft	11-12 ft	6-7 ft	18-19 ft
Sample Date:	06/11/2007	06/11/2007	06/08/2007	06/08/2007	06/08/2007	06/08/2007	06/06/2007	06/06/2007
Analyte								
Carbon disulfide	5.2 U	5.2 U	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.2 U	5.1 U
Carbon tetrachloride	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Chlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
cis-1,3-Dichloropropene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
FREON 113	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Isopropylbenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
o-Xylene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Styrene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Tetrachloroethene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Toluene	5.2 UJ	5.2 UJ	5.2 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
trans-1,3-Dichloropropene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Trichloroethene	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Trichlorofluoromethane	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U
Vinyl chloride	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U

Table 3.2-3c Complete Nickel and VOC Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU08-10-Z1 6-7 ft 06/06/2007	SU08-10-Z2 11-12 ft 06/06/2007	SU08-12-Z1[6] 3-4 ft 06/08/2007	SU08-12-Z2[6] 10-11 ft 06/08/2007	SU08-13-Z1 2-3 ft 06/06/2007	SU08-13-Z2 8-9 ft 06/06/2007	SU08-15-Z1 6-7 ft 06/07/2007	SU08-15-Z2 15-16 ft 06/07/2007
Carbon disulfide	5.1 UJ	5.1 U	5.2 UJ	5.2 UJ	5.8 U	5.5 U	5.1 UJ	5.1 U
Carbon tetrachloride	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Chlorobenzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Chloroethane	10 UJ	10 U	10 U	10 U	12 U	11 U	10 UJ	10 U
Chloroform	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U
Chloromethane	10 UJ	10 U	10 U	10 U	12 U	11 U	10 UJ	10 U
cis-1,2-Dichloroethene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U
cis-1,3-Dichloropropene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Cyclohexane	10 UJ	10 U	10 U	10 U	12 UJ	11 U	10 UJ	10 UJ
Dibromochloromethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Dichlorodifluoromethane	10 UJ	10 U	10 U	10 U	12 U	11 U	10 UJ	10 U
Ethylbenzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
FREON 113	5.1 UJ	5.1 U	5.2 UJ	5.2 UJ	5.8 U	5.5 U	5.1 UJ	5.1 U
Isopropylbenzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Methyl acetate	10 UJ	10 U	10 U	10 U	12 U	11 U	10 UJ	10 U
Methyl tert-butyl ether	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U
Methylcyclohexane	10 UJ	10 U	10 U	10 U	12 UJ	11 U	10 UJ	10 UJ
Methylene chloride	10 UJ	10 U	10 U	10 U	12 U	11 U	10 UJ	10 U
m-Xylene & p-Xylene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
o-Xylene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Styrene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Tetrachloroethene	5.1 UJ	5.1 U	5.2 U	5.2 U	**24 J**	5.5 U	5.1 UJ	5.1 UJ
Toluene	5.1 UJ	5.1 U	5.2 UJ	5.2 UJ	5.8 UJ	5.5 UJ	5.1 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U
trans-1,3-Dichloropropene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Trichloroethene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Trichlorofluoromethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U
Vinyl chloride	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U

Table 3.2-3c Complete Nickel and VOC Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU08-10-Z1 6-7 ft 06/06/2007	SU08-10-Z2 11-12 ft 06/06/2007	SU08-12-Z1[6] 3-4 ft 06/08/2007	SU08-12-Z2[6] 10-11 ft 06/08/2007	SU08-13-Z1 2-3 ft 06/06/2007	SU08-13-Z2 8-9 ft 06/06/2007	SU08-15-Z1 6-7 ft 06/07/2007	SU08-15-Z2 15-16 ft 06/07/2007
6010B (mg/kg)								
Nickel	**9.5**	**2.7 J**	**7.2**	**2.0 J**	**7.0**	**8.3**	**3.0 J**	**2.1 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
1,1,2,2-Tetrachloroethane	5.1 UJ	5.1 UJ	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
1,1,2-Trichloroethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
1,1-Dichloroethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U
1,1-Dichloroethene	5.1 UJ	5.1 U	5.2 UJ	5.2 UJ	5.8 U	5.5 U	5.1 UJ	5.1 U
1,2,3-Trichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 UJ	5.1 UJ	5.1 UJ
1,2,4-Trichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 UJ	5.1 UJ	5.1 UJ
1,2-Dibromo-3-chloropropane	10 UJ	10 U	10 U	10 U	12 UJ	11 UJ	10 UJ	10 UJ
1,2-Dibromoethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
1,2-Dichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 UJ	5.1 UJ	5.1 UJ
1,2-Dichloroethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U
1,2-Dichloropropane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
1,3-Dichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 UJ	5.1 UJ	5.1 UJ
1,4-Dichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 UJ	5.1 UJ	5.1 UJ
1,4-Dioxane	410 UJ	410 U	420 U	410 U	460 U	440 U	410 UJ	410 U
2-Butanone	20 UJ	21 U	21 U	21 U	23 U	22 U	21 UJ	21 U
2-Hexanone	20 UJ	21 U	21 U	21 U	23 UJ	22 U	21 UJ	21 UJ
4-Methyl-2-Pentanone	20 UJ	21 U	21 U	21 U	23 UJ	22 U	21 UJ	21 UJ
Acetone	20 UJ	21 U	21 U	21 U	23 U	**4.8 J**	21 UJ	21 U
Benzene	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Bromochloromethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 U	5.5 U	5.1 UJ	5.1 U
Bromodichloromethane	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 U	5.1 UJ	5.1 UJ
Bromoform	5.1 UJ	5.1 U	5.2 U	5.2 U	5.8 UJ	5.5 UJ	5.1 UJ	5.1 UJ
Bromomethane	10 UJ	10 U	10 U	10 U	12 U	11 U	10 UJ	10 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-01-Z1 4-5.5 ft 05/23/2007	SU09-01-Z2 12-13.5 ft 05/23/2007	SU09-01-Z3 20-21.5 ft 05/23/2007	SU09-02-Z1[7] 4-5 ft 05/16/2007	SU09-02-Z2 12-13.5 ft 05/16/2007	SU09-03-Z1 4-5 ft 05/16/2007	SU09-03-Z2[7] 10.5-12 ft 05/16/2007	SU09-04-Z1 2-4 ft 05/15/2007	SU09-04-Z2 13-15 ft 05/15/2007
6010B (mg/kg)									
Nickel	**4.3**	**3.6 J**	**2.5 J**	**4.2**	**1.9 J**	**4.4**	**10.7**	**4.3**	**7.7**
8260B (µg/kg)									
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	**0.85 J**	5.1 UJ	**13 J**	5.2 U	5.2 U	5.7 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	**2.2 J**	5.2 U	5.2 U	5.7 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	11 UJ	10 UJ	10 UJ	10 U	10 U	11 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
1,2-Dichlorobenzene	**0.21 J**	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 UJ	5.2 U	5.2 U	5.7 U
1,3-Dichlorobenzene	**0.27 J**	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
1,4-Dioxane	410 U	410 U	410 U	430 UJ	410 U	400 U	410 U	410 U	460 U
2-Butanone	20 U	20 U	21 U	22 UJ	20 U	**9.1 J**	21 U	21 U	23 U
2-Hexanone	20 U	20 U	21 U	22 UJ	20 UJ	20 UJ	21 U	21 U	23 U
4-Methyl-2-Pentanone	20 U	20 U	21 U	22 UJ	20 UJ	20 UJ	21 U	21 U	23 U
Acetone	20 U	20 U	21 U	22 UJ	20 U	**58 J+**	21 U	21 U	23 U
Benzene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Bromoform	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Bromomethane	10 U	10 U	10 U	11 UJ	10 U	10 U	10 U	10 U	11 U
Carbon disulfide	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	**1.8 J**	5.2 U	5.2 U	5.7 U
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-01-Z1 4-5.5 ft 05/23/2007	SU09-01-Z2 12-13.5 ft 05/23/2007	SU09-01-Z3 20-21.5 ft 05/23/2007	SU09-02-Z1[7] 4-5 ft 05/16/2007	SU09-02-Z2 12-13.5 ft 05/16/2007	SU09-03-Z1 4-5 ft 05/16/2007	SU09-03-Z2[7] 10.5-12 ft 05/16/2007	SU09-04-Z1 2-4 ft 05/15/2007	SU09-04-Z2 13-15 ft 05/15/2007
Chlorobenzene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Chloroethane	10 U	10 U	10 U	11 UJ	10 U	10 U	10 U	10 U	11 U
Chloroform	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
Chloromethane	10 U	10 U	10 U	11 UJ	10 U	10 U	10 U	10 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	**8.2 J+**	5.2 U	5.2 U	5.7 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Cyclohexane	10 U	10 U	10 U	11 UJ	10 UJ	10 UJ	10 U	10 U	11 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Dichlorodifluoromethane	10 U	10 U	10 U	11 UJ	10 U	10 U	10 U	10 U	11 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
FREON 113	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Methyl acetate	10 U	10 U	10 U	11 UJ	10 U	10 U	10 U	10 U	11 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
Methylcyclohexane	10 U	10 U	10 U	11 UJ	10 UJ	10 UJ	10 U	10 U	11 U
Methylene chloride	10 U	10 U	10 U	11 UJ	5.1 U	5.0 U	10 U	5.2 U	5.7 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
o-Xylene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Styrene	5.1 U	**1.9 J**	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Tetrachloroethene	5.1 U	5.1 U	5.1 U	**26 J-**	5.1 UJ	**4600 J-**	**1.0 J**	5.2 U	**1.3 J**
Toluene	5.1 UJ	5.1 UJ	5.1 UJ	5.4 UJ	5.1 UJ	5.0 UJ	5.2 UJ	5.2 UJ	5.7 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.0 UJ	5.2 U	5.2 U	5.7 U
Trichloroethene	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 UJ	**5.6 J**	5.2 U	5.2 U	5.7 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	**0.84 J**	5.2 U	5.7 U
Vinyl chloride	5.1 U	5.1 U	5.1 U	5.4 UJ	5.1 U	5.0 U	5.2 U	5.2 U	5.7 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-05-Z1 1-3 ft 05/15/2007	SU09-05-Z2 9-11 ft 05/15/2007	SU09-06-Z1 2.5-3.5 ft 05/21/2007	SU09-06-Z2 14-15.5 ft 05/21/2007	SU09-06-Z3 17-18.5 ft 05/21/2007	SU09-07-Z1 7-9 ft 05/15/2007	SU09-07-Z2 14-15 ft 05/15/2007	SU09-08/D-Z1 5-6 ft 05/15/2007
6010B (mg/kg)								
Nickel	**11.5**	**8.4**	**9.4**	**3.0 J**	**1.2 J**	**2.7 J**	**1.5 J**	**7.0**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
1,1,2,2-Tetrachloroethane	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
1,1,2-Trichloroethane	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 U	5.1 U	5.1 U	5.7 U
1,1-Dichloroethane	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
1,1-Dichloroethene	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
1,2,3-Trichlorobenzene	5.8 UJ	5.7 UJ	5.1 UJ	5.1 U	5.2 UJ	5.1 UJ	5.1 U	5.7 U
1,2,4-Trichlorobenzene	5.8 UJ	5.7 UJ	5.1 UJ	5.1 U	5.2 UJ	5.1 UJ	5.1 U	5.7 U
1,2-Dibromo-3-chloropropane	12 UJ	11 UJ	10 UJ	10 U	10 UJ	10 UJ	10 U	11 U
1,2-Dibromoethane	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
1,2-Dichlorobenzene	5.8 UJ	5.7 UJ	5.1 UJ	5.1 U	5.2 UJ	5.1 UJ	5.1 U	5.7 U
1,2-Dichloroethane	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
1,2-Dichloropropane	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
1,3-Dichlorobenzene	5.8 UJ	5.7 UJ	5.1 UJ	5.1 U	5.2 UJ	5.1 UJ	5.1 U	5.7 U
1,4-Dichlorobenzene	5.8 UJ	5.7 UJ	5.1 UJ	5.1 U	5.2 UJ	5.1 UJ	5.1 U	5.7 U
1,4-Dioxane	460 U	460 U	410 U	400 U	420 UJ	410 U	410 U	450 U
2-Butanone	23 U	23 U	20 U	20 U	21 UJ	**3.2 J**	21 U	23 U
2-Hexanone	23 U	23 U	20 UJ	20 U	21 UJ	21 U	21 U	23 U
4-Methyl-2-Pentanone	23 U	23 U	20 UJ	20 U	21 UJ	21 U	21 U	23 U
Acetone	23 U	23 U	20 U	20 U	21 UJ	21 U	21 U	23 U
Benzene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Bromochloromethane	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Bromodichloromethane	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Bromoform	5.8 UJ	5.7 UJ	5.1 U	5.1 U	5.2 UJ	5.1 UJ	5.1 U	5.7 U
Bromomethane	12 U	11 U	10 U	10 U	10 UJ	10 U	10 U	11 U
Carbon disulfide	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Carbon tetrachloride	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-05-Z1 1-3 ft 05/15/2007	SU09-05-Z2 9-11 ft 05/15/2007	SU09-06-Z1 2.5-3.5 ft 05/21/2007	SU09-06-Z2 14-15.5 ft 05/21/2007	SU09-06-Z3 17-18.5 ft 05/21/2007	SU09-07-Z1 7-9 ft 05/15/2007	SU09-07-Z2 14-15 ft 05/15/2007	SU09-08/D-Z1 5-6 ft 05/15/2007
Chlorobenzene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Chloroethane	12 U	11 U	10 U	10 U	10 UJ	10 U	10 U	11 U
Chloroform	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Chloromethane	12 U	11 U	10 U	10 U	10 UJ	10 U	10 U	11 U
cis-1,2-Dichloroethene	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
cis-1,3-Dichloropropene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Cyclohexane	12 U	11 U	10 UJ	10 U	10 U	10 U	10 U	11 U
Dibromochloromethane	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 U	5.1 U	5.1 U	5.7 U
Dichlorodifluoromethane	12 U	11 U	10 U	10 U	10 UJ	10 U	10 U	11 U
Ethylbenzene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
FREON 113	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Isopropylbenzene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Methyl acetate	12 U	11 U	10 U	10 U	10 UJ	10 U	10 U	11 U
Methyl tert-butyl ether	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Methylcyclohexane	12 U	11 U	10 UJ	10 U	10 UJ	10 U	10 U	11 U
Methylene chloride	5.8 U	5.7 U	10 U	10 U	42 UJ	5.1 U	5.1 U	5.7 U
m-Xylene & p-Xylene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
o-Xylene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Styrene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Tetrachloroethene	**7.4 J+**	**0.55 J**	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Toluene	5.8 UJ	5.7 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.1 UJ	5.7 UJ
trans-1,2-Dichloroethene	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
trans-1,3-Dichloropropene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Trichloroethene	5.8 U	5.7 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Trichlorofluoromethane	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U
Vinyl chloride	5.8 U	5.7 U	5.1 U	5.1 U	5.2 UJ	5.1 U	5.1 U	5.7 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU09-08/D-Z1A 10.5-12 ft 05/16/2007	SU09-08/D-Z2 17-18.5 ft 05/15/2007	SU09-08/D-Z3 26-27 ft 05/15/2007	SU09-08/D-Z4 36.5-37 ft 05/15/2007	SU09-08/D-Z5 46-47.5 ft 05/15/2007	SU09-08/D-Z6 50-52 ft 05/15/2007	SU09-09-Z1 4-5 ft 05/16/2007	SU09-09-Z2 12-13 ft 05/16/2007
6010B (mg/kg)								
Nickel	**1.5 J**	**1.6 J**	**1.4 J**	**4.8**	**1.3 J**	4 U	**1.9 J**	**2.0 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
1,1,2,2-Tetrachloroethane	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
1,1,2-Trichloroethane	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
1,1-Dichloroethane	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
1,1-Dichloroethene	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
1,2,3-Trichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 UJ	5.1 U	5.1 UJ	5.2 UJ
1,2,4-Trichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 UJ	5.1 U	5.1 UJ	5.2 UJ
1,2-Dibromo-3-chloropropane	10 UJ	10 U	10 U	10 U	11 UJ	10 U	10 UJ	10 UJ
1,2-Dibromoethane	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
1,2-Dichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 UJ	5.1 U	5.1 UJ	5.2 UJ
1,2-Dichloroethane	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
1,2-Dichloropropane	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
1,3-Dichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 UJ	5.1 U	5.1 UJ	5.2 UJ
1,4-Dichlorobenzene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 UJ	5.1 U	5.1 UJ	5.2 UJ
1,4-Dioxane	410 U	410 U	420 U	410 U	450 U	410 U	410 UJ	410 UJ
2-Butanone	21 U	21 U	21 U	21 U	23 U	21 U	20 UJ	21 UJ
2-Hexanone	21 UJ	21 U	21 U	21 U	23 U	21 U	20 UJ	21 UJ
4-Methyl-2-Pentanone	21 UJ	21 U	21 U	21 U	23 U	21 U	20 UJ	21 UJ
Acetone	21 U	21 U	21 U	21 U	23 U	21 U	20 UJ	21 UJ
Benzene	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Bromochloromethane	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Bromodichloromethane	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Bromoform	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 UJ	5.1 U	5.1 UJ	5.2 UJ
Bromomethane	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ	10 UJ
Carbon disulfide	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Carbon tetrachloride	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-08/D-Z1A 10.5-12 ft 05/16/2007	SU09-08/D-Z2 17-18.5 ft 05/15/2007	SU09-08/D-Z3 26-27 ft 05/15/2007	SU09-08/D-Z4 36.5-37 ft 05/15/2007	SU09-08/D-Z5 46-47.5 ft 05/15/2007	SU09-08/D-Z6 50-52 ft 05/15/2007	SU09-09-Z1 4-5 ft 05/16/2007	SU09-09-Z2 12-13 ft 05/16/2007
Chlorobenzene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Chloroethane	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ	10 UJ
Chloroform	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Chloromethane	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ	10 UJ
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
cis-1,3-Dichloropropene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Cyclohexane	10 UJ	10 U	10 U	10 U	11 U	10 U	10 UJ	10 UJ
Dibromochloromethane	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ	10 UJ
Ethylbenzene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
FREON 113	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Isopropylbenzene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Methyl acetate	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ	10 UJ
Methyl tert-butyl ether	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Methylcyclohexane	10 UJ	10 U	10 U	10 U	11 U	10 U	10 UJ	10 UJ
Methylene chloride	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
m-Xylene & p-Xylene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
o-Xylene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Styrene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Tetrachloroethene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Toluene	5.1 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.6 UJ	5.1 UJ	5.1 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
trans-1,3-Dichloropropene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Trichloroethene	5.1 UJ	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Trichlorofluoromethane	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ
Vinyl chloride	5.1 U	5.1 U	5.2 U	5.1 U	5.6 U	5.1 U	5.1 UJ	5.2 UJ

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-10-Z1 1-2 ft 05/17/2007	SU09-10-Z2 14-15 ft 05/17/2007	SU09-10-Z3 20-21 ft 05/17/2007	SU09-10-Z4 28-29 ft 05/17/2007	SU09-10-Z5 36-37 ft 05/17/2007	SU09-10-Z6 44-45 ft 05/17/2007	SU09-10-Z7 52-53.5 ft 05/17/2007	SU09-11-Z1 2-3 ft 05/17/2007	SU09-11-Z2 12-13 ft 05/17/2007
6010B (mg/kg)									
Nickel	**5.6**	**1.5 J**	**1.0 J**	**2.4 J**	**3.5 J**	4 U	**1.2 J**	**6.4**	**2.0 J**
8260B (µg/kg)									
1,1,1-Trichloroethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
1,1,2,2-Tetrachloroethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
1,1,2-Trichloroethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
1,1-Dichloroethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
1,1-Dichloroethene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
1,2,3-Trichlorobenzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.2 U	5.2 U
1,2,4-Trichlorobenzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.2 U	5.2 U
1,2-Dibromo-3-chloropropane	11 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U
1,2-Dibromoethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
1,2-Dichlorobenzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.2 U	5.2 U
1,2-Dichloroethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
1,2-Dichloropropane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
1,3-Dichlorobenzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.2 U	5.2 U
1,4-Dichlorobenzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.2 U	5.2 U
1,4-Dioxane	420 U	410 U	410 U	410 U	420 U	420 U	420 U	420 U	410 U
2-Butanone	21 U	21 U	20 U	21 U	21 U	21 U	**12 J**	21 U	21 U
2-Hexanone	21 U	21 U	20 U	21 U	21 U	21 U	21 U	21 U	21 U
4-Methyl-2-Pentanone	21 U	21 U	20 U	21 U	21 U	21 U	21 U	21 U	21 U
Acetone	21 U	21 U	20 U	21 U	21 U	21 U	21 U	21 U	21 U
Benzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Bromochloromethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Bromodichloromethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Bromoform	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 UJ	5.2 U	5.2 U
Bromomethane	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Carbon tetrachloride	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-10-Z1 1-2 ft 05/17/2007	SU09-10-Z2 14-15 ft 05/17/2007	SU09-10-Z3 20-21 ft 05/17/2007	SU09-10-Z4 28-29 ft 05/17/2007	SU09-10-Z5 36-37 ft 05/17/2007	SU09-10-Z6 44-45 ft 05/17/2007	SU09-10-Z7 52-53.5 ft 05/17/2007	SU09-11-Z1 2-3 ft 05/17/2007	SU09-11-Z2 12-13 ft 05/17/2007
Chlorobenzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Chloroethane	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Chloromethane	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
cis-1,3-Dichloropropene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Cyclohexane	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Dichlorodifluoromethane	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
FREON 113	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Isopropylbenzene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Methyl acetate	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Methylcyclohexane	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5.3 U	5.1 U	5.1 U	5.2 U	**4.7 J**	**4.2 J**	**2.7 J**	**3.7 J**	**3.6 J**
m-Xylene & p-Xylene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
o-Xylene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Styrene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Tetrachloroethene	**1.0 J**	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Toluene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
trans-1,2-Dichloroethene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
trans-1,3-Dichloropropene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Trichloroethene	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Trichlorofluoromethane	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Vinyl chloride	5.3 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-12-Z1 1.5-2.5 ft 05/21/2007	SU09-12-Z2 12-13 ft 05/21/2007	SU09-13-Z1 4-5 ft 05/16/2007	SU09-13-Z2[7] 13-14.5 ft 05/16/2007	SU09-14-Z1 3-5 ft 05/15/2007	SU09-14-Z2 13-15 ft 05/15/2007	SU13-01-Z1 6-7.5 ft 05/21/2007	SU13-01-Z2 9-10.5 ft 05/21/2007
6010B (mg/kg)								
Nickel	**10.2**	**1.1 J**	**4.3**	**1.8 J**	**3.2 J**	**1.9 J**	**5.4**	**5.6**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,1,2,2-Tetrachloroethane	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,1,2-Trichloroethane	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,1-Dichloroethane	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
1,1-Dichloroethene	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
1,2,3-Trichlorobenzene	5.5 UJ	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,2,4-Trichlorobenzene	5.5 UJ	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,2-Dibromo-3-chloropropane	11 UJ	10 UJ	11 UJ	11 U	10 U	10 U	11 UJ	10 UJ
1,2-Dibromoethane	5.5 U	5.2 UJ	5.4 U	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,2-Dichlorobenzene	5.5 UJ	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,2-Dichloroethane	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
1,2-Dichloropropane	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,3-Dichlorobenzene	5.5 UJ	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,4-Dichlorobenzene	5.5 UJ	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
1,4-Dioxane	440 U	410 U	430 U	420 U	410 U	410 U	430 U	410 U
2-Butanone	22 U	21 U	22 U	21 U	21 U	21 U	22 U	20 U
2-Hexanone	22 U	21 UJ	22 UJ	21 U	21 U	21 U	22 UJ	20 UJ
4-Methyl-2-Pentanone	22 U	21 UJ	22 UJ	21 U	21 U	21 U	22 UJ	20 UJ
Acetone	22 U	21 U	22 U	21 U	21 U	21 U	22 U	20 U
Benzene	5.5 U	5.2 UJ	5.4 U	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Bromochloromethane	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
Bromodichloromethane	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Bromoform	5.5 UJ	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Bromomethane	11 U	10 U	11 U	11 U	10 U	10 U	11 U	10 U
Carbon disulfide	5.5 U	5.2 U	5.4 U	**2.9 J**	5.2 U	5.1 U	5.4 U	5.1 U
Carbon tetrachloride	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU09-12-Z1 1.5-2.5 ft 05/21/2007	SU09-12-Z2 12-13 ft 05/21/2007	SU09-13-Z1 4-5 ft 05/16/2007	SU09-13-Z2[7] 13-14.5 ft 05/16/2007	SU09-14-Z1 3-5 ft 05/15/2007	SU09-14-Z2 13-15 ft 05/15/2007	SU13-01-Z1 6-7.5 ft 05/21/2007	SU13-01-Z2 9-10.5 ft 05/21/2007
Chlorobenzene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Chloroethane	11 U	10 U	11 U	11 U	10 U	10 U	11 U	10 U
Chloroform	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
Chloromethane	11 U	10 U	11 U	11 U	10 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
cis-1,3-Dichloropropene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Cyclohexane	11 U	10 UJ	11 UJ	11 U	10 U	10 U	11 UJ	10 UJ
Dibromochloromethane	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Dichlorodifluoromethane	11 U	10 U	11 U	11 U	10 U	10 U	11 U	10 U
Ethylbenzene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 U	5.1 UJ
FREON 113	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Isopropylbenzene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Methyl acetate	11 U	10 U	11 U	11 U	10 U	10 U	11 U	**3.0 J**
Methyl tert-butyl ether	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
Methylcyclohexane	11 U	10 UJ	11 UJ	11 U	10 U	10 U	11 UJ	10 UJ
Methylene chloride	11 U	10 U	5.4 U	11 U	5.2 U	5.1 U	11 U	10 U
m-Xylene & p-Xylene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
o-Xylene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Styrene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Tetrachloroethene	**1.5 J**	5.2 UJ	5.4 UJ	5.3 U	**0.60 J**	5.1 U	5.4 UJ	5.1 UJ
Toluene	5.5 UJ	5.2 UJ	5.4 UJ	5.3 U	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
trans-1,3-Dichloropropene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Trichloroethene	5.5 U	5.2 UJ	5.4 UJ	5.3 U	5.2 U	5.1 U	5.4 UJ	5.1 UJ
Trichlorofluoromethane	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U
Vinyl chloride	5.5 U	5.2 U	5.4 U	5.3 U	5.2 U	5.1 U	5.4 U	5.1 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU13-02-Z1 6-7.5 ft 05/21/2007	SU13-02-Z2 13-14.5 ft 05/21/2007	SU13-03-Z1 2-3 ft 05/21/2007	SU13-03-Z2 13-14 ft 05/21/2007	SU13-04-Z1 6-7 ft 05/22/2007	SU13-04-Z2 8.5-9.5 ft 05/22/2007	SU13-05-Z1 2-3 ft 05/22/2007	SU13-05-Z2 12-13.5 ft 05/22/2007
6010B (mg/kg)								
Nickel	**1.4 J**	**1.5 J**	**5.9**	**2.4 J**	**5.6**	**8.4**	**9.0**	**9.2**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
1,1,2,2-Tetrachloroethane	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.3 UJ	5.3 UJ
1,1,2-Trichloroethane	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
1,1-Dichloroethane	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
1,1-Dichloroethene	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
1,2,3-Trichlorobenzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 UJ	5.3 UJ
1,2,4-Trichlorobenzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 UJ	5.3 UJ
1,2-Dibromo-3-chloropropane	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	11 UJ	11 UJ
1,2-Dibromoethane	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
1,2-Dichlorobenzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 UJ	5.3 U
1,2-Dichloroethane	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 UJ
1,2-Dichloropropane	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
1,3-Dichlorobenzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 UJ	5.3 UJ
1,4-Dichlorobenzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 UJ	5.3 UJ
1,4-Dioxane	410 U	420 U	420 U	410 U	420 U	410 U	420 U	420 U
2-Butanone	20 U	21 U	21 U	21 U	21 U	20 U	21 U	21 U
2-Hexanone	20 UJ	21 UJ	21 UJ	21 UJ	21 U	20 U	21 U	21 U
4-Methyl-2-Pentanone	20 UJ	21 UJ	21 UJ	21 UJ	21 U	20 U	21 U	21 U
Acetone	20 U	21 UJ	21 U	21 U	21 U	20 U	21 U	21 U
Benzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Bromochloromethane	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
Bromodichloromethane	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Bromoform	5.1 UJ	5.2 UJ	5.2 U	5.1 UJ	5.2 U	5.1 U	5.3 UJ	5.3 UJ
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Carbon disulfide	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
Carbon tetrachloride	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU13-02-Z1 6-7.5 ft 05/21/2007	SU13-02-Z2 13-14.5 ft 05/21/2007	SU13-03-Z1 2-3 ft 05/21/2007	SU13-03-Z2 13-14 ft 05/21/2007	SU13-04-Z1 6-7 ft 05/22/2007	SU13-04-Z2 8.5-9.5 ft 05/22/2007	SU13-05-Z1 2-3 ft 05/22/2007	SU13-05-Z2 12-13.5 ft 05/22/2007
Chlorobenzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Chloroform	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
cis-1,3-Dichloropropene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Cyclohexane	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	11 U	11 U
Dibromochloromethane	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Ethylbenzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
FREON 113	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
Isopropylbenzene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Methyl acetate	**3.4 J**	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Methyl tert-butyl ether	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
Methylcyclohexane	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	11 U	11 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U
m-Xylene & p-Xylene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
o-Xylene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Styrene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Tetrachloroethene	5.1 UJ	5.2 UJ	**6.0 J**	5.1 UJ	5.2 U	**1.7 J**	5.3 U	**3.5 J**
Toluene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.3 UJ	5.3 UJ
trans-1,2-Dichloroethene	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
trans-1,3-Dichloropropene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Trichloroethene	5.1 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 U	5.1 U	5.3 U	5.3 U
Trichlorofluoromethane	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U
Vinyl chloride	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU13-06-Z1 4-5 ft 05/22/2007	SU13-06-Z2 8-9 ft 05/22/2007	SU13-08-Z1 4.5-5.5 ft 05/22/2007	SU13-08-Z2 13-14 ft 05/22/2007	SU13-09-Z1 5-6 ft 05/22/2007	SU13-09-Z2 8-9 ft 05/22/2007	SU13-10-Z1 1.5-2.5 ft 05/22/2007	SU13-10-Z2 12.5-13.5 ft 05/22/2007
6010B (mg/kg)								
Nickel	**6.8**	**9.8**	**7.4**	**3.0 J**	**6.8**	**4.9**	**11.1**	**2.7 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
1,1,2,2-Tetrachloroethane	5.3 UJ	5.1 UJ	5.5 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
1,1,2-Trichloroethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
1,1-Dichloroethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
1,1-Dichloroethene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
1,2,3-Trichlorobenzene	5.3 U	5.1 UJ	5.5 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
1,2,4-Trichlorobenzene	5.3 U	5.1 UJ	5.5 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
1,2-Dibromo-3-chloropropane	11 U	10 UJ	11 UJ	10 UJ	10 UJ	10 UJ	11 UJ	10 UJ
1,2-Dibromoethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
1,2-Dichlorobenzene	5.3 U	5.1 UJ	5.5 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
1,2-Dichloroethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
1,2-Dichloropropane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
1,3-Dichlorobenzene	5.3 U	5.1 UJ	5.5 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
1,4-Dichlorobenzene	5.3 U	5.1 UJ	5.5 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
1,4-Dioxane	420 U	410 U	440 U	410 U	420 U	410 U	430 U	410 U
2-Butanone	21 U	20 U	22 U	21 U	21 U	20 U	22 U	20 U
2-Hexanone	21 U	20 U	22 U	21 U	21 U	20 U	22 UJ	20 U
4-Methyl-2-Pentanone	21 U	20 U	22 U	21 U	21 U	20 U	22 UJ	20 U
Acetone	21 U	20 U	22 U	21 U	21 U	20 U	22 U	20 U
Benzene	5.3 U	5.1 UJ	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Bromochloromethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
Bromodichloromethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Bromoform	5.3 U	5.1 U	5.5 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
Bromomethane	11 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U
Carbon disulfide	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
Carbon tetrachloride	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU13-06-Z1 4-5 ft 05/22/2007	SU13-06-Z2 8-9 ft 05/22/2007	SU13-08-Z1 4.5-5.5 ft 05/22/2007	SU13-08-Z2 13-14 ft 05/22/2007	SU13-09-Z1 5-6 ft 05/22/2007	SU13-09-Z2 8-9 ft 05/22/2007	SU13-10-Z1 1.5-2.5 ft 05/22/2007	SU13-10-Z2 12.5-13.5 ft 05/22/2007
Chlorobenzene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Chloroethane	11 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U
Chloroform	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
Chloromethane	11 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
cis-1,3-Dichloropropene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Cyclohexane	11 U	10 U	11 U	10 U	10 U	10 U	11 UJ	10 U
Dibromochloromethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Dichlorodifluoromethane	11 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U
Ethylbenzene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
FREON 113	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
Isopropylbenzene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Methyl acetate	11 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U
Methyl tert-butyl ether	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
Methylcyclohexane	11 U	10 U	11 U	10 U	10 U	10 U	11 UJ	10 U
Methylene chloride	11 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U
m-Xylene & p-Xylene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
o-Xylene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Styrene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Tetrachloroethene	5.3 U	5.1 U	5.5 U	5.1 U	**2.1 J**	5.1 U	**1.2 J**	5.1 U
Toluene	5.3 UJ	5.1 UJ	5.5 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.4 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
trans-1,3-Dichloropropene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U
Trichloroethene	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Trichlorofluoromethane	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 UJ	5.1 U
Vinyl chloride	5.3 U	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.4 U	5.1 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU13-11-Z1 0-8 ft 05/21/2007	SU13-11-Z2 8-16 ft 05/21/2007	SU13-12-Z1 0-8 ft 05/21/2007	SU13-12-Z2 8-16 ft 05/21/2007	SU13-13-Z1 0-8 ft 05/21/2007	SU13-13-Z2 8-16 ft 05/21/2007	SU13-14-Z1 0-8 ft 05/21/2007	SU13-14-Z2 8-16 ft 05/21/2007
6010B (mg/kg)								
Nickel	**8.1**	**2.5 J**	**5.0**	**3.2 J**	**7.6**	**1.8 J**	**6.8**	**1.6 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
1,1,2,2-Tetrachloroethane	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
1,1,2-Trichloroethane	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
1,1-Dichloroethane	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
1,1-Dichloroethene	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
1,2,3-Trichlorobenzene	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 U	5.1 U
1,2,4-Trichlorobenzene	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 U	5.1 U
1,2-Dibromo-3-chloropropane	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U
1,2-Dibromoethane	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
1,2-Dichlorobenzene	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 U	5.1 U
1,2-Dichloroethane	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
1,2-Dichloropropane	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
1,3-Dichlorobenzene	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 U	5.1 U
1,4-Dichlorobenzene	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 U	5.1 U
1,4-Dioxane	420 U	410 U	410 U	410 U	410 U	410 U	410 U	410 U
2-Butanone	21 U	21 U	20 UJ	20 U	21 U	21 U	21 U	**2.0 J**
2-Hexanone	21 UJ	21 U	20 UJ	20 U	21 U	21 U	21 U	20 U
4-Methyl-2-Pentanone	21 UJ	21 U	20 U	20 U	21 U	21 U	21 U	20 U
Acetone	21 U	21 U	20 UJ	20 UJ	21 U	21 U	21 U	20 U
Benzene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Bromochloromethane	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Bromodichloromethane	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Bromoform	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 U	5.1 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Carbon tetrachloride	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU13-11-Z1 0-8 ft 05/21/2007	SU13-11-Z2 8-16 ft 05/21/2007	SU13-12-Z1 0-8 ft 05/21/2007	SU13-12-Z2 8-16 ft 05/21/2007	SU13-13-Z1 0-8 ft 05/21/2007	SU13-13-Z2 8-16 ft 05/21/2007	SU13-14-Z1 0-8 ft 05/21/2007	SU13-14-Z2 8-16 ft 05/21/2007
Chlorobenzene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Chloroethane	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Chloroform	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
cis-1,3-Dichloropropene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Cyclohexane	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
FREON 113	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Isopropylbenzene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Methylcyclohexane	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
o-Xylene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Styrene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Tetrachloroethene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Toluene	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.2 UJ	5.2 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
trans-1,3-Dichloropropene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Trichloroethene	5.2 UJ	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Trichlorofluoromethane	5.2 U	5.1 U	5.1 UJ	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U
Vinyl chloride	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU13-15-Z1 0-8 ft 05/21/2007	SU13-15-Z2 8-16 ft 05/21/2007	SU14-01-Z1 3-4 ft 05/23/2007	SU14-01-Z2 13.5-14.5 ft 05/23/2007	SU14-02-Z1 1.5-2.5 ft 05/23/2007	SU14-02-Z2 12-13 ft 05/23/2007	SU14-04-Z1 5-7 ft 05/24/2007	SU14-04-Z2 9-11 ft 05/24/2007
6010B (mg/kg)								
Nickel	**7.7**	**4.7**	**8.6**	**3.2 J**	**10.2**	**2.6 J**	**2.5 J**	**4.2**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
1,1,2,2-Tetrachloroethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
1,1,2-Trichloroethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
1,1-Dichloroethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
1,1-Dichloroethene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
1,2,3-Trichlorobenzene	5.5 UJ	5.1 UJ	7.0 U	5.1 U	6.8 UJ	5.1 U	5.1 U	5.2 U
1,2,4-Trichlorobenzene	5.5 UJ	5.1 UJ	7.0 U	5.1 U	6.8 UJ	5.1 U	5.1 U	5.2 U
1,2-Dibromo-3-chloropropane	11 UJ	10 UJ	14 U	10 U	14 UJ	10 U	10 U	10 U
1,2-Dibromoethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
1,2-Dichlorobenzene	5.5 UJ	5.1 UJ	7.0 U	5.1 U	6.8 UJ	5.1 U	5.1 U	5.2 U
1,2-Dichloroethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
1,2-Dichloropropane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
1,3-Dichlorobenzene	5.5 UJ	5.1 UJ	7.0 U	5.1 U	6.8 UJ	**0.15 J**	5.1 U	5.2 U
1,4-Dichlorobenzene	5.5 UJ	5.1 UJ	7.0 U	5.1 U	6.8 UJ	5.1 U	5.1 U	5.2 U
1,4-Dioxane	440 UJ	410 U	560 U	410 U	550 U	410 U	410 U	410 U
2-Butanone	22 UJ	21 U	28 U	20 U	27 U	20 U	21 U	21 U
2-Hexanone	22 UJ	21 U	28 U	20 U	27 U	20 U	21 U	21 U
4-Methyl-2-Pentanone	22 UJ	21 U	28 U	20 U	27 U	20 U	21 U	21 U
Acetone	22 UJ	21 U	28 U	20 U	27 U	20 U	21 U	21 U
Benzene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Bromochloromethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Bromodichloromethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Bromoform	5.5 UJ	5.1 UJ	7.0 U	5.1 U	6.8 UJ	5.1 U	5.1 U	5.2 U
Bromomethane	11 UJ	10 U	14 U	10 U	14 U	10 U	10 UJ	10 UJ
Carbon disulfide	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Carbon tetrachloride	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU13-15-Z1 0-8 ft 05/21/2007	SU13-15-Z2 8-16 ft 05/21/2007	SU14-01-Z1 3-4 ft 05/23/2007	SU14-01-Z2 13.5-14.5 ft 05/23/2007	SU14-02-Z1 1.5-2.5 ft 05/23/2007	SU14-02-Z2 12-13 ft 05/23/2007	SU14-04-Z1 5-7 ft 05/24/2007	SU14-04-Z2 9-11 ft 05/24/2007
Chlorobenzene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Chloroethane	11 UJ	10 U	14 U	10 U	14 U	10 U	10 U	10 U
Chloroform	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Chloromethane	11 UJ	10 U	14 U	10 U	14 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
cis-1,3-Dichloropropene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Cyclohexane	11 UJ	10 U	14 U	10 U	14 U	10 U	10 U	10 U
Dibromochloromethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Dichlorodifluoromethane	11 UJ	10 U	14 U	10 U	14 U	10 U	10 U	10 U
Ethylbenzene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
FREON 113	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Isopropylbenzene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Methyl acetate	**2.3 J**	10 U	14 U	10 U	14 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Methylcyclohexane	11 UJ	10 U	14 U	10 U	14 U	10 U	10 U	10 U
Methylene chloride	11 UJ	10 U	14 U	10 U	14 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
o-Xylene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Styrene	5.5 UJ	5.1 U	**2.2 J**	**1.9 J**	**2.6 J**	**1.8 J**	5.1 UJ	5.2 UJ
Tetrachloroethene	**1.7 J**	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Toluene	5.5 UJ	5.1 UJ	7.0 UJ	5.1 UJ	6.8 UJ	5.1 UJ	5.1 U	5.2 U
trans-1,2-Dichloroethene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
trans-1,3-Dichloropropene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Trichloroethene	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Trichlorofluoromethane	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U
Vinyl chloride	5.5 UJ	5.1 U	7.0 U	5.1 U	6.8 U	5.1 U	5.1 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU14-05-Z1 4-6 ft 05/24/2007	SU14-05-Z2 12-14 ft 05/24/2007	SU14-05-Z3 17-18.5 ft 05/24/2007	SU14-06-Z1 4-6 ft 05/24/2007	SU14-06-Z2 12-14 ft 05/24/2007	SU14-07-Z1 4-6 ft 05/23/2007	SU14-07-Z2 13-15 ft 05/23/2007	SU14-08-Z1 1.5-2.5 ft 05/24/2007
6010B (mg/kg)								
Nickel	**2.8 J**	**3.0 J**	**1.4 J**	**2.6 J**	**2.8 J**	**4.2**	**2.4 J**	**5.6**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
1,1,2,2-Tetrachloroethane	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
1,1,2-Trichloroethane	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
1,1-Dichloroethane	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
1,1-Dichloroethene	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
1,2,3-Trichlorobenzene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 UJ	5.1 UJ	5.2 U
1,2,4-Trichlorobenzene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 UJ	5.1 UJ	5.2 U
1,2-Dibromo-3-chloropropane	10 U	12 U	10 U	11 U	11 U	10 UJ	10 UJ	10 U
1,2-Dibromoethane	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
1,2-Dichlorobenzene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 UJ	5.1 UJ	5.2 U
1,2-Dichloroethane	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
1,2-Dichloropropane	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
1,3-Dichlorobenzene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 UJ	5.1 UJ	5.2 U
1,4-Dichlorobenzene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 UJ	5.1 UJ	5.2 U
1,4-Dioxane	410 UJ	500 U	410 U	420 U	430 U	410 U	410 U	410 U
2-Butanone	20 U	25 U	21 U	21 U	22 U	20 U	21 U	21 U
2-Hexanone	20 U	25 U	21 U	21 U	22 U	20 U	21 U	21 U
4-Methyl-2-Pentanone	20 U	25 U	21 U	21 U	22 U	20 U	21 U	21 U
Acetone	20 U	25 U	21 U	21 U	22 U	20 U	21 U	21 U
Benzene	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Bromochloromethane	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Bromodichloromethane	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Bromoform	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 UJ	5.1 UJ	5.2 U
Bromomethane	10 UJ	12 UJ	10 UJ	11 UJ	11 UJ	10 U	10 U	10 UJ
Carbon disulfide	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Carbon tetrachloride	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU14-05-Z1 4-6 ft 05/24/2007	SU14-05-Z2 12-14 ft 05/24/2007	SU14-05-Z3 17-18.5 ft 05/24/2007	SU14-06-Z1 4-6 ft 05/24/2007	SU14-06-Z2 12-14 ft 05/24/2007	SU14-07-Z1 4-6 ft 05/23/2007	SU14-07-Z2 13-15 ft 05/23/2007	SU14-08-Z1 1.5-2.5 ft 05/24/2007
Chlorobenzene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Chloroethane	10 U	12 U	10 U	11 U	11 U	10 U	10 U	10 U
Chloroform	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Chloromethane	10 U	12 U	10 U	11 U	11 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
cis-1,3-Dichloropropene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Cyclohexane	10 UJ	12 U	10 U	11 U	11 U	10 U	10 U	10 U
Dibromochloromethane	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Dichlorodifluoromethane	10 U	12 U	10 U	11 U	11 U	10 U	10 U	10 U
Ethylbenzene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
FREON 113	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Isopropylbenzene	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Methyl acetate	10 U	12 U	10 U	11 U	11 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Methylcyclohexane	10 U	12 U	10 U	11 U	11 U	10 U	10 U	10 U
Methylene chloride	10 U	12 U	10 U	11 U	11 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
o-Xylene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Styrene	5.1 UJ	6.2 UJ	5.2 UJ	5.3 UJ	5.4 UJ	**1.8 J**	5.1 U	5.2 UJ
Tetrachloroethene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Toluene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 UJ	5.1 UJ	5.2 U
trans-1,2-Dichloroethene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
trans-1,3-Dichloropropene	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Trichloroethene	5.1 UJ	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Trichlorofluoromethane	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U
Vinyl chloride	5.1 U	6.2 U	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU14-08-Z2 8-10 ft 05/24/2007	SU14-09-Z1 2-4 ft 05/23/2007	SU14-09-Z2 12-14 ft 05/23/2007	SU14-11-Z1 6-8 ft 05/23/2007	SU14-11-Z2 13-15 ft 05/23/2007	SU14-12-Z1 6-8 ft 05/23/2007	SU14-12-Z2[8] 13-15 ft 05/23/2007	SU14-13-Z1 5-7 ft 05/22/2007
6010B (mg/kg)								
Nickel	**5.1**	**7.8**	**2.9 J**	**6.0**	**4.2**	**4.1**	**1.6 J**	**5.3**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
1,1,2,2-Tetrachloroethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
1,1,2-Trichloroethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
1,1-Dichloroethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
1,1-Dichloroethene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
1,2,3-Trichlorobenzene	5.8 U	5.5 U	5.1 U	5.2 UJ	5.1 U	5.3 UJ	5.1 UJ	5.1 U
1,2,4-Trichlorobenzene	5.8 U	5.5 U	5.1 U	5.2 UJ	5.1 U	5.3 UJ	5.1 UJ	5.1 U
1,2-Dibromo-3-chloropropane	12 U	11 U	10 U	10 UJ	10 U	11 UJ	10 UJ	10 U
1,2-Dibromoethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
1,2-Dichlorobenzene	5.8 U	5.5 U	5.1 U	5.2 UJ	5.1 U	5.3 UJ	5.1 UJ	5.1 U
1,2-Dichloroethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
1,2-Dichloropropane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
1,3-Dichlorobenzene	5.8 U	5.5 U	5.1 U	5.2 UJ	5.1 U	5.3 UJ	5.1 UJ	5.1 U
1,4-Dichlorobenzene	5.8 U	5.5 U	5.1 U	5.2 UJ	5.1 U	5.3 UJ	5.1 UJ	5.1 U
1,4-Dioxane	460 U	440 U	410 U	420 U	410 U	420 U	410 UJ	410 U
2-Butanone	23 U	22 U	20 U	21 U	21 U	21 U	20 UJ	21 U
2-Hexanone	23 U	22 U	20 U	21 U	21 U	21 U	20 UJ	21 U
4-Methyl-2-Pentanone	23 U	22 U	20 U	21 U	21 U	21 U	20 UJ	21 U
Acetone	23 U	22 U	20 U	21 U	21 U	21 U	**24 J-**	21 U
Benzene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Bromochloromethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Bromodichloromethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Bromoform	5.8 U	5.5 U	5.1 U	5.2 UJ	5.1 U	5.3 UJ	5.1 UJ	5.1 U
Bromomethane	12 UJ	11 UJ	10 UJ	10 U	10 U	11 U	10 UJ	10 UJ
Carbon disulfide	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Carbon tetrachloride	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU14-08-Z2 8-10 ft 05/24/2007	SU14-09-Z1 2-4 ft 05/23/2007	SU14-09-Z2 12-14 ft 05/23/2007	SU14-11-Z1 6-8 ft 05/23/2007	SU14-11-Z2 13-15 ft 05/23/2007	SU14-12-Z1 6-8 ft 05/23/2007	SU14-12-Z2[8] 13-15 ft 05/23/2007	SU14-13-Z1 5-7 ft 05/22/2007
Chlorobenzene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Chloroethane	12 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U
Chloroform	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Chloromethane	12 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U
cis-1,2-Dichloroethene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
cis-1,3-Dichloropropene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Cyclohexane	12 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U
Dibromochloromethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Dichlorodifluoromethane	12 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U
Ethylbenzene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
FREON 113	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Isopropylbenzene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Methyl acetate	12 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U
Methyl tert-butyl ether	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Methylcyclohexane	12 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U
Methylene chloride	12 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U
m-Xylene & p-Xylene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
o-Xylene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Styrene	5.8 UJ	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	**1.8 J**
Tetrachloroethene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Toluene	5.8 U	5.5 U	5.1 UJ	5.2 U	5.1 UJ	5.3 UJ	5.1 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
trans-1,3-Dichloropropene	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Trichloroethene	5.8 U	5.5 U	5.1 U	5.2 UJ	5.1 U	5.3 U	5.1 UJ	5.1 U
Trichlorofluoromethane	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U
Vinyl chloride	5.8 U	5.5 U	5.1 U	5.2 U	5.1 U	5.3 U	5.1 UJ	5.1 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU14-13-Z2 13-15 ft 05/22/2007	SU14-14-Z1 4-6 ft 05/22/2007	SU14-14-Z2 8-10 ft 05/22/2007	SU14-15-Z1 2-4 ft 05/22/2007	SU14-15-Z2 10-12 ft 05/22/2007	SU14-16-Z1 2-4 ft 05/22/2007	SU14-16-Z2 10-12 ft 05/22/2007	SU14-17-Z1 3-5 ft 05/22/2007
6010B (mg/kg)								
Nickel	**3.1 J**	**7.9**	**3.8 J**	**7.0**	**2.9 J**	**9.7**	**2.0 J**	**7.6**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,1,2,2-Tetrachloroethane	5.2 UJ	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,1,2-Trichloroethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,1-Dichloroethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,1-Dichloroethene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,2,3-Trichlorobenzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,2,4-Trichlorobenzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,2-Dibromo-3-chloropropane	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U
1,2-Dibromoethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,2-Dichlorobenzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,2-Dichloroethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,2-Dichloropropane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,3-Dichlorobenzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,4-Dichlorobenzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
1,4-Dioxane	410 U	440 U	410 U	430 U	410 U	440 U	410 U	410 U
2-Butanone	21 U	22 U	21 U	21 U	21 U	22 U	20 U	21 U
2-Hexanone	21 U	22 U	21 U	21 U	21 U	22 U	20 U	21 U
4-Methyl-2-Pentanone	21 U	22 U	21 U	21 U	21 U	22 U	20 U	21 U
Acetone	21 U	22 U	21 U	21 U	21 U	22 U	20 U	21 U
Benzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Bromochloromethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Bromodichloromethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Bromoform	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Bromomethane	10 U	11 UJ	10 UJ	11 UJ	10 UJ	11 UJ	10 UJ	10 UJ
Carbon disulfide	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Carbon tetrachloride	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU14-13-Z2 13-15 ft 05/22/2007	SU14-14-Z1 4-6 ft 05/22/2007	SU14-14-Z2 8-10 ft 05/22/2007	SU14-15-Z1 2-4 ft 05/22/2007	SU14-15-Z2 10-12 ft 05/22/2007	SU14-16-Z1 2-4 ft 05/22/2007	SU14-16-Z2 10-12 ft 05/22/2007	SU14-17-Z1 3-5 ft 05/22/2007
Chlorobenzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Chloroethane	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U
Chloroform	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Chloromethane	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U
cis-1,2-Dichloroethene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
cis-1,3-Dichloropropene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Cyclohexane	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U
Dibromochloromethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Dichlorodifluoromethane	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U
Ethylbenzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
FREON 113	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Isopropylbenzene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Methyl acetate	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U
Methyl tert-butyl ether	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Methylcyclohexane	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U
Methylene chloride	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U
m-Xylene & p-Xylene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
o-Xylene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Styrene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	**1.7 J**	5.1 U	**1.5 J**
Tetrachloroethene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Toluene	5.2 UJ	5.5 U	5.1 UJ	5.3 UJ	5.2 UJ	5.5 UJ	5.1 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
trans-1,3-Dichloropropene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Trichloroethene	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Trichlorofluoromethane	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U
Vinyl chloride	5.2 U	5.5 U	5.1 U	5.3 U	5.2 U	5.5 U	5.1 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU14-17-Z2 8-10 ft 05/22/2007	SU14-18-Z1 2-4 ft 05/22/2007	SU14-18-Z2 13-15 ft 05/22/2007	SU14-19-Z1 1-3 ft 05/23/2007	SU14-19-Z2 14-16 ft 05/23/2007	SU14-20-Z1 1-3 ft 05/23/2007	SU14-20-Z2 8-10 ft 05/23/2007
6010B (mg/kg)							
Nickel	**3.4 J**	**6.6**	**3.0 J**	**9.5**	**2.1 J**	**10.1 J**	**5.1**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
1,1-Dichloroethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
1,1-Dichloroethene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.3 U	5.5 UJ	5.2 UJ	5.7 U	5.2 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.3 U	5.5 UJ	5.2 UJ	5.7 U	5.2 U
1,2-Dibromo-3-chloropropane	10 U	10 U	11 U	11 UJ	10 UJ	11 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.3 U	5.5 UJ	5.2 UJ	5.7 U	5.2 U
1,2-Dichloroethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
1,2-Dichloropropane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.3 U	5.5 UJ	5.2 UJ	5.7 U	5.2 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.3 U	5.5 UJ	5.2 UJ	5.7 U	5.2 U
1,4-Dioxane	410 U	410 U	420 U	440 U	410 U	450 U	420 U
2-Butanone	20 U	20 U	21 U	22 U	21 U	23 U	21 U
2-Hexanone	20 U	20 U	21 U	22 U	21 U	23 U	21 U
4-Methyl-2-Pentanone	20 U	20 U	21 U	22 U	21 U	23 U	21 U
Acetone	20 U	20 U	21 U	22 U	21 U	23 U	21 U
Benzene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Bromochloromethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Bromodichloromethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Bromoform	5.1 U	5.1 U	5.3 U	5.5 UJ	5.2 UJ	5.7 U	5.2 U
Bromomethane	10 UJ	10 UJ	11 UJ	11 U	10 U	11 UJ	10 UJ
Carbon disulfide	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Carbon tetrachloride	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU14-17-Z2 8-10 ft 05/22/2007	SU14-18-Z1 2-4 ft 05/22/2007	SU14-18-Z2 13-15 ft 05/22/2007	SU14-19-Z1 1-3 ft 05/23/2007	SU14-19-Z2 14-16 ft 05/23/2007	SU14-20-Z1 1-3 ft 05/23/2007	SU14-20-Z2 8-10 ft 05/23/2007
Chlorobenzene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Chloroethane	10 U	10 U	11 U	11 U	10 U	11 U	10 U
Chloroform	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Chloromethane	10 U	10 U	11 U	11 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Cyclohexane	10 U	10 U	11 U	11 U	10 U	11 U	10 U
Dibromochloromethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Dichlorodifluoromethane	10 U	10 U	11 U	11 U	10 U	11 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
FREON 113	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Isopropylbenzene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Methyl acetate	10 U	10 U	11 U	11 U	10 U	11 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Methylcyclohexane	10 U	10 U	11 U	11 U	10 U	11 U	10 U
Methylene chloride	10 U	10 U	11 U	11 U	10 U	11 U	10 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
o-Xylene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Styrene	5.1 U	5.1 U	5.3 U	**2.0 J**	5.2 U	5.7 U	5.2 U
Tetrachloroethene	5.1 U	**0.30 J**	5.3 U	**14 J+**	5.2 U	**0.97 J**	5.2 U
Toluene	5.1 UJ	5.1 UJ	5.3 U	5.5 U	5.2 UJ	5.7 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Trichloroethene	5.1 U	5.1 UJ	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Trichlorofluoromethane	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U
Vinyl chloride	5.1 U	5.1 U	5.3 U	5.5 U	5.2 U	5.7 U	5.2 U

Table 3.2-3d Complete Nickel, VOC, and PCB Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: Sample Date: Analyte	SU14-11-Z1 6-8 ft 05/23/2007	SU14-11-Z2 13-15 ft 05/23/2007	SU14-12-Z1 6-8 ft 05/23/2007	SU14-12-Z2[8] 13-15 ft 05/23/2007	SU14-13-Z1 5-7 ft 05/22/2007	SU14-13-Z2 13-15 ft 05/22/2007	SU14-14-Z1 4-6 ft 05/22/2007	SU14-14-Z2 8-10 ft 05/22/2007
Aroclor 1016	35 UJ	34 U	35 U	34 U	34 U	34 U	36 U	34 U
Aroclor 1221	14 U	13 U	14 U	13 U	34 U	34 U	36 U	34 U
Aroclor 1232	35 U	34 U	35 U	34 U	34 U	34 U	36 U	34 U
Aroclor 1242	35 U	34 U	35 U	34 U	34 U	34 U	36 U	34 U
Aroclor 1248	35 U	34 U	35 U	34 U	34 U	34 U	36 U	34 U
Aroclor 1254	**39**	34 U	35 U	34 U	**88**	**140**	36 U	34 U
Aroclor 1260	35 UJ	34 U	35 U	34 U	34 U	34 U	36 U	34 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-01-Z1 4-6 ft 05/29/2007	SU10-02-Z1 5.5-7 ft 06/07/2007	SU10-02-Z2 9-11 ft 06/07/2007	SU10-03-Z1[9] 6-8 ft 06/08/2007	SU10-04-Z1 6-8 ft 05/25/2007	SU10-04-Z2 10-11.5 ft 05/25/2007	SU10-05-Z1 4-6 ft 05/25/2007	SU10-05-Z2 10-12 ft 05/25/2007
6010B (mg/kg)								
Nickel	**1.5 J**	**4.3**	**5.6**	**4.4**	**9.7**	**2.2 J**	**3.3 J**	**6.5**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,1,2,2-Tetrachloroethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,1,2-Trichloroethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,1-Dichloroethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,1-Dichloroethene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,2,3-Trichlorobenzene	5.1 U	5.2 U	5.2 UJ	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,2,4-Trichlorobenzene	5.1 U	5.2 U	5.2 UJ	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 UJ	10 U	12 U	10 U	10 U	11 U
1,2-Dibromoethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,2-Dichlorobenzene	5.1 U	5.2 U	5.2 UJ	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,2-Dichloroethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,2-Dichloropropane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,3-Dichlorobenzene	5.1 U	5.2 U	5.2 UJ	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
1,4-Dichlorobenzene	5.1 U	5.2 U	5.2 UJ	5.1 U	5.9 U	5.0 U	5.1 U	**0.21 J**
1,4-Dioxane	410 U	420 U	420 U	410 U	470 U	400 U	400 U	420 U
2-Butanone	20 U	21 U	21 U	21 U	24 U	20 U	20 U	21 U
2-Hexanone	20 U	21 U	21 U	21 U	24 U	20 U	20 U	21 U
4-Methyl-2-Pentanone	20 U	21 U	21 U	21 U	24 U	20 U	20 U	21 U
Acetone	20 U	21 U	**7.3 J**	21 U	24 U	20 U	20 U	21 U
Benzene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Bromochloromethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Bromodichloromethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Bromoform	5.1 U	5.2 U	5.2 UJ	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Bromomethane	10 U	10 U	10 U	10 U	12 U	10 U	10 U	11 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-01-Z1 4-6 ft 05/29/2007	SU10-02-Z1 5.5-7 ft 06/07/2007	SU10-02-Z2 9-11 ft 06/07/2007	SU10-03-Z1[9] 6-8 ft 06/08/2007	SU10-04-Z1 6-8 ft 05/25/2007	SU10-04-Z2 10-11.5 ft 05/25/2007	SU10-05-Z1 4-6 ft 05/25/2007	SU10-05-Z2 10-12 ft 05/25/2007
Carbon disulfide	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Carbon tetrachloride	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Chlorobenzene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Chloroethane	10 U	10 U	10 U	10 U	12 U	10 U	10 U	11 U
Chloroform	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Chloromethane	10 U	10 U	10 U	10 U	12 U	10 U	10 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
cis-1,3-Dichloropropene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Cyclohexane	10 U	10 U	10 U	10 U	12 U	10 U	10 U	11 U
Dibromochloromethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	12 U	10 U	10 U	11 U
Ethylbenzene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
FREON 113	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Isopropylbenzene	5.1 U	5.2 U	5.2 U	5.1 U	**0.29 J**	5.0 U	5.1 U	5.3 U
Methyl acetate	10 U	10 U	10 U	10 U	12 U	10 U	10 U	11 U
Methyl tert-butyl ether	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Methylcyclohexane	10 U	10 U	10 U	10 U	12 U	10 U	10 U	11 U
Methylene chloride	10 U	10 U	10 U	10 U	12 U	10 U	10 U	11 U
m-Xylene & p-Xylene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 UJ
o-Xylene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 UJ
Styrene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 UJ	5.0 U	5.1 U	5.3 UJ
Tetrachloroethene	5.1 U	5.2 U	**0.69 J**	5.1 U	**0.71 J**	5.0 U	**32 J+**	5.3 U
Toluene	5.1 UJ	5.2 U	5.2 UJ	**0.82 J**	5.9 UJ	5.0 UJ	5.1 UJ	5.3 U
trans-1,2-Dichloroethene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
trans-1,3-Dichloropropene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Trichloroethene	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U
Trichlorofluoromethane	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	**1.4 J**	5.1 U	5.3 U
Vinyl chloride	5.1 U	5.2 U	5.2 U	5.1 U	5.9 U	5.0 U	5.1 U	5.3 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-06-Z1 4-6 ft 05/29/2007	SU10-06-Z2 9-11 ft 05/29/2007	SU10-07-Z1 1-3 ft 05/29/2007	SU10-07-Z2 10-12 ft 05/29/2007	SU10-08-Z1 0-2 ft 05/29/2007	SU10-09-Z1 3-5 ft 05/30/2007
6010B (mg/kg)						
Nickel	**2.7 J**	**4.8 J**	**2.1 J**	**4.2 J**	**12.0 J**	**5.7**
8260B (µg/kg)						
1,1,1-Trichloroethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,1,2,2-Tetrachloroethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,1,2-Trichloroethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,1-Dichloroethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,1-Dichloroethene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,2,3-Trichlorobenzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,2,4-Trichlorobenzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,2-Dibromo-3-chloropropane	10 U	10 UJ	11 U	10 U	10 U	10 UJ
1,2-Dibromoethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,2-Dichlorobenzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,2-Dichloroethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,2-Dichloropropane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,3-Dichlorobenzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,4-Dichlorobenzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
1,4-Dioxane	410 U	420 UJ	420 U	410 U	410 U	410 UJ
2-Butanone	20 U	21 UJ	21 U	20 U	21 U	**3.0 J**
2-Hexanone	20 U	21 UJ	21 U	20 U	21 U	20 UJ
4-Methyl-2-Pentanone	20 U	21 UJ	21 U	20 U	21 U	20 UJ
Acetone	20 U	**73 J**	21 U	20 U	21 U	**57 J**
Benzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Bromochloromethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Bromodichloromethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Bromoform	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Bromomethane	10 U	10 UJ	11 U	10 U	10 UJ	10 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-06-Z1 4-6 ft 05/29/2007	SU10-06-Z2 9-11 ft 05/29/2007	SU10-07-Z1 1-3 ft 05/29/2007	SU10-07-Z2 10-12 ft 05/29/2007	SU10-08-Z1 0-2 ft 05/29/2007	SU10-09-Z1 3-5 ft 05/30/2007
Carbon disulfide	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Carbon tetrachloride	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Chlorobenzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Chloroethane	10 U	10 UJ	11 U	10 U	10 UJ	10 UJ
Chloroform	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Chloromethane	10 U	10 UJ	11 U	10 U	10 U	10 UJ
cis-1,2-Dichloroethene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
cis-1,3-Dichloropropene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Cyclohexane	10 U	10 UJ	11 U	10 U	10 U	10 UJ
Dibromochloromethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Dichlorodifluoromethane	10 U	10 UJ	11 U	10 U	10 UJ	10 UJ
Ethylbenzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
FREON 113	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Isopropylbenzene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Methyl acetate	10 U	10 UJ	11 U	10 U	10 U	10 UJ
Methyl tert-butyl ether	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Methylcyclohexane	10 U	10 UJ	11 U	10 U	10 U	10 UJ
Methylene chloride	10 U	10 UJ	11 U	10 U	10 U	**6.2 J**
m-Xylene & p-Xylene	5.1 U	**3.6 J**	5.3 U	5.1 U	5.2 U	5.1 UJ
o-Xylene	5.1 U	**5.2 J**	5.3 U	5.1 U	5.2 U	5.1 UJ
Styrene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 UJ	5.1 UJ
Tetrachloroethene	5.1 U	**3.5 J**	**16 J+**	5.1 U	**450 J+**	**24 J**
Toluene	5.1 UJ	5.2 UJ	5.3 U	5.1 UJ	5.2 U	5.1 UJ
trans-1,2-Dichloroethene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
trans-1,3-Dichloropropene	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 U	5.1 UJ
Trichloroethene	5.1 U	5.2 UJ	5.3 U	5.1 U	**24 J**	**1.0 J**
Trichlorofluoromethane	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 UJ	**0.56 J**
Vinyl chloride	5.1 U	5.2 UJ	5.3 U	5.1 U	5.2 UJ	5.1 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-10-Z1 4-6 ft 05/31/2007	SU10-10-Z2 14-16 ft 05/31/2007	SU10-10-Z3 19-20 ft 05/31/2007	SU10-11-Z1[10] 3-5 ft 06/08/2007	SU10-11-Z2[10] 8-10 ft 06/08/2007	SU10-12-Z1 6-8 ft 05/30/2007	SU10-12-Z2 10-12 ft 05/30/2007
6010B (mg/kg)							
Nickel	**2.9 J**	**1.5 J**	**8.4**	**4.1**	**6.1**	**8.6**	**7.2**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	**0.22 J**
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,1-Dichloroethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,1-Dichloroethene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	12 U	12 U
1,2-Dibromoethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,2-Dichlorobenzene	5.1 UJ	5.1 UJ	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,2-Dichloroethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,2-Dichloropropane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
1,4-Dichlorobenzene	5.1 U	**0.29 J**	5.0 UJ	5.1 U	5.0 U	5.9 UJ	5.9 U
1,4-Dioxane	410 U	410 U	400 U	410 U	400 U	470 U	470 U
2-Butanone	20 U	20 U	20 U	20 U	20 U	24 U	23 U
2-Hexanone	20 U	20 U	20 U	20 U	20 U	24 U	23 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	20 U	20 U	24 U	23 U
Acetone	20 U	20 U	20 U	20 U	20 U	24 U	23 U
Benzene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Bromochloromethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Bromodichloromethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Bromoform	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	12 U	12 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-10-Z1 4-6 ft 05/31/2007	SU10-10-Z2 14-16 ft 05/31/2007	SU10-10-Z3 19-20 ft 05/31/2007	SU10-11-Z1[10] 3-5 ft 06/08/2007	SU10-11-Z2[10] 8-10 ft 06/08/2007	SU10-12-Z1 6-8 ft 05/30/2007	SU10-12-Z2 10-12 ft 05/30/2007
Carbon disulfide	5.1 U	5.1 U	5.0 U	5.1 UJ	5.0 UJ	5.9 U	5.9 U
Carbon tetrachloride	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Chlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Chloroethane	10 U	10 U	10 UJ	10 U	10 U	12 U	12 U
Chloroform	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	12 U	12 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	12 U	12 U
Dibromochloromethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	12 U	12 U
Ethylbenzene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
FREON 113	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Isopropylbenzene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Methyl acetate	10 U	**0.90 J**	10 U	10 U	10 U	12 U	12 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U	12 U	12 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	12 U	12 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
o-Xylene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Styrene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Tetrachloroethene	5.1 U	5.1 U	**1.7 J**	5.1 U	5.0 U	**5.5 J**	**7.5**
Toluene	5.1 UJ	5.1 UJ	5.0 UJ	5.1 U	5.0 U	5.9 UJ	5.9 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Trichloroethene	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Trichlorofluoromethane	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U
Vinyl chloride	5.1 U	5.1 U	5.0 U	5.1 U	5.0 U	5.9 U	5.9 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-13-Z1 3-5 ft 05/30/2007	SU10-14-Z1 7-8 ft 06/04/2007	SU10-14-Z2 13-14 ft 06/04/2007	SU10-15-Z1[10] 3-6 ft 06/08/2007	SU10-15-Z2[10] 8-10 ft 06/08/2007	SU10-16-Z1 1-2 ft 06/04/2007	SU10-16-Z2 9-10 ft 06/04/2007
6010B (mg/kg)							
Nickel	**8.3**	**4.2**	**2.5 J**	**6.8**	**3.6 J**	**8.4**	**3.2 J**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,1,2,2-Tetrachloroethane	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,1,2-Trichloroethane	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,1-Dichloroethane	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,1-Dichloroethene	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,2,3-Trichlorobenzene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,2,4-Trichlorobenzene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,2-Dibromo-3-chloropropane	11 U	10 UJ	10 U	12 U	10 U	13 U	10 U
1,2-Dibromoethane	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	5.3 U	5.1 U
1,2-Dichlorobenzene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,2-Dichloroethane	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,2-Dichloropropane	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,3-Dichlorobenzene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,4-Dichlorobenzene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
1,4-Dioxane	420 U	410 UJ	400 U	480 U	410 U	510 U	410 U
2-Butanone	21 U	21 UJ	20 U	24 U	20 U	25 U	20 U
2-Hexanone	21 U	21 UJ	20 U	24 U	20 U	25 U	20 U
4-Methyl-2-Pentanone	21 U	21 UJ	20 U	24 U	20 U	25 U	20 U
Acetone	21 U	**150 J**	20 U	24 U	20 U	25 U	20 U
Benzene	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Bromochloromethane	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Bromodichloromethane	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Bromoform	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Bromomethane	11 UJ	10 UJ	10 U	12 U	10 U	13 U	10 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-13-Z1 3-5 ft 05/30/2007	SU10-14-Z1 7-8 ft 06/04/2007	SU10-14-Z2 13-14 ft 06/04/2007	SU10-15-Z1[10] 3-6 ft 06/08/2007	SU10-15-Z2[10] 8-10 ft 06/08/2007	SU10-16-Z1 1-2 ft 06/04/2007	SU10-16-Z2 9-10 ft 06/04/2007
Carbon disulfide	5.3 U	5.2 UJ	5.0 U	6.0 UJ	5.1 UJ	6.3 U	5.1 U
Carbon tetrachloride	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Chlorobenzene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Chloroethane	11 UJ	10 UJ	10 U	12 U	10 U	13 U	10 U
Chloroform	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Chloromethane	11 U	10 UJ	10 U	12 U	10 U	13 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
cis-1,3-Dichloropropene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Cyclohexane	11 U	10 UJ	10 U	12 U	10 U	15 U	10 U
Dibromochloromethane	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	5.3 U	5.1 U
Dichlorodifluoromethane	11 UJ	10 UJ	10 U	12 U	10 U	11 U	10 U
Ethylbenzene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
FREON 113	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Isopropylbenzene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Methyl acetate	11 U	10 UJ	10 U	12 U	10 U	13 U	10 U
Methyl tert-butyl ether	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Methylcyclohexane	11 U	10 UJ	10 U	12 U	10 U	13 U	10 U
Methylene chloride	11 U	10 UJ	10 U	12 U	10 U	13 U	10 U
m-Xylene & p-Xylene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
o-Xylene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Styrene	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Tetrachloroethene	**10 J+**	**18 J**	**0.28 J**	6.0 U	5.1 U	**5.3 J**	5.1 U
Toluene	5.3 UJ	5.2 UJ	5.0 UJ	6.0 U	5.1 U	6.3 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
trans-1,3-Dichloropropene	5.3 U	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Trichloroethene	5.3 UJ	**4.1 J**	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Trichlorofluoromethane	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U
Vinyl chloride	5.3 UJ	5.2 UJ	5.0 U	6.0 U	5.1 U	6.3 U	5.1 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-17-Z1 5-6 ft 06/04/2007	SU10-17-Z2 8-9 ft 06/04/2007	SU10-18-Z1 6-8 ft 05/31/2007	SU10-18-Z2 9-11 ft 05/31/2007	SU10-19-Z1[10] 6-8 ft 06/08/2007	SU10-19-Z2[10] 9-11 ft 06/08/2007
6010B (mg/kg)						
Nickel	**6.0**	**3.0 J**	**4.3**	**5.6**	**2.5 J**	**7.6**
8260B (µg/kg)						
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
1,4-Dichlorobenzene	5.1 U	5.1 U	**0.24 J**	5.2 U	5.1 U	5.2 U
1,4-Dioxane	410 U	410 U	400 U	410 U	410 U	410 U
2-Butanone	21 U	20 U	20 U	21 U	20 U	21 U
2-Hexanone	21 U	20 U	20 U	21 U	20 U	21 U
4-Methyl-2-Pentanone	21 U	20 U	20 U	21 U	20 U	21 U
Acetone	21 U	20 U	20 U	21 U	20 U	21 U
Benzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Bromoform	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU10-17-Z1 5-6 ft 06/04/2007	SU10-17-Z2 8-9 ft 06/04/2007	SU10-18-Z1 6-8 ft 05/31/2007	SU10-18-Z2 9-11 ft 05/31/2007	SU10-19-Z1[10] 6-8 ft 06/08/2007	SU10-19-Z2[10] 9-11 ft 06/08/2007
Carbon disulfide	5.1 U	5.1 U	5.1 U	5.2 U	5.1 UJ	5.2 UJ
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Chlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Chloroethane	10 U	10 U	10 U	10 UJ	10 U	10 U
Chloroform	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
FREON 113	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Methyl acetate	10 U	10 U	**0.73 J**	10 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	10 U
m-Xylene & p-Xylene	**3.3 J**	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
o-Xylene	**2.1 J**	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Styrene	**2.3 J**	**2.2 J**	5.1 U	5.2 U	5.1 U	5.2 U
Tetrachloroethene	**0.40 J**	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Toluene	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.1 U	5.2 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Trichloroethene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Vinyl chloride	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-01-Z1 3-4 ft 06/04/2007	SU11-01-Z2 11-12 ft 06/04/2007	SU11-02-Z1 3-4 ft 06/04/2007	SU11-02-Z2 8-9 ft 06/04/2007	SU11-03-Z1 0-2 ft 06/07/2007	SU11-04-Z1 0-2 ft 06/06/2007	SU11-04-Z2 11-13 ft 06/06/2007
6010B (mg/kg)							
Nickel	**9.0**	**9.4**	**2.5 J**	**4.6**	**12.4**	**9.2**	**2.9 J**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,1,2,2-Tetrachloroethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,1,2-Trichloroethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,1-Dichloroethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,1-Dichloroethene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,2,3-Trichlorobenzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UR	5.1 UJ
1,2,4-Trichlorobenzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UR	5.1 UJ
1,2-Dibromo-3-chloropropane	11 U	10 U	35 UR	11 U	13 U	12 UJ	10 UJ
1,2-Dibromoethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,2-Dichlorobenzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,2-Dichloroethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,2-Dichloropropane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,3-Dichlorobenzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
1,4-Dichlorobenzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UR	5.1 UJ
1,4-Dioxane	420 U	420 U	1400 UR	420 U	500 U	460 UJ	410 UJ
2-Butanone	21 U	21 U	71 UR	21 U	25 U	23 UJ	20 UJ
2-Hexanone	21 U	21 U	71 UR	21 U	25 U	23 UJ	20 UJ
4-Methyl-2-Pentanone	21 U	21 U	71 UR	21 U	25 U	23 UJ	20 UJ
Acetone	21 U	21 U	71 UR	21 U	25 U	23 UJ	20 UJ
Benzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Bromochloromethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Bromodichloromethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Bromoform	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Bromomethane	11 U	10 U	35 UR	11 U	13 U	12 UJ	10 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-01-Z1 3-4 ft 06/04/2007	SU11-01-Z2 11-12 ft 06/04/2007	SU11-02-Z1 3-4 ft 06/04/2007	SU11-02-Z2 8-9 ft 06/04/2007	SU11-03-Z1 0-2 ft 06/07/2007	SU11-04-Z1 0-2 ft 06/06/2007	SU11-04-Z2 11-13 ft 06/06/2007
Carbon disulfide	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	**7.2 J**
Carbon tetrachloride	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Chlorobenzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Chloroethane	11 U	10 U	35 UR	11 U	13 U	12 UJ	10 UJ
Chloroform	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	**0.28 J**	5.1 UJ
Chloromethane	11 U	10 U	71 UR	11 U	13 U	12 UJ	10 UJ
cis-1,2-Dichloroethene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	**5.1 J**	5.1 UJ
cis-1,3-Dichloropropene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Cyclohexane	11 U	10 U	35 UR	11 U	13 U	12 UJ	10 UJ
Dibromochloromethane	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Dichlorodifluoromethane	11 U	10 U	35 UR	11 U	13 U	12 UJ	10 UJ
Ethylbenzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	**0.31 J**	5.1 UJ
FREON 113	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Isopropylbenzene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Methyl acetate	11 U	10 U	35 UR	11 U	13 U	12 UJ	10 UJ
Methyl tert-butyl ether	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Methylcyclohexane	11 U	10 U	35 UR	11 U	13 U	12 UJ	10 UJ
Methylene chloride	11 U	10 U	35 UR	11 U	13 U	12 UJ	10 UJ
m-Xylene & p-Xylene	**3.8 J**	**3.3 J**	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
o-Xylene	**2.4 J**	5.2 U	18 UR	5.3 U	6.3 U	**2.8 J**	5.1 UJ
Styrene	5.3 U	5.2 U	18 UR	**2.2 J**	6.3 U	5.8 UJ	5.1 UJ
Tetrachloroethene	**2.1 J**	5.2 U	18 UR	5.3 U	**6.4**	**400 J**	5.1 UJ
Toluene	5.3 UJ	5.2 UJ	18 UR	5.3 UJ	6.3 UJ	5.8 UJ	**4.6 J**
trans-1,2-Dichloroethene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	**2.4 J**	5.1 UJ
trans-1,3-Dichloropropene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ
Trichloroethene	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	**26 J**	5.1 UJ
Trichlorofluoromethane	5.3 U	5.2 U	18 UR	5.3 U	**3.2 J**	5.8 UJ	5.1 UJ
Vinyl chloride	5.3 U	5.2 U	18 UR	5.3 U	6.3 U	5.8 UJ	5.1 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-05/D-Z1 6-8 ft 06/06/2007	SU11-05/D-Z2 10-12 ft 06/06/2007	SU11-06-Z1 2-3 ft 06/04/2007	SU11-06-Z2 8-9 ft 06/04/2007	SU11-07-Z1 5-7 ft 05/30/2007	SU11-07-Z2 12-14 ft 05/30/2007	SU11-08-Z1 2-4 ft 05/30/2007	SU11-08-Z2 14-16 ft 05/30/2007
6010B (mg/kg)								
Nickel	**2.8 J**	**4.4**	**10.9**	**11.0**	**3.6 J**	**3.5 J**	**10.9**	**3.3 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,1,2-Trichloroethane	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,1-Dichloroethane	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,1-Dichloroethene	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	12 UJ	11 U	10 U	10 U	13 UJ	10 U
1,2-Dibromoethane	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,2-Dichlorobenzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,2-Dichloroethane	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,2-Dichloropropane	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,3-Dichlorobenzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,4-Dichlorobenzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
1,4-Dioxane	410 U	410 U	490 U	420 U	400 U	410 U	510 UJ	410 U
2-Butanone	20 U	21 U	24 U	21 U	20 U	20 U	25 UJ	20 U
2-Hexanone	20 U	21 U	24 UJ	21 U	20 U	20 U	25 UJ	20 U
4-Methyl-2-Pentanone	20 U	21 U	24 UJ	21 U	20 U	20 U	25 UJ	20 U
Acetone	20 U	21 U	24 U	21 U	20 U	20 U	25 UJ	20 U
Benzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Bromochloromethane	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Bromodichloromethane	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Bromoform	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Bromomethane	10 U	10 U	12 U	11 U	10 U	10 U	13 UJ	10 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-05/D-Z1 6-8 ft 06/06/2007	SU11-05/D-Z2 10-12 ft 06/06/2007	SU11-06-Z1 2-3 ft 06/04/2007	SU11-06-Z2 8-9 ft 06/04/2007	SU11-07-Z1 5-7 ft 05/30/2007	SU11-07-Z2 12-14 ft 05/30/2007	SU11-08-Z1 2-4 ft 05/30/2007	SU11-08-Z2 14-16 ft 05/30/2007
Carbon disulfide	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Carbon tetrachloride	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Chlorobenzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Chloroethane	10 U	10 U	12 U	11 U	10 U	10 U	13 UJ	10 U
Chloroform	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	**0.31 J**	5.1 U
Chloromethane	10 U	10 U	12 U	11 U	10 U	10 U	13 UJ	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Cyclohexane	10 U	10 U	12 UJ	11 U	10 U	10 U	13 UJ	10 U
Dibromochloromethane	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Dichlorodifluoromethane	10 U	10 U	12 U	11 U	10 U	10 U	13 UJ	10 U
Ethylbenzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
FREON 113	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Isopropylbenzene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Methyl acetate	10 U	10 U	12 U	11 U	10 U	10 U	13 UJ	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Methylcyclohexane	10 U	10 U	12 UJ	11 U	10 U	10 U	13 UJ	10 U
Methylene chloride	10 U	10 U	12 U	11 U	10 U	10 U	13 UJ	10 U
m-Xylene & p-Xylene	5.1 UJ	5.1 U	**3.3 J**	**3.2 J**	5.1 U	5.1 U	6.3 UJ	5.1 U
o-Xylene	5.1 U	5.1 U	6.1 UJ	**2.0 J**	5.1 U	5.1 U	6.3 UJ	5.1 U
Styrene	5.1 U	5.1 U	6.1 UJ	**2.3 J**	5.1 U	5.1 U	6.3 UJ	5.1 U
Tetrachloroethene	5.1 U	5.1 U	**8.5 J**	5.3 U	**0.69 J**	5.1 U	**270 J-**	**0.63 J**
Toluene	5.1 U	5.1 U	6.1 UJ	5.3 UJ	5.1 UJ	5.1 UJ	6.3 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	**0.33 J**	5.1 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U
Trichloroethene	5.1 U	5.1 U	6.1 UJ	5.3 U	5.1 U	5.1 U	**17 J-**	5.1 U
Trichlorofluoromethane	5.1 U	5.1 U	6.1 U	5.3 U	**0.64 J**	**0.54 J**	6.3 UJ	5.1 U
Vinyl chloride	5.1 U	5.1 U	6.1 U	5.3 U	5.1 U	5.1 U	6.3 UJ	5.1 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-09-Z1 1.5-3.5 ft 06/06/2007	SU11-09-Z2 11-13 ft 06/06/2007	SU11-10-Z1 5-6.5 ft 06/05/2007	SU11-10-Z2 10-12 ft 06/05/2007	SU11-11-Z1 5-7 ft 06/06/2007	SU11-11-Z2 10-12 ft 06/06/2007	SU11-12-Z1 2-3.5 ft 06/05/2007	SU11-12-Z2 13.5-15 ft 06/05/2007
6010B (mg/kg)								
Nickel	**10.0**	**2.1 J**	**2.7 J**	**2.0 J**	**1.9 J**	**2.5 J**	**11.5**	**2.3 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,1,2,2-Tetrachloroethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,1,2-Trichloroethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,1-Dichloroethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,1-Dichloroethene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,2,3-Trichlorobenzene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,2,4-Trichlorobenzene	6.0 UJ	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,2-Dibromo-3-chloropropane	12 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U
1,2-Dibromoethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,2-Dichlorobenzene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,2-Dichloroethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,2-Dichloropropane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,3-Dichlorobenzene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,4-Dichlorobenzene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
1,4-Dioxane	480 U	400 U	410 U	400 U	400 U	400 U	470 U	400 U
2-Butanone	24 U	20 U	20 U	20 U	20 U	20 U	23 U	20 U
2-Hexanone	24 U	20 U	20 U	20 U	20 U	20 U	23 U	20 U
4-Methyl-2-Pentanone	24 U	20 U	20 U	20 U	20 U	20 U	23 U	20 U
Acetone	24 U	20 U	20 U	20 U	20 U	**5.7 J**	**14 J**	20 U
Benzene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Bromochloromethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Bromodichloromethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Bromoform	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Bromomethane	12 UJ	10 U	10 U	10 U	10 U	10 U	12 U	10 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-09-Z1 1.5-3.5 ft 06/06/2007	SU11-09-Z2 11-13 ft 06/06/2007	SU11-10-Z1 5-6.5 ft 06/05/2007	SU11-10-Z2 10-12 ft 06/05/2007	SU11-11-Z1 5-7 ft 06/06/2007	SU11-11-Z2 10-12 ft 06/06/2007	SU11-12-Z1 2-3.5 ft 06/05/2007	SU11-12-Z2 13.5-15 ft 06/05/2007
Carbon disulfide	6.0 U	5.0 U	5.1 UJ	5.0 UJ	5.1 U	**5.8 J+**	**0.78 J**	5.0 UJ
Carbon tetrachloride	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Chlorobenzene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Chloroethane	12 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U
Chloroform	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Chloromethane	12 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U
cis-1,2-Dichloroethene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	**61 J+**	5.0 U
cis-1,3-Dichloropropene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Cyclohexane	12 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U
Dibromochloromethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Dichlorodifluoromethane	12 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U
Ethylbenzene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
FREON 113	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Isopropylbenzene	6.0 U	**2.4 J**	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Methyl acetate	12 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U
Methyl tert-butyl ether	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Methylcyclohexane	12 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U
Methylene chloride	12 U	10 U	5.1 U	5.0 U	10 U	10 U	5.8 U	5.0 U
m-Xylene & p-Xylene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	**2.9 J**	**3.4 J**
o-Xylene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Styrene	6.0 U	5.0 UJ	5.1 UJ	5.0 UJ	5.1 U	5.0 U	5.8 U	5.0 UJ
Tetrachloroethene	**18 J+**	5.0 U	5.1 U	5.0 U	5.1 U	**0.77 J**	**1.2 J**	5.0 U
Toluene	6.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.8 UJ	5.0 UJ
trans-1,2-Dichloroethene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
trans-1,3-Dichloropropene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Trichloroethene	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Trichlorofluoromethane	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U
Vinyl chloride	6.0 U	5.0 U	5.1 U	5.0 U	5.1 U	5.0 U	5.8 U	5.0 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-13-Z1 3.5-5 ft 06/04/2007	SU11-13-Z2 13.5-15 ft 06/04/2007	SU11-13-Z3 16-17.5 ft 06/04/2007	SU11-13-Z4 28-29.5 ft 06/04/2007	SU11-13-Z5 38.5-40 ft 06/04/2007	SU11-13-Z6 47.5-49 ft 06/04/2007	SU11-14-Z1 6-8 ft 06/01/2007	SU11-14-Z2 14.5-16 ft 06/04/2007	SU11-14-Z3 21-24 ft 06/04/2007
6010B (mg/kg)									
Nickel	**4.7**	**3.0 J**	**2.2 J**	**2.5 J**	**2.5 J**	**1.3 J**	3.7 UJ	**2.2 J**	**3.2 J**
8260B (µg/kg)									
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
1,4-Dioxane	410 U	400 U	410 U	400 U	410 U	400 U	410 U	410 U	400 U
2-Butanone	21 U	20 U	20 U	20 U	20 U	20 U	21 U	20 U	20 U
2-Hexanone	21 U	20 U	20 U	20 U	20 U	20 U	21 UJ	20 U	20 U
4-Methyl-2-Pentanone	21 U	20 U	20 U	20 U	20 U	20 U	21 UJ	20 U	20 U
Acetone	21 U	20 U	20 U	20 U	20 U	20 U	21 U	20 U	20 U
Benzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Bromoform	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-13-Z1 3.5-5 ft 06/04/2007	SU11-13-Z2 13.5-15 ft 06/04/2007	SU11-13-Z3 16-17.5 ft 06/04/2007	SU11-13-Z4 28-29.5 ft 06/04/2007	SU11-13-Z5 38.5-40 ft 06/04/2007	SU11-13-Z6 47.5-49 ft 06/04/2007	SU11-14-Z1 6-8 ft 06/01/2007	SU11-14-Z2 14.5-16 ft 06/04/2007	SU11-14-Z3 21-24 ft 06/04/2007
Carbon disulfide	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Chlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
FREON 113	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
o-Xylene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Styrene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Tetrachloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	**0.87 J**	5.1 U	5.0 U
Toluene	**0.66 J**	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Trichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 UJ	5.1 U	5.0 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	**0.54 J**	5.1 U	5.0 U
Vinyl chloride	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.1 U	5.0 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-14-Z4 24-25.5 ft 06/04/2007	SU11-15-Z1 2-4 ft 06/01/2007	SU11-15-Z2 12-16 ft 06/01/2007	SU11-16-Z1 0-2 ft 05/31/2007	SU11-16-Z2 12-16 ft 05/31/2007	SU11-16-Z3 16-18 ft 05/31/2007	SU11-17-Z1 6-8 ft 06/05/2007	SU11-17-Z2 14-16 ft 06/05/2007
6010B (mg/kg)								
Nickel	**2.7 J**	8.7 UJ	**3.4 J**	**10.3**	**5.4**	**5.6**	**3.0 J**	**1.9 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.0 U	6.0 UJ	5.0 U	**1.4 J**	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,1,2-Trichloroethane	5.0 U	6.0 UJ	5.0 U	**2.0 J**	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,1-Dichloroethane	5.0 U	6.0 U	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,1-Dichloroethene	5.0 U	6.0 U	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.0 U	6.0 UJ	5.0 UJ	6.1 UJ	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.0 U	6.0 UJ	5.0 UJ	6.1 UJ	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	12 UJ	10 UJ	12 UJ	10 UJ	10 UJ	10 U	10 U
1,2-Dibromoethane	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,2-Dichlorobenzene	5.0 U	6.0 UJ	5.0 UJ	**0.74 J**	5.1 UJ	5.2 UJ	5.1 U	**0.19 J**
1,2-Dichloroethane	5.0 U	6.0 U	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,2-Dichloropropane	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,3-Dichlorobenzene	5.0 U	6.0 UJ	5.0 UJ	6.1 UJ	5.1 UJ	5.2 UJ	5.1 U	5.1 U
1,4-Dichlorobenzene	5.0 U	6.0 UJ	5.0 UJ	6.1 UJ	**0.39 J**	**0.29 J**	5.1 U	5.1 U
1,4-Dioxane	400 U	480 U	400 U	490 U	410 UJ	410 UJ	400 U	410 U
2-Butanone	20 U	24 U	20 U	24 U	20 UJ	21 UJ	20 U	20 U
2-Hexanone	20 U	24 UJ	20 U	24 U	20 UJ	21 UJ	20 U	20 U
4-Methyl-2-Pentanone	20 U	24 UJ	20 U	24 U	20 UJ	21 UJ	20 U	20 U
Acetone	20 U	24 U	**29 J+**	24 U	20 UJ	**37 J**	20 U	20 U
Benzene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Bromochloromethane	5.0 U	6.0 U	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Bromodichloromethane	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Bromoform	5.0 U	6.0 UJ	5.0 UJ	6.1 UJ	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Bromomethane	10 U	12 U	10 U	12 U	10 UJ	10 UJ	10 U	10 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-14-Z4 24-25.5 ft 06/04/2007	SU11-15-Z1 2-4 ft 06/01/2007	SU11-15-Z2 12-16 ft 06/01/2007	SU11-16-Z1 0-2 ft 05/31/2007	SU11-16-Z2 12-16 ft 05/31/2007	SU11-16-Z3 16-18 ft 05/31/2007	SU11-17-Z1 6-8 ft 06/05/2007	SU11-17-Z2 14-16 ft 06/05/2007
Carbon disulfide	5.0 U	6.0 U	**2.2 J**	6.1 U	5.1 UJ	5.2 UJ	5.1 UJ	5.1 UJ
Carbon tetrachloride	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Chlorobenzene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Chloroethane	10 U	12 U	10 U	12 UJ	10 UJ	10 UJ	10 U	10 U
Chloroform	5.0 U	6.0 U	5.0 U	**0.58 J**	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Chloromethane	10 U	12 U	10 U	12 U	10 UJ	10 UJ	10 U	10 U
cis-1,2-Dichloroethene	5.0 U	6.0 U	5.0 U	**3.9 J**	5.1 UJ	5.2 UJ	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Cyclohexane	10 U	12 UJ	10 U	12 U	10 UJ	10 UJ	10 U	10 U
Dibromochloromethane	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	12 U	10 U	12 U	10 UJ	10 UJ	10 U	10 U
Ethylbenzene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
FREON 113	5.0 U	6.0 U	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Isopropylbenzene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Methyl acetate	10 U	12 U	10 U	12 U	**0.79 J**	10 UJ	10 U	10 U
Methyl tert-butyl ether	5.0 U	6.0 U	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Methylcyclohexane	10 U	12 UJ	10 U	12 U	10 UJ	10 UJ	10 U	10 U
Methylene chloride	10 U	12 U	10 UJ	12 U	10 UJ	10 UJ	5.1 U	5.1 U
m-Xylene & p-Xylene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 UJ	5.1 U
o-Xylene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Styrene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 UJ	5.1 UJ
Tetrachloroethene	5.0 U	6.0 UJ	5.0 U	**1600 J+**	**0.73 J**	**2.9 J**	5.1 U	5.1 U
Toluene	5.0 U	6.0 UJ	5.0 UJ	6.1 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.0 U	6.0 U	5.0 U	**0.68 J**	5.1 UJ	5.2 UJ	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.0 U	6.0 UJ	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Trichloroethene	5.0 U	6.0 UJ	5.0 U	**140 J+**	5.1 UJ	**1.9 J**	5.1 U	5.1 U
Trichlorofluoromethane	5.0 U	6.0 U	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U
Vinyl chloride	5.0 U	6.0 U	5.0 U	6.1 U	5.1 UJ	5.2 UJ	5.1 U	5.1 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-18-Z1 6-8 ft 06/05/2007	SU11-18-Z2 8-10 ft 06/05/2007	SU11-19-Z1 1-3 ft 05/31/2007	SU11-19-Z2 12-14 ft 05/31/2007	SU11-20-Z1 4-6 ft 05/31/2007	SU11-20-Z2 8-10 ft 05/31/2007	SU11-21-Z1 3-5 ft 06/05/2007	SU11-21-Z2 9-11 ft 06/05/2007	SU11-22-Z1 6-8 ft 06/07/2007
6010B (mg/kg)									
Nickel	**7.3**	**4.7**	**8.1**	4 U	**3.5 J**	**7.4**	**3.6 J**	**3.1 J**	**4.9**
8260B (µg/kg)									
1,1,1-Trichloroethane	5.0 U	5.2 U	**1.6 J**	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,1,2,2-Tetrachloroethane	5.0 U	5.2 U	6.1 UJ	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,1,2-Trichloroethane	5.0 U	5.2 U	**8.0**	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,1-Dichloroethane	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
1,1-Dichloroethene	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
1,2,3-Trichlorobenzene	5.0 U	5.2 U	6.1 UJ	5.1 U	5.1 UJ	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,2,4-Trichlorobenzene	5.0 U	5.2 U	6.1 UJ	5.1 U	5.1 UJ	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,2-Dibromo-3-chloropropane	10 U	10 U	12 UJ	10 U	10 UJ	10 UJ	10 U	7.7 U	10 UJ
1,2-Dibromoethane	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,2-Dichlorobenzene	5.0 U	5.2 U	6.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,2-Dichloroethane	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
1,2-Dichloropropane	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,3-Dichlorobenzene	5.0 U	5.2 U	6.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.1 U	3.8 U	5.2 UJ
1,4-Dichlorobenzene	5.0 UJ	5.2 U	6.1 UJ	**0.53 J**	**0.33 J**	**0.19 J**	5.1 U	3.8 U	5.2 UJ
1,4-Dioxane	400 UJ	420 U	480 U	410 U	400 U	410 U	410 U	310 U	410 UJ
2-Butanone	20 U	21 U	24 U	20 U	20 U	21 U	20 U	15 U	**17 J**
2-Hexanone	20 U	21 U	24 U	20 U	20 U	21 UJ	20 U	15 U	21 UJ
4-Methyl-2-Pentanone	20 U	21 U	24 U	20 U	20 U	21 UJ	20 U	15 U	21 UJ
Acetone	20 U	21 U	**11 J**	20 U	20 U	21 U	20 U	15 U	**250 J-**
Benzene	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Bromochloromethane	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
Bromodichloromethane	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Bromoform	5.0 U	5.2 U	6.1 UJ	5.1 U	5.1 UJ	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Bromomethane	10 U	10 U	12 U	10 U	10 U	10 U	10 U	7.7 U	10 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU11-18-Z1 6-8 ft 06/05/2007	SU11-18-Z2 8-10 ft 06/05/2007	SU11-19-Z1 1-3 ft 05/31/2007	SU11-19-Z2 12-14 ft 05/31/2007	SU11-20-Z1 4-6 ft 05/31/2007	SU11-20-Z2 8-10 ft 05/31/2007	SU11-21-Z1 3-5 ft 06/05/2007	SU11-21-Z2 9-11 ft 06/05/2007	SU11-22-Z1 6-8 ft 06/07/2007
Carbon disulfide	5.0 UJ	5.2 UJ	6.1 U	5.1 U	5.1 U	5.2 U	5.1 UJ	3.8 U	5.2 UJ
Carbon tetrachloride	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Chlorobenzene	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Chloroethane	10 U	10 U	12 UJ	10 U	10 U	10 U	10 U	7.7 U	10 UJ
Chloroform	5.0 U	5.2 U	**0.30 J**	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
Chloromethane	10 U	10 U	12 U	10 U	10 U	10 U	10 U	7.7 U	10 UJ
cis-1,2-Dichloroethene	5.0 U	5.2 U	**1.6 J**	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
cis-1,3-Dichloropropene	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Cyclohexane	10 U	10 U	12 U	10 U	10 U	10 UJ	10 U	7.7 U	10 UJ
Dibromochloromethane	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Dichlorodifluoromethane	10 U	10 U	12 U	10 U	10 U	10 U	10 U	7.7 U	10 UJ
Ethylbenzene	5.0 U	5.2 U	6.1 U	5.1 UJ	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
FREON 113	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
Isopropylbenzene	5.0 UJ	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Methyl acetate	10 U	10 U	12 U	**1.4 J**	10 U	10 U	10 U	7.7 U	10 UJ
Methyl tert-butyl ether	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
Methylcyclohexane	10 U	10 U	12 U	10 U	10 U	10 UJ	10 U	7.7 U	10 UJ
Methylene chloride	5.0 U	5.2 U	12 U	10 U	10 U	10 U	5.1 U	3.8 U	10 UJ
m-Xylene & p-Xylene	5.0 UJ	**3.0 J**	6.1 U	5.1 U	5.1 U	5.2 UJ	**3.5 J**	3.8 U	5.2 UJ
o-Xylene	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Styrene	5.0 UJ	5.2 UJ	6.1 UJ	5.1 U	5.1 U	5.2 UJ	5.1 UJ	3.8 UJ	5.2 UJ
Tetrachloroethene	5.0 UJ	5.2 U	**790 J**	**0.38 J**	5.1 U	**0.82 J**	5.1 U	3.8 U	**0.58 J**
Toluene	5.0 UJ	5.2 UJ	6.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.1 UJ	3.8 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
trans-1,3-Dichloropropene	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Trichloroethene	5.0 U	5.2 U	**240 J-**	5.1 U	5.1 U	5.2 UJ	5.1 U	3.8 U	5.2 UJ
Trichlorofluoromethane	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ
Vinyl chloride	5.0 U	5.2 U	6.1 U	5.1 U	5.1 U	5.2 U	5.1 U	3.8 U	5.2 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU12-02-Z1 6-7 ft 05/31/2007	SU12-02-Z2 10-11 ft 05/31/2007	SU12-02-Z3 19-20 ft 05/31/2007	SU12-03/I-Z1 3-4 ft 05/31/2007	SU12-03/I-Z2 14-15 ft 05/31/2007	SU12-05-Z1 3-4 ft 05/30/2007	SU12-05-Z2 8-9 ft 05/30/2007
6010B (mg/kg)							
Nickel	**6.5**	**2.3 J**	**2.5 J**	**13.1**	**23.3**	**37.0**	**5.3**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,1,2,2-Tetrachloroethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,1,2-Trichloroethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,1-Dichloroethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,1-Dichloroethene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,2,3-Trichlorobenzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,2,4-Trichlorobenzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,2-Dibromo-3-chloropropane	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U
1,2-Dibromoethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,2-Dichlorobenzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	**0.67 J**	5.2 U
1,2-Dichloroethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,2-Dichloropropane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,3-Dichlorobenzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
1,4-Dichlorobenzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 UJ	5.5 UJ	5.2 UJ
1,4-Dioxane	400 UJ	400 U	410 UJ	430 UR	420 U	440 UJ	410 U
2-Butanone	20 UJ	20 U	20 UJ	22 UR	21 U	22 UJ	21 U
2-Hexanone	20 UJ	20 U	20 UJ	22 UR	21 U	22 UJ	21 U
4-Methyl-2-Pentanone	20 UJ	20 U	20 UJ	22 UR	21 U	22 UJ	21 U
Acetone	20 UJ	20 U	20 UJ	22 UR	**6.7 J**	**8.6 J**	21 U
Benzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Bromochloromethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Bromodichloromethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Bromoform	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Bromomethane	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU12-02-Z1 6-7 ft 05/31/2007	SU12-02-Z2 10-11 ft 05/31/2007	SU12-02-Z3 19-20 ft 05/31/2007	SU12-03/I-Z1 3-4 ft 05/31/2007	SU12-03/I-Z2 14-15 ft 05/31/2007	SU12-05-Z1 3-4 ft 05/30/2007	SU12-05-Z2 8-9 ft 05/30/2007
Carbon disulfide	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Carbon tetrachloride	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Chlorobenzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Chloroethane	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U
Chloroform	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Chloromethane	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U
cis-1,2-Dichloroethene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	**19 J**	**1.4 J**
cis-1,3-Dichloropropene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Cyclohexane	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U
Dibromochloromethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Dichlorodifluoromethane	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U
Ethylbenzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
FREON 113	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Isopropylbenzene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Methyl acetate	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U
Methyl tert-butyl ether	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Methylcyclohexane	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U
Methylene chloride	10 UJ	10 U	10 UJ	11 UR	10 U	11 UJ	10 U
m-Xylene & p-Xylene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	**1.7 J**	5.2 U
o-Xylene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Styrene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Tetrachloroethene	**0.89 J**	**1.2 J**	**1.3 J**	**19 J**	**5.2 J+**	**280 J**	**2.4 J**
Toluene	5.1 UJ	5.0 UJ	5.1 UJ	**1.1 J**	5.2 UJ	5.5 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	**0.39 J**	5.2 U
trans-1,3-Dichloropropene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Trichloroethene	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	**33 J**	5.2 U
Trichlorofluoromethane	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U
Vinyl chloride	5.1 UJ	5.0 U	5.1 UJ	5.4 UR	5.2 U	5.5 UJ	5.2 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU12-06-Z1 5-6 ft 05/30/2007	SU12-06-Z2 14-15 ft 05/30/2007	SU12-06-Z3 17-18 ft 05/30/2007	SU12-09-Z1 6-7 ft 05/18/2007	SU12-09-Z2 9-11 ft 05/24/2007	SU12-10-Z1 2-3 ft 05/30/2007	SU12-10-Z2 13-14 ft 05/30/2007	SU12-10-Z3 17-19 ft 05/30/2007
6010B (mg/kg)								
Nickel	**4.0**	**2.9 J**	**2.0 J**	**5.2**	**5.6**	**12.6**	**3.6 J**	**1.2 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,1,2,2-Tetrachloroethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,1,2-Trichloroethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,1-Dichloroethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,1-Dichloroethene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,2,3-Trichlorobenzene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,2,4-Trichlorobenzene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U
1,2-Dibromoethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,2-Dichlorobenzene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,2-Dichloroethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,2-Dichloropropane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,3-Dichlorobenzene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,4-Dichlorobenzene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
1,4-Dioxane	410 U	420 U	410 U	430 U	400 U	430 U	400 U	460 U
2-Butanone	20 U	21 U	20 U	22 U	20 U	22 U	20 U	23 U
2-Hexanone	20 U	21 U	20 U	22 U	20 U	22 U	20 U	23 U
4-Methyl-2-Pentanone	20 U	21 U	20 U	22 U	20 U	22 U	20 U	23 U
Acetone	20 U	21 U	20 U	22 U	20 U	22 U	20 U	23 U
Benzene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Bromochloromethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Bromodichloromethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Bromoform	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Bromomethane	10 UJ	10 UJ	10 UJ	11 U	10 UJ	11 UJ	10 UJ	11 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU12-06-Z1 5-6 ft 05/30/2007	SU12-06-Z2 14-15 ft 05/30/2007	SU12-06-Z3 17-18 ft 05/30/2007	SU12-09-Z1 6-7 ft 05/18/2007	SU12-09-Z2 9-11 ft 05/24/2007	SU12-10-Z1 2-3 ft 05/30/2007	SU12-10-Z2 13-14 ft 05/30/2007	SU12-10-Z3 17-19 ft 05/30/2007
Carbon disulfide	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Carbon tetrachloride	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Chlorobenzene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Chloroethane	10 UJ	10 UJ	10 UJ	11 U	10 U	11 UJ	10 UJ	11 UJ
Chloroform	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Chloromethane	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
cis-1,3-Dichloropropene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Cyclohexane	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U
Dibromochloromethane	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Dichlorodifluoromethane	10 UJ	10 UJ	10 UJ	11 U	10 U	11 UJ	10 UJ	11 UJ
Ethylbenzene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
FREON 113	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Isopropylbenzene	5.1 U	5.2 U	5.1 U	5.4 U	**0.23 J**	5.4 U	5.0 U	5.7 U
Methyl acetate	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U
Methyl tert-butyl ether	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Methylcyclohexane	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U
Methylene chloride	10 U	10 U	10 U	5.4 U	10 U	11 U	10 U	11 U
m-Xylene & p-Xylene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
o-Xylene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Styrene	5.1 UJ	5.2 UJ	5.1 UJ	5.4 U	5.0 U	5.4 UJ	5.0 UJ	5.7 UJ
Tetrachloroethene	**1.7 J**	**0.97 J**	**0.82 J**	**18 J+**	5.0 U	**0.91 J**	5.0 U	5.7 U
Toluene	5.1 UJ	5.2 U	5.1 UJ	5.4 UJ	5.0 UJ	5.4 UJ	5.0 UJ	5.7 UJ
trans-1,2-Dichloroethene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
trans-1,3-Dichloropropene	5.1 U	5.2 U	5.1 U	5.4 U	5.0 U	5.4 U	5.0 U	5.7 U
Trichloroethene	5.1 UJ	5.2 UJ	5.1 UJ	5.4 U	5.0 U	5.4 UJ	5.0 UJ	5.7 UJ
Trichlorofluoromethane	5.1 UJ	5.2 UJ	5.1 UJ	5.4 U	5.0 U	5.4 UJ	5.0 UJ	5.7 UJ
Vinyl chloride	5.1 UJ	5.2 UJ	5.1 UJ	5.4 U	5.0 U	5.4 UJ	5.0 UJ	5.7 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU12-12I-Z1 1-3 ft 05/24/2007	SU12-13-Z1 5-7 ft 05/24/2007	SU12-13-Z2 10-12 ft 05/24/2007	SU12-14-Z1 7-8 ft 05/18/2007	SU12-15-Z1 0-8 ft 05/29/2007	SU12-15-Z2 8-16 ft 05/29/2007	SU12-16-Z1 0-8 ft 05/29/2007	SU12-16-Z2 8-12 ft 05/29/2007
6010B (mg/kg)								
Nickel	**5.6**	**8.6**	**2.7 J**	**2.3 J**	**2.7 J**	**2.9 J**	**3.0 J**	**3.3 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,1,2-Trichloroethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,1-Dichloroethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,1-Dichloroethene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,2-Dichlorobenzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,2-Dichloroethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,2-Dichloropropane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,3-Dichlorobenzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,4-Dichlorobenzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
1,4-Dioxane	410 U	440 U	400 U	400 U	450 U	420 U	400 U	400 U
2-Butanone	21 U	22 U	20 U	20 U	22 U	21 U	20 U	20 U
2-Hexanone	21 U	22 U	20 U	20 U	22 U	21 U	20 U	20 U
4-Methyl-2-Pentanone	21 U	22 U	20 U	20 U	22 U	21 U	20 U	20 U
Acetone	21 U	22 U	20 U	20 U	22 U	21 U	20 U	20 U
Benzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 UJ	5.0 U
Bromochloromethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 UJ	5.0 U
Bromodichloromethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Bromoform	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Bromomethane	10 UJ	11 UJ	10 UJ	10 U	11 UJ	10 UJ	10 U	10 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU12-12I-Z1 1-3 ft 05/24/2007	SU12-13-Z1 5-7 ft 05/24/2007	SU12-13-Z2 10-12 ft 05/24/2007	SU12-14-Z1 7-8 ft 05/18/2007	SU12-15-Z1 0-8 ft 05/29/2007	SU12-15-Z2 8-16 ft 05/29/2007	SU12-16-Z1 0-8 ft 05/29/2007	SU12-16-Z2 8-12 ft 05/29/2007
Carbon disulfide	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Carbon tetrachloride	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Chlorobenzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Chloroethane	10 U	11 U	10 U	10 U	11 UJ	10 UJ	10 U	10 U
Chloroform	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Chloromethane	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Cyclohexane	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U
Dibromochloromethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Dichlorodifluoromethane	10 U	11 U	10 U	10 U	11 UJ	10 UJ	10 U	10 U
Ethylbenzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
FREON 113	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Isopropylbenzene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Methyl acetate	10 U	11 U	10 U	10 U	11 U	10 U	10 UJ	10 U
Methyl tert-butyl ether	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Methylcyclohexane	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U
Methylene chloride	10 U	11 U	10 U	5.0 U	11 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
o-Xylene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Styrene	5.1 UJ	5.5 U	5.0 U	5.0 U	5.6 UJ	5.2 UJ	5.0 UJ	5.0 U
Tetrachloroethene	5.1 U	**28 J+**	**0.28 J**	5.0 U	5.6 U	5.2 U	**17 J+**	**0.69 J**
Toluene	5.1 U	5.5 UJ	5.0 UJ	5.0 UJ	5.6 UJ	5.2 U	5.0 UJ	5.0 U
trans-1,2-Dichloroethene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 U	5.2 U	5.0 U	5.0 U
Trichloroethene	5.1 U	5.5 U	5.0 U	5.0 U	5.6 UJ	5.2 UJ	5.0 UJ	5.0 U
Trichlorofluoromethane	5.1 U	5.5 U	5.0 U	5.0 U	5.6 UJ	5.2 UJ	5.0 U	5.0 U
Vinyl chloride	5.1 U	5.5 U	5.0 U	5.0 U	5.6 UJ	5.2 UJ	5.0 U	5.0 U

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU12-18-Z1 0-8 ft 05/29/2007	SU12-18-Z2 8-12 ft 05/29/2007	SU12-19-Z1 7-8 ft 05/18/2007	SU12-19-Z2 13-14 ft 05/18/2007	SU12-20-Z1 1-3 ft 05/18/2007	SU12-20-Z2 8-9.5 ft 05/18/2007	SU12-21-Z1 2-3.5 ft 05/18/2007	SU12-21-Z2 9-10.5 ft 05/18/2007
6010B (mg/kg)								
Nickel	**8.0 J**	**4.2 J**	**3.2 J**	**2.0 J**	**5.6**	**7.5**	**47.1**	**4.4**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,1,2,2-Tetrachloroethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,1,2-Trichloroethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,1-Dichloroethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,1-Dichloroethene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,2,3-Trichlorobenzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,2,4-Trichlorobenzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,2-Dibromo-3-chloropropane	11 U	10 U	10 U	10 U	11 U	11 UJ	11 U	10 UJ
1,2-Dibromoethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,2-Dichlorobenzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,2-Dichloroethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,2-Dichloropropane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,3-Dichlorobenzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,4-Dichlorobenzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
1,4-Dioxane	420 U	410 U	410 U	410 U	420 U	420 UJ	440 U	410 UJ
2-Butanone	21 U	20 U	20 U	20 U	21 U	**8.6 J**	**11 J**	20 UJ
2-Hexanone	21 U	20 U	20 U	20 U	21 U	21 UJ	22 U	20 UJ
4-Methyl-2-Pentanone	21 U	20 U	20 U	20 U	21 U	21 UJ	22 U	20 UJ
Acetone	**78 J+**	20 U	20 U	20 U	21 U	**130 J**	**130 J+**	**98 J**
Benzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Bromochloromethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Bromodichloromethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Bromoform	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Bromomethane	11 U	10 U	10 U	10 U	11 U	11 UJ	11 U	10 UJ

Table 3.2-3e Complete Nickel and VOC Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	SU12-18-Z1 0-8 ft 05/29/2007	SU12-18-Z2 8-12 ft 05/29/2007	SU12-19-Z1 7-8 ft 05/18/2007	SU12-19-Z2 13-14 ft 05/18/2007	SU12-20-Z1 1-3 ft 05/18/2007	SU12-20-Z2 8-9.5 ft 05/18/2007	SU12-21-Z1 2-3.5 ft 05/18/2007	SU12-21-Z2 9-10.5 ft 05/18/2007
Carbon disulfide	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	**2.1 J**	5.5 U	5.1 UJ
Carbon tetrachloride	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Chlorobenzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Chloroethane	11 U	10 U	10 U	10 U	11 U	11 UJ	11 U	10 UJ
Chloroform	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Chloromethane	11 U	10 U	10 U	10 U	11 U	11 UJ	11 U	10 UJ
cis-1,2-Dichloroethene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
cis-1,3-Dichloropropene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Cyclohexane	11 U	10 U	10 U	10 U	11 U	11 UJ	11 U	10 UJ
Dibromochloromethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Dichlorodifluoromethane	11 U	10 U	10 U	10 U	11 U	11 UJ	11 U	10 UJ
Ethylbenzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
FREON 113	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Isopropylbenzene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Methyl acetate	11 U	10 U	10 U	10 U	11 U	11 UJ	11 U	10 UJ
Methyl tert-butyl ether	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Methylcyclohexane	11 U	10 U	10 U	10 U	11 U	11 UJ	11 U	10 UJ
Methylene chloride	11 U	10 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
m-Xylene & p-Xylene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
o-Xylene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Styrene	5.3 UJ	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Tetrachloroethene	5.3 U	**1.4 J**	5.1 U	5.1 U	**1.2 J**	**3.9 J**	5.5 U	**0.55 J**
Toluene	5.3 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.3 UJ	5.3 UJ	5.5 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
trans-1,3-Dichloropropene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Trichloroethene	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Trichlorofluoromethane	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	5.5 U	5.1 UJ
Vinyl chloride	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 UJ	**4.0 J**	5.1 UJ

Table 3.2-3f Complete Nickel and VOC Results for Concrete Core Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	A301-Z1 1-3 ft 05/18/2007	F601-Z1 1-2 ft 05/17/2007	F601-Z2 6-7.5 ft 05/17/2007
6010B (mg/kg)			
Nickel	**5.2**	**8.7**	**2.0 J**
8260B (µg/kg)			
1,1,1-Trichloroethane	5.3 U	6.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.3 U	6.1 U	5.1 U
1,1,2-Trichloroethane	5.3 U	6.1 U	5.1 U
1,1-Dichloroethane	5.3 U	6.1 U	5.1 U
1,1-Dichloroethene	5.3 U	6.1 U	5.1 U
1,2,3-Trichlorobenzene	5.3 U	6.1 UJ	5.1 U
1,2,4-Trichlorobenzene	5.3 U	6.1 UJ	5.1 U
1,2-Dibromo-3-chloropropane	11 U	12 UJ	10 U
1,2-Dibromoethane	5.3 U	6.1 U	5.1 U
1,2-Dichlorobenzene	5.3 U	6.1 UJ	5.1 U
1,2-Dichloroethane	5.3 U	6.1 U	5.1 U
1,2-Dichloropropane	5.3 U	6.1 U	5.1 U
1,3-Dichlorobenzene	5.3 U	6.1 UJ	5.1 U
1,4-Dichlorobenzene	5.3 U	6.1 UJ	5.1 U
1,4-Dioxane	420 U	490 U	410 U
2-Butanone	21 U	24 U	**4.8 J**
2-Hexanone	21 U	24 U	20 U
4-Methyl-2-Pentanone	21 U	24 U	20 U
Acetone	21 U	24 U	**4.1 J**
Benzene	5.3 U	6.1 U	5.1 U
Bromochloromethane	5.3 U	6.1 U	5.1 U
Bromodichloromethane	5.3 U	6.1 U	5.1 U
Bromoform	5.3 U	6.1 UJ	5.1 U
Bromomethane	11 U	12 U	10 U
Carbon disulfide	5.3 U	6.1 U	5.1 U
Carbon tetrachloride	5.3 U	6.1 U	5.1 U

Table 3.2-3f Complete Nickel and VOC Results for Concrete Core Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	A301-Z1 1-3 ft 05/18/2007	F601-Z1 1-2 ft 05/17/2007	F601-Z2 6-7.5 ft 05/17/2007
Chlorobenzene	5.3 U	6.1 U	5.1 U
Chloroethane	11 U	12 U	10 U
Chloroform	5.3 U	6.1 U	5.1 U
Chloromethane	11 U	12 U	10 U
cis-1,2-Dichloroethene	5.3 U	6.1 U	5.1 U
cis-1,3-Dichloropropene	5.3 U	6.1 U	5.1 U
Cyclohexane	11 U	12 U	10 U
Dibromochloromethane	5.3 U	6.1 U	5.1 U
Dichlorodifluoromethane	11 U	12 U	10 U
Ethylbenzene	5.3 U	6.1 U	5.1 U
FREON 113	5.3 U	6.1 U	5.1 U
Isopropylbenzene	5.3 U	6.1 U	5.1 U
Methyl acetate	11 U	12 U	10 U
Methyl tert-butyl ether	5.3 U	6.1 U	5.1 U
Methylcyclohexane	11 U	12 U	10 U
Methylene chloride	5.3 U	6.1 U	5.1 U
m-Xylene & p-Xylene	5.3 U	6.1 U	5.1 U
o-Xylene	5.3 U	6.1 U	5.1 U
Styrene	5.3 U	6.1 U	5.1 U
Tetrachloroethene	5.3 U	**9.7 J+**	5.1 U
Toluene	5.3 UJ	6.1 UJ	5.1 U
trans-1,2-Dichloroethene	5.3 U	6.1 U	5.1 U
trans-1,3-Dichloropropene	5.3 U	6.1 U	5.1 U
Trichloroethene	5.3 U	6.1 U	5.1 U
Trichlorofluoromethane	5.3 U	6.1 U	5.1 U
Vinyl chloride	5.3 U	6.1 U	5.1 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DR R1/R2-Z1 6-8 ft 06/07/2007	DR-C-Z1 2-4 ft 06/01/2007	DR-C-Z2 9-11 ft 06/01/2007	DR-C-Z3 18-20 ft 06/01/2007	DR-D-Z1 5-7 ft 06/01/2007	DR-E-Z1 0-2 ft 06/01/2007	DR-E-Z2 12-16 ft 06/01/2007	DR-F-Z1 0-2 ft 06/06/2007	DR-F-Z2 11-13 ft 06/06/2007
6010B (mg/kg)									
Nickel	**4.4**	**5.4**	**5.8**	**3.2 J**	**2.2 J**	3.9 UJ	7.3 UJ	**4.4**	**4.8**
8260B (µg/kg)									
1,1,1-Trichloroethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
1,1,2,2-Tetrachloroethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U
1,1,2-Trichloroethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U
1,1-Dichloroethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
1,1-Dichloroethene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U
1,2,3-Trichlorobenzene	5.2 U	5.7 UJ	5.2 UJ	5.1 UJ	5.1 UJ	5.5 UJ	5.1 UJ	5.5 UJ	5.0 U
1,2,4-Trichlorobenzene	5.2 U	5.7 UJ	5.2 UJ	5.1 UJ	5.1 UJ	5.5 UJ	5.1 UJ	5.5 UJ	5.0 U
1,2-Dibromo-3-chloropropane	10 U	11 UJ	10 UJ	10 UJ	10 UJ	11 UJ	10 UJ	11 UJ	10 U
1,2-Dibromoethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U
1,2-Dichlorobenzene	5.2 U	5.7 UJ	5.2 UJ	5.1 UJ	5.1 UJ	5.5 U	5.1 UJ	5.5 UJ	5.0 U
1,2-Dichloroethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 UJ	5.1 U	5.5 U	5.0 U
1,2-Dichloropropane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
1,3-Dichlorobenzene	5.2 U	5.7 UJ	5.2 UJ	5.1 UJ	5.1 UJ	5.5 UJ	5.1 UJ	5.5 UJ	5.0 U
1,4-Dichlorobenzene	5.2 U	5.7 UJ	5.2 UJ	5.1 UJ	5.1 UJ	5.5 UJ	5.1 UJ	5.5 UJ	5.0 U
1,4-Dioxane	420 U	450 U	420 U	400 U	400 U	440 U	410 U	440 UJ	400 U
2-Butanone	21 U	23 U	21 U	20 U	20 U	22 U	20 U	22 UJ	20 U
2-Hexanone	21 U	23 U	21 U	20 U	20 U	22 U	20 U	22 UJ	20 U
4-Methyl-2-Pentanone	21 U	23 U	21 U	20 U	20 U	22 U	20 U	22 U	20 U
Acetone	21 U	23 U	21 U	20 U	**4.5 J**	22 U	20 U	22 UJ	20 U
Benzene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Bromochloromethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Bromodichloromethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Bromoform	5.2 U	5.7 UJ	5.2 UJ	5.1 UJ	5.1 UJ	5.5 UJ	5.1 UJ	5.5 U	5.0 U
Bromomethane	10 U	11 U	10 U	10 U	10 U	11 U	10 U	11 UJ	10 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

	DR R1/R2-Z1	DR-C-Z1	DR-C-Z2	DR-C-Z3	DR-D-Z1	DR-E-Z1	DR-E-Z2	DR-F-Z1	DR-F-Z2
Sample Depth:	6-8 ft	2-4 ft	9-11 ft	18-20 ft	5-7 ft	0-2 ft	12-16 ft	0-2 ft	11-13 ft
Sample Date:	06/07/2007	06/01/2007	06/01/2007	06/01/2007	06/01/2007	06/01/2007	06/01/2007	06/06/2007	06/06/2007
Analyte									
Carbon disulfide	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U
Carbon tetrachloride	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Chlorobenzene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Chloroethane	10 U	11 U	10 U	10 U	10 U	11 U	10 U	11 UJ	10 U
Chloroform	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Chloromethane	10 U	11 U	10 U	10 U	10 U	11 U	10 U	11 UJ	10 U
cis-1,2-Dichloroethene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
cis-1,3-Dichloropropene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Cyclohexane	10 U	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Dibromochloromethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Dichlorodifluoromethane	10 U	11 U	10 U	10 U	10 U	11 U	10 U	11 UJ	10 U
Ethylbenzene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
FREON 113	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U
Isopropylbenzene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U
Methyl acetate	10 U	11 U	10 U	10 U	10 U	11 U	10 U	11 UJ	10 U
Methyl tert-butyl ether	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Methylcyclohexane	10 U	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Methylene chloride	10 U	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
m-Xylene & p-Xylene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 UJ
o-Xylene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Styrene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 UJ
Tetrachloroethene	5.2 U	**4.4 J**	5.2 U	**1.0 J**	5.1 U	5.5 U	5.1 U	**4.7 J**	5.0 U
Toluene	5.2 UJ	5.7 UJ	5.2 UJ	5.1 UJ	5.1 UJ	5.5 UJ	5.1 UJ	5.5 UJ	5.0 UJ
trans-1,2-Dichloroethene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
trans-1,3-Dichloropropene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 U	5.0 U
Trichloroethene	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	**1.4 J**	5.0 U
Trichlorofluoromethane	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U
Vinyl chloride	5.2 U	5.7 U	5.2 U	5.1 U	5.1 U	5.5 U	5.1 U	5.5 UJ	5.0 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DR-G-Z1 3.5-5 ft 06/05/2007	DR-G-Z2 13.5-15 ft 06/05/2007	DRH-A1-Z1 2-3 ft 06/06/2007	DRH-A1-Z2 15-16 ft 06/06/2007	DRH-A2-Z1 3-4 ft 06/06/2007	DRH-A2-Z2 14-15 ft 06/05/2007	DRH-B-Z1 4-5 ft 06/06/2007	DRH-B-Z2 9-10 ft 06/06/2007
6010B (mg/kg)								
Nickel	**3.2 J**	**4.5**	**449**	**2.5 J**	**161**	**42.9**	**7.4**	**9.0**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,1-Dichloroethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,1-Dichloroethene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,2-Dibromo-3-chloropropane	10 U	10 U	11 UJ	10 U	10 U	10 UR	10 UR	11 U
1,2-Dibromoethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.2 UJ	5.2 UR	5.2 UR	5.3 UJ
1,2-Dichloroethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,2-Dichloropropane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.2 UJ	5.2 UR	5.2 UR	5.3 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.4 UJ	5.1 UJ	5.2 UJ	5.2 UR	5.2 UR	5.3 U
1,4-Dioxane	410 U	400 U	430 UJ	400 U	420 U	420 UR	410 UR	430 U
2-Butanone	20 U	20 U	21 UJ	20 U	21 U	21 UR	21 UR	21 U
2-Hexanone	20 U	20 U	21 UJ	20 U	21 U	21 UR	21 UR	21 U
4-Methyl-2-Pentanone	20 U	20 U	21 UJ	20 U	21 U	21 UR	21 UR	21 U
Acetone	20 U	20 U	21 UJ	20 U	21 U	**140 J**	**38 J-**	21 U
Benzene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Bromochloromethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Bromodichloromethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Bromoform	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Bromomethane	10 U	10 U	11 UJ	10 U	10 U	10 UR	10 UR	11 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

	DR-G-Z1	DR-G-Z2	DRH-A1-Z1	DRH-A1-Z2	DRH-A2-Z1	DRH-A2-Z2	DRH-B-Z1	DRH-B-Z2
Sample Depth:	3.5-5 ft	13.5-15 ft	2-3 ft	15-16 ft	3-4 ft	14-15 ft	4-5 ft	9-10 ft
Sample Date:	06/05/2007	06/05/2007	06/06/2007	06/06/2007	06/06/2007	06/05/2007	06/06/2007	06/06/2007
Analyte								
Carbon disulfide	5.1 UJ	5.1 UJ	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Carbon tetrachloride	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Chlorobenzene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Chloroethane	10 U	10 U	11 UJ	10 U	10 U	10 UR	10 UR	11 U
Chloroform	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Chloromethane	10 U	10 U	11 UJ	10 U	10 U	10 UR	10 UR	11 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Cyclohexane	10 U	10 U	11 UJ	10 U	10 U	10 UR	10 UR	11 U
Dibromochloromethane	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Dichlorodifluoromethane	10 U	10 U	11 UJ	10 U	10 U	10 UR	10 UR	11 U
Ethylbenzene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
FREON 113	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Isopropylbenzene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Methyl acetate	10 U	10 U	11 UJ	10 U	10 U	10 UR	10 UR	11 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Methylcyclohexane	10 U	10 U	11 UJ	10 U	10 U	10 UR	10 UR	11 U
Methylene chloride	5.1 U	5.1 U	**150 J**	10 U	10 U	5.2 UR	10 UR	11 U
m-Xylene & p-Xylene	**3.3 J**	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
o-Xylene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Styrene	5.1 UJ	5.1 UJ	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Tetrachloroethene	5.1 U	5.1 U	**590 J**	5.1 U	**49**	**49 J**	**0.29 J**	5.3 U
Toluene	5.1 UJ	5.1 UJ	**16 J**	5.1 UJ	5.2 UJ	5.2 UR	5.2 UJ	5.3 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Trichloroethene	5.1 U	5.1 U	**37 J**	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U
Trichlorofluoromethane	5.1 U	5.1 U	5.4 UJ	5.1 U	**0.65 J**	5.2 UR	5.2 UR	5.3 U
Vinyl chloride	5.1 U	5.1 U	5.4 UJ	5.1 U	5.2 U	5.2 UR	5.2 UR	5.3 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DR-H-Z1 7-8 ft 06/01/2007	DR-H-Z2 10-11 ft 06/01/2007	DR-I-Z1 1-2 ft 06/01/2007	DR-I-Z2 10-11 ft 06/01/2007	DR-I-Z3 18-19 ft 06/01/2007	DR-J-Z1 3-4 ft 05/31/2007	DR-J-Z2 15-16 ft 05/31/2007
6010B (mg/kg)							
Nickel	**15.3**	**3.3 J**	**5.9**	**3.4 J**	**3.6 J**	**6.4**	**24.6**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 UJ	5.3 U	5.3 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 UJ	5.3 U	5.3 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 UJ	11 U	11 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 UJ	**0.48 J**	5.3 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 UJ	5.3 UJ	5.3 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 UJ	5.3 UJ	5.3 U
1,4-Dioxane	410 U	410 U	410 U	410 U	400 U	420 U	420 U
2-Butanone	21 U	20 U	21 U	20 U	20 U	21 U	21 U
2-Hexanone	21 U	20 U	21 U	20 U	20 U	21 U	21 U
4-Methyl-2-Pentanone	21 U	20 U	21 U	20 U	20 U	21 U	21 U
Acetone	21 U	20 U	21 U	20 U	**9.8 J**	21 U	21 U
Benzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Bromoform	5.1 U	5.1 U	5.1 U	5.1 U	5.0 UJ	5.3 U	5.3 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	11 U	11 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

	DR-H-Z1	DR-H-Z2	DR-I-Z1	DR-I-Z2	DR-I-Z3	DR-J-Z1	DR-J-Z2
Sample Depth:	7-8 ft	10-11 ft	1-2 ft	10-11 ft	18-19 ft	3-4 ft	15-16 ft
Sample Date:	06/01/2007	06/01/2007	06/01/2007	06/01/2007	06/01/2007	05/31/2007	05/31/2007
Analyte							
Carbon disulfide	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Chlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Chloroform	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	11 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	**2.6 J**	5.3 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
FREON 113	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Methylene chloride	10 U	10 U	10 U	10 U	10 UJ	11 U	11 U
m-Xylene & p-Xylene	5.1 U	5.1 U	**3.5 J**	5.1 U	5.0 U	5.3 U	5.3 U
o-Xylene	5.1 U	5.1 U	**0.80 J**	5.1 U	5.0 U	5.3 U	5.3 U
Styrene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Tetrachloroethene	**9.9 J+**	5.1 U	**14 J+**	**0.47 J**	5.0 U	**500 J+**	**5.2 J**
Toluene	5.1 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.0 UJ	5.3 UJ	5.3 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Trichloroethene	**1.3 J**	5.1 U	**1.8 J**	5.1 U	5.0 U	**5.8 J+**	5.3 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U
Vinyl chloride	5.1 U	5.1 U	5.1 U	5.1 U	5.0 U	5.3 U	5.3 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DR-K-Z1 7-8 ft 05/31/2007	DR-K-Z2 15-16 ft 05/31/2007	DR-K-Z3 19-20 ft 05/31/2007	DR-L-Z1 5-6 ft 05/31/2007	DR-L-Z2 12-13 ft 05/31/2007	DR-M-Z1 5-6 ft 06/01/2007	DR-M-Z2 9-10 ft 06/01/2007
Carbon disulfide	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Carbon tetrachloride	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Chlorobenzene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Chloroethane	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U
Chloroform	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Chloromethane	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U
cis-1,2-Dichloroethene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
cis-1,3-Dichloropropene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Cyclohexane	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U
Dibromochloromethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Dichlorodifluoromethane	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U
Ethylbenzene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
FREON 113	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Isopropylbenzene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Methyl acetate	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U
Methyl tert-butyl ether	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Methylcyclohexane	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U
Methylene chloride	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U
m-Xylene & p-Xylene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
o-Xylene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Styrene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Tetrachloroethene	**4600**	**400 J-**	**1.2 J**	5.1 U	5.1 U	**4.2 J**	5.1 U
Toluene	5.1 UJ	5.6 UJ	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
trans-1,3-Dichloropropene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Trichloroethene	**5.6 J+**	**2.4 J**	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Trichlorofluoromethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Vinyl chloride	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DR-K-Z1 7-8 ft 05/31/2007	DR-K-Z2 15-16 ft 05/31/2007	DR-K-Z3 19-20 ft 05/31/2007	DR-L-Z1 5-6 ft 05/31/2007	DR-L-Z2 12-13 ft 05/31/2007	DR-M-Z1 5-6 ft 06/01/2007	DR-M-Z2 9-10 ft 06/01/2007
6010B (mg/kg)							
Nickel	**7.5**	**17.9**	**2.1 J**	**4.5**	**1.6 J**	**6.0**	**4.8**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,1,2-Trichloroethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,1-Dichloroethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,1-Dichloroethene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,2,3-Trichlorobenzene	5.1 UJ	5.6 UJ	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,2,4-Trichlorobenzene	5.1 UJ	5.6 UJ	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,2-Dibromo-3-chloropropane	10 UJ	11 UJ	10 U	10 U	10 U	10 UJ	10 U
1,2-Dibromoethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,2-Dichlorobenzene	5.1 UJ	5.6 UJ	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,2-Dichloroethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,2-Dichloropropane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,3-Dichlorobenzene	5.1 UJ	5.6 UJ	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,4-Dichlorobenzene	5.1 UJ	5.6 UJ	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
1,4-Dioxane	410 U	440 U	410 U	410 U	410 U	410 UJ	410 U
2-Butanone	21 U	22 U	20 U	20 U	21 U	21 UJ	20 U
2-Hexanone	21 U	22 U	20 U	20 U	21 U	21 UJ	20 U
4-Methyl-2-Pentanone	21 U	22 U	20 U	20 U	21 U	21 UJ	20 U
Acetone	21 U	22 U	20 U	20 U	21 U	**130 J**	20 U
Benzene	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Bromochloromethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Bromodichloromethane	5.1 U	5.6 U	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Bromoform	5.1 UJ	5.6 UJ	5.1 U	5.1 U	5.1 U	5.2 UJ	5.1 U
Bromomethane	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

	DR-N-Z1	DR-N-Z2	DR-O-Z1	DR-O-Z2	DR-O-Z3	DR-P-Z1	DR-P-Z2	DR-U-Z1	DR-U-Z2
Sample Depth:	**2-3.5 ft**	**8-9.5 ft**	**2-3.5 ft**	**12-13.5 ft**	**16-17.5 ft**	**3.5-5 ft**	**11.5-13 ft**	**5-6 ft**	**15-16 ft**
Sample Date:	**06/04/2007**	**06/04/2007**	**06/04/2007**	**06/04/2007**	**06/04/2007**	**06/06/2007**	**06/06/2007**	**06/01/2007**	**06/01/2007**
Analyte									
6010B (mg/kg)									
Nickel	**7.6**	**4.6**	**7.5**	**3.5 J**	**2.9 J**	**3.6 J**	**3.6 J**	**9.5**	**3.4 J**
8260B (µg/kg)									
1,1,1-Trichloroethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,1,2,2-Tetrachloroethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,1,2-Trichloroethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,1-Dichloroethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,1-Dichloroethene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,2,3-Trichlorobenzene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,2,4-Trichlorobenzene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,2-Dibromo-3-chloropropane	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U
1,2-Dibromoethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,2-Dichlorobenzene	5.5 U	5.3 U	**1.2 J**	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,2-Dichloroethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,2-Dichloropropane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,3-Dichlorobenzene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,4-Dichlorobenzene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
1,4-Dioxane	440 U	420 U	420 U	400 U	410 U	330 U	400 U	420 U	400 U
2-Butanone	22 U	21 U	21 U	20 U	20 U	16 U	20 U	21 U	20 U
2-Hexanone	22 U	21 U	21 U	20 U	20 U	16 U	20 U	21 U	20 U
4-Methyl-2-Pentanone	22 U	21 U	21 U	20 U	20 U	16 U	20 U	21 U	20 U
Acetone	22 U	21 U	21 U	20 U	20 U	16 U	20 U	21 U	**36 J+**
Benzene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Bromochloromethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Bromodichloromethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Bromoform	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Bromomethane	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

	DR-N-Z1	DR-N-Z2	DR-O-Z1	DR-O-Z2	DR-O-Z3	DR-P-Z1	DR-P-Z2	DR-U-Z1	DR-U-Z2
Sample Depth:	2-3.5 ft	8-9.5 ft	2-3.5 ft	12-13.5 ft	16-17.5 ft	3.5-5 ft	11.5-13 ft	5-6 ft	15-16 ft
Sample Date:	06/04/2007	06/04/2007	06/04/2007	06/04/2007	06/04/2007	06/06/2007	06/06/2007	06/01/2007	06/01/2007
Analyte									
Carbon disulfide	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Carbon tetrachloride	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Chlorobenzene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Chloroethane	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U
Chloroform	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Chloromethane	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
cis-1,3-Dichloropropene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Cyclohexane	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U
Dibromochloromethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Dichlorodifluoromethane	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U
Ethylbenzene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
FREON 113	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Isopropylbenzene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Methyl acetate	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U
Methyl tert-butyl ether	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Methylcyclohexane	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U
Methylene chloride	11 U	11 U	11 U	10 U	10 U	8.2 U	10 U	11 U	10 U
m-Xylene & p-Xylene	5.5 U	5.3 UJ	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
o-Xylene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Styrene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Tetrachloroethene	**63 J+**	5.3 U	**35 J+**	5.0 U	5.1 U	**1.5 J**	5.1 U	**4.8 J**	5.1 U
Toluene	5.5 U	5.3 U	**0.71 J**	5.0 U	5.1 UJ	4.1 U	5.1 UJ	5.3 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
trans-1,3-Dichloropropene	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Trichloroethene	**17 J+**	5.3 U	**4.3 J**	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Trichlorofluoromethane	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U
Vinyl chloride	5.5 U	5.3 U	5.3 U	5.0 U	5.1 U	4.1 U	5.1 U	5.3 U	5.1 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DR-V-Z1 3-4 ft 06/05/2007	DR-V-Z2 9-10 ft 06/05/2007	DRY-B-Z1 7-8 ft 06/05/2007	DRY-B-Z2 15-16 ft 06/05/2007	DRY-D-Z1 6-7 ft 06/05/2007	DRY-D-Z2 15-16 ft 06/05/2007	DRY-D-Z3 23-24 ft 06/05/2007	DRY-D-Z4 29-30 ft 06/05/2007
6010B (mg/kg)								
Nickel	**16.0**	**4.7**	**6.6**	**3.1 J**	**2.8 J**	**3.1 J**	**2.1 J**	**2.4 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethane	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethene	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 UJ	10 UJ	10 UJ	11 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,2-Dichloroethane	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,2-Dichloropropane	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
1,4-Dioxane	410 U	410 U	410 U	430 U	410 U	410 U	410 U	410 U
2-Butanone	21 U	20 U	21 U	21 U	21 U	20 U	20 U	21 U
2-Hexanone	21 UJ	20 UJ	21 U	21 U	21 U	20 U	20 U	21 U
4-Methyl-2-Pentanone	21 UJ	20 UJ	21 U	21 U	21 U	20 U	20 U	21 U
Acetone	21 U	20 U	21 U	21 U	21 U	20 U	20 U	21 U
Benzene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Bromochloromethane	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Bromodichloromethane	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Bromoform	5.2 UJ	5.1 UJ	5.2 UJ	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Bromomethane	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

	DR-V-Z1	DR-V-Z2	DRY-B-Z1	DRY-B-Z2	DRY-D-Z1	DRY-D-Z2	DRY-D-Z3	DRY-D-Z4
Sample Depth:	**3-4 ft**	**9-10 ft**	**7-8 ft**	**15-16 ft**	**6-7 ft**	**15-16 ft**	**23-24 ft**	**29-30 ft**
Sample Date:	**06/05/2007**	**06/05/2007**	**06/05/2007**	**06/05/2007**	**06/05/2007**	**06/05/2007**	**06/05/2007**	**06/05/2007**
Analyte								
Carbon disulfide	5.2 UJ	5.1 UJ	5.2 U	**2.6 J**	5.2 UJ	5.1 UJ	5.1 U	5.1 UJ
Carbon tetrachloride	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Chlorobenzene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Chloroethane	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
Chloroform	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Chloromethane	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Cyclohexane	10 UJ	10 UJ	10 U	11 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
FREON 113	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Isopropylbenzene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	**2.3 J**	5.1 U	5.1 U
Methyl acetate	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Methylcyclohexane	10 UJ	10 UJ	10 U	11 U	10 U	10 U	10 U	10 U
Methylene chloride	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
m-Xylene & p-Xylene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
o-Xylene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Styrene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Tetrachloroethene	**12 J**	5.1 UJ	**4.8 J**	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Toluene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 UJ	5.1 UJ	5.1 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.2 UJ	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Trichloroethene	**2.1 J**	5.1 UJ	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U
Trichlorofluoromethane	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	**0.64 J**	5.1 U	5.1 U
Vinyl chloride	5.2 U	5.1 U	5.2 U	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	DRY-E-Z1 1-3 ft 06/04/2007	DRY-E-Z2 10-11 ft 06/04/2007	DRYH-A-Z1 4-5 ft 06/05/2007	DRYH-A-Z2 14-15 ft 06/05/2007	DRYH-C-Z1 1-2 ft 05/23/2007	DRYH-C-Z2 8-10 ft 05/23/2007	DRYH-F-Z1 0-2 ft 06/06/2007	DRYH-F-Z2 13.5-15 ft 06/06/2007
6010B (mg/kg)								
Nickel	**5.0**	**1.8 J**	**8.9**	**3.4 J**	**1.7 J**	**3.8 J**	**7.1**	**1.9 J**
8260B (µg/kg)								
1,1,1-Trichloroethane	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,1,2,2-Tetrachloroethane	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,1,2-Trichloroethane	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,1-Dichloroethane	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
1,1-Dichloroethene	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
1,2,3-Trichlorobenzene	5.2 U	5.1 U	5.1 UJ	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,2,4-Trichlorobenzene	5.2 U	5.1 U	5.1 UJ	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 UJ	10 UJ	10 U	10 U	8.9 UJ	10 U
1,2-Dibromoethane	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,2-Dichlorobenzene	5.2 U	5.1 U	5.1 UJ	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,2-Dichloroethane	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
1,2-Dichloropropane	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,3-Dichlorobenzene	5.2 U	5.1 U	5.1 UJ	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,4-Dichlorobenzene	5.2 U	5.1 U	5.1 UJ	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
1,4-Dioxane	410 U	410 U	410 U	410 U	410 U	410 U	360 UJ	400 U
2-Butanone	21 U	20 U	20 U	21 U	20 U	20 U	18 UJ	20 U
2-Hexanone	21 U	20 U	20 U	21 UJ	20 U	20 U	18 UJ	20 U
4-Methyl-2-Pentanone	21 U	20 U	20 U	21 UJ	20 U	20 U	18 UJ	20 U
Acetone	21 U	20 U	**27 J**	**10 J**	20 U	20 U	18 UJ	20 U
Benzene	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Bromochloromethane	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
Bromodichloromethane	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Bromoform	5.2 U	5.1 U	5.1 UJ	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	8.9 UJ	10 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

	DRY-E-Z1	DRY-E-Z2	DRYH-A-Z1	DRYH-A-Z2	DRYH-C-Z1	DRYH-C-Z2	DRYH-F-Z1	DRYH-F-Z2
Sample Depth:	1-3 ft	10-11 ft	4-5 ft	14-15 ft	1-2 ft	8-10 ft	0-2 ft	13.5-15 ft
Sample Date:	06/04/2007	06/04/2007	06/05/2007	06/05/2007	05/23/2007	05/23/2007	06/06/2007	06/06/2007
Analyte								
Carbon disulfide	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Carbon tetrachloride	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Chlorobenzene	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	8.9 UJ	10 U
Chloroform	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	8.9 UJ	10 U
cis-1,2-Dichloroethene	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	**1.9 J**	5.0 U
cis-1,3-Dichloropropene	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Cyclohexane	10 U	10 U	10 U	10 UJ	10 U	10 U	8.9 UJ	10 U
Dibromochloromethane	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U	8.9 UJ	10 U
Ethylbenzene	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
FREON 113	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
Isopropylbenzene	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Methyl acetate	10 U	10 U	**6.4 J**	10 U	10 U	10 U	8.9 UJ	10 U
Methyl tert-butyl ether	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
Methylcyclohexane	10 U	10 U	10 U	10 UJ	10 U	10 U	8.9 UJ	10 U
Methylene chloride	10 U	10 U	5.1 U	5.1 U	10 U	10 U	8.9 UJ	10 U
m-Xylene & p-Xylene	5.2 U	5.1 UJ	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
o-Xylene	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Styrene	5.2 U	5.1 U	5.1 U	5.1 UJ	**1.7 J**	5.1 U	4.4 UJ	5.0 U
Tetrachloroethene	5.2 U	5.1 U	**24 J**	5.1 UJ	5.1 U	5.1 U	**310 J**	5.0 U
Toluene	5.2 UJ	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ	5.1 UJ	4.4 UJ	5.0 UJ
trans-1,2-Dichloroethene	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
trans-1,3-Dichloropropene	5.2 U	5.1 U	5.1 U	5.1 UJ	5.1 U	5.1 U	4.4 UJ	5.0 U
Trichloroethene	5.2 U	5.1 U	**1.4 J**	5.1 UJ	5.1 U	5.1 U	**61 J**	5.0 U
Trichlorofluoromethane	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U
Vinyl chloride	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	4.4 UJ	5.0 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	LPH-B-Z1 5-6 ft 06/05/2007	LPH-B-Z2 11-12 ft 06/05/2007	SMP-1-Z1 0-2 ft 06/07/2007	SMP-1-Z2 8-10 ft 06/07/2007
6010B (mg/kg)				
Nickel	**23.1**	**2.1 J**	**7.7**	**3.6 J**
8260B (µg/kg)				
1,1,1-Trichloroethane	5.3 U	5.1 U	5.7 UJ	5.1 U
1,1,2,2-Tetrachloroethane	5.3 U	5.1 U	5.7 UJ	5.1 U
1,1,2-Trichloroethane	5.3 U	5.1 U	5.7 UJ	5.1 U
1,1-Dichloroethane	5.3 U	5.1 U	5.7 U	5.1 U
1,1-Dichloroethene	5.3 U	5.1 U	5.7 U	5.1 U
1,2,3-Trichlorobenzene	5.3 UJ	5.1 U	5.7 UJ	5.1 U
1,2,4-Trichlorobenzene	5.3 UJ	5.1 U	5.7 UJ	5.1 U
1,2-Dibromo-3-chloropropane	11 UJ	10 U	11 UJ	10 U
1,2-Dibromoethane	5.3 U	5.1 U	5.7 UJ	5.1 U
1,2-Dichlorobenzene	5.3 UJ	5.1 U	5.7 UJ	5.1 U
1,2-Dichloroethane	5.3 U	5.1 U	5.7 U	5.1 U
1,2-Dichloropropane	5.3 U	5.1 U	5.7 UJ	5.1 U
1,3-Dichlorobenzene	5.3 UJ	5.1 U	5.7 UJ	5.1 U
1,4-Dichlorobenzene	5.3 UJ	5.1 U	5.7 UJ	5.1 U
1,4-Dioxane	420 U	410 U	460 U	410 U
2-Butanone	21 U	20 U	23 U	20 U
2-Hexanone	21 U	20 U	23 UJ	20 U
4-Methyl-2-Pentanone	21 U	20 U	23 UJ	20 U
Acetone	**10 J**	20 U	23 U	20 U
Benzene	5.3 U	5.1 U	5.7 UJ	5.1 U
Bromochloromethane	5.3 U	5.1 U	5.7 U	5.1 U
Bromodichloromethane	5.3 U	5.1 U	5.7 UJ	5.1 U
Bromoform	5.3 UJ	5.1 U	5.7 UJ	5.1 U
Bromomethane	11 U	10 U	11 U	10 U

Table 3.2-3g Complete Nickel and VOC Results for the Leach Pool/Drain/Drywell/Sump Soil Samples. RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Depth: / Sample Date: / Analyte	LPH-B-Z1 5-6 ft 06/05/2007	LPH-B-Z2 11-12 ft 06/05/2007	SMP-1-Z1 0-2 ft 06/07/2007	SMP-1-Z2 8-10 ft 06/07/2007
Carbon disulfide	5.3 U	5.1 U	5.7 U	5.1 U
Carbon tetrachloride	5.3 U	5.1 U	5.7 UJ	5.1 U
Chlorobenzene	5.3 U	5.1 U	5.7 UJ	5.1 U
Chloroethane	11 U	10 U	11 U	10 U
Chloroform	5.3 U	5.1 U	5.7 U	5.1 U
Chloromethane	11 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.1 U	5.7 U	5.1 U
cis-1,3-Dichloropropene	5.3 U	5.1 U	5.7 UJ	5.1 U
Cyclohexane	11 U	10 U	11 UJ	10 U
Dibromochloromethane	5.3 U	5.1 U	5.7 UJ	5.1 U
Dichlorodifluoromethane	11 U	10 U	11 U	10 U
Ethylbenzene	5.3 U	5.1 U	5.7 UJ	5.1 U
FREON 113	5.3 U	5.1 U	5.7 U	5.1 U
Isopropylbenzene	5.3 U	5.1 U	5.7 UJ	5.1 U
Methyl acetate	11 U	10 U	11 U	10 U
Methyl tert-butyl ether	5.3 U	5.1 U	5.7 U	5.1 U
Methylcyclohexane	11 U	10 U	11 UJ	10 U
Methylene chloride	5.3 U	5.1 U	11 U	10 U
m-Xylene & p-Xylene	5.3 U	5.1 U	5.7 UJ	5.1 U
o-Xylene	5.3 U	5.1 U	5.7 UJ	5.1 U
Styrene	5.3 U	5.1 U	5.7 UJ	5.1 U
Tetrachloroethene	**37 J+**	5.1 U	**250 J**	5.1 U
Toluene	5.3 U	5.1 U	5.7 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.3 U	5.1 U	5.7 U	5.1 U
trans-1,3-Dichloropropene	5.3 U	5.1 U	5.7 UJ	5.1 U
Trichloroethene	**5.7 J+**	5.1 U	**3.2 J**	5.1 U
Trichlorofluoromethane	5.3 U	5.1 U	5.7 U	5.1 U
Vinyl chloride	5.3 U	5.1 U	5.7 U	5.1 U

Table 3.2-3h Complete Nickel and VOC Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

	EM-15B-SO-01	EM-15B-SO-02	EM-21-SO-01	EM-21-SO-02	EM-26-SO-01	EM-29A-SO-01	EM-29A-SO-02
Sample Depth:	**0-2 ft**	**0-7 ft**	**0-4 ft**	**0-8 ft**	**0-4 ft**	**0-3 ft**	**0-7 ft**
Sample Date:	**06/13/2007**	**06/13/2007**	**06/12/2007**	**06/12/2007**	**06/11/2007**	**06/11/2007**	**06/11/2007**
6010B (mg/kg)							
Nickel	**415**	**24.4**	**42.9**	**4.4**	**5.1**	**5.7**	**17.4**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,1,2,2-Tetrachloroethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,1,2-Trichloroethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,1-Dichloroethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,1-Dichloroethene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,2,3-Trichlorobenzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,2,4-Trichlorobenzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,2-Dibromo-3-chloropropane	11 U	11 U	12 U	10 U	11 U	11 U	10 U
1,2-Dibromoethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,2-Dichlorobenzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,2-Dichloroethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,2-Dichloropropane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,3-Dichlorobenzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,4-Dichlorobenzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
1,4-Dioxane	430 U	420 U	460 U	410 U	430 U	430 U	410 U
2-Butanone	21 U	21 U	23 U	21 U	21 U	21 U	21 U
2-Hexanone	21 U	21 U	23 U	21 U	21 U	21 U	21 U
4-Methyl-2-Pentanone	21 U	21 U	23 U	21 U	21 U	21 U	21 U
Acetone	21 U	21 U	23 U	21 U	21 U	**16 J**	21 U
Benzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Bromochloromethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Bromodichloromethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Bromoform	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Bromomethane	11 U	11 U	12 U	10 U	11 U	11 U	10 U

Table 3.2-3h Complete Nickel and VOC Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

	EM-15B-SO-01	EM-15B-SO-02	EM-21-SO-01	EM-21-SO-02	EM-26-SO-01	EM-29A-SO-01	EM-29A-SO-02
Sample Depth:	**0-2 ft**	**0-7 ft**	**0-4 ft**	**0-8 ft**	**0-4 ft**	**0-3 ft**	**0-7 ft**
Sample Date:	**06/13/2007**	**06/13/2007**	**06/12/2007**	**06/12/2007**	**06/11/2007**	**06/11/2007**	**06/11/2007**
Carbon disulfide	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	**1.0 J**	5.2 U
Carbon tetrachloride	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Chlorobenzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Chloroethane	11 U	11 U	12 U	10 U	11 U	11 U	10 U
Chloroform	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Chloromethane	11 U	11 U	12 U	10 U	11 U	11 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	**2.6 J**	5.2 U
cis-1,3-Dichloropropene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Cyclohexane	11 U	11 U	12 U	10 U	11 U	11 U	10 U
Dibromochloromethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Dichlorodifluoromethane	11 U	11 U	12 U	10 U	11 U	11 U	10 U
Ethylbenzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
FREON 113	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Isopropylbenzene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Methyl acetate	11 U	11 U	12 U	10 U	11 U	11 U	10 U
Methyl tert-butyl ether	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Methylcyclohexane	11 U	11 U	12 U	10 U	11 U	11 U	10 U
Methylene chloride	11 U	11 U	12 U	10 U	11 U	11 U	10 U
m-Xylene & p-Xylene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
o-Xylene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Styrene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Tetrachloroethene	5.3 U	5.3 U	**19**	5.1 U	**1.4 J**	5.3 U	5.2 U
Toluene	5.3 U	5.3 U	5.8 U	5.1 UJ	5.4 U	5.3 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
trans-1,3-Dichloropropene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Trichloroethene	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Trichlorofluoromethane	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U
Vinyl chloride	5.3 U	5.3 U	5.8 U	5.1 U	5.4 U	5.3 U	5.2 U

Table 3.2-3h Complete Nickel and VOC Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

	EM-2-SO-01	EM-3-SO-01	EM-3-SO-02	EM-5-SO-01	EM-5-SO-02	GPR-F-SO-01	GPR-F-SO-02
Sample Depth:	**0-4 ft**	**0-8 ft**	**0-2 ft**	**0-2 ft**	**0-4 ft**	**0-2 ft**	**0-4 ft**
Sample Date:	**06/14/2007**	**06/14/2007**	**06/14/2007**	**06/14/2007**	**06/14/2007**	**06/12/2007**	**06/12/2007**
6010B (mg/kg)							
Nickel	**7.9**	**4.8**	**16900**	**20.3**	**2.7 J**	**16.6**	**5.0**
8260B (µg/kg)							
1,1,1-Trichloroethane	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,1,2,2-Tetrachloroethane	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,1,2-Trichloroethane	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,1-Dichloroethane	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
1,1-Dichloroethene	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
1,2,3-Trichlorobenzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,2,4-Trichlorobenzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,2-Dibromo-3-chloropropane	10 U	11 U	13 UJ	11 U	10 U	11 U	11 U
1,2-Dibromoethane	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,2-Dichlorobenzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,2-Dichloroethane	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
1,2-Dichloropropane	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,3-Dichlorobenzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,4-Dichlorobenzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
1,4-Dioxane	420 U	430 U	530 U	450 U	410 U	440 U	420 U
2-Butanone	21 U	21 U	26 U	23 U	20 U	22 U	21 U
2-Hexanone	21 U	21 U	26 UJ	23 U	20 U	22 U	21 U
4-Methyl-2-Pentanone	21 U	21 U	26 UJ	23 U	20 U	22 U	21 U
Acetone	21 U	21 U	26 U	23 U	20 U	22 U	21 U
Benzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Bromochloromethane	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
Bromodichloromethane	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Bromoform	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Bromomethane	10 U	11 U	13 U	11 U	10 U	11 U	11 U

Table 3.2-3h Complete Nickel and VOC Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

	EM-2-SO-01	EM-3-SO-01	EM-3-SO-02	EM-5-SO-01	EM-5-SO-02	GPR-F-SO-01	GPR-F-SO-02
Sample Depth:	0-4 ft	0-8 ft	0-2 ft	0-2 ft	0-4 ft	0-2 ft	0-4 ft
Sample Date:	06/14/2007	06/14/2007	06/14/2007	06/14/2007	06/14/2007	06/12/2007	06/12/2007
Carbon disulfide	5.2 UJ	5.4 UJ	6.6 UJ	5.7 UJ	5.1 UJ	5.5 U	5.3 U
Carbon tetrachloride	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Chlorobenzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Chloroethane	10 U	11 U	13 U	11 U	10 U	11 U	11 U
Chloroform	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
Chloromethane	10 U	11 U	13 U	11 U	10 U	11 U	11 U
cis-1,2-Dichloroethene	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
cis-1,3-Dichloropropene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Cyclohexane	10 U	11 U	13 UJ	11 U	10 U	11 U	11 U
Dibromochloromethane	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Dichlorodifluoromethane	10 U	11 U	13 U	11 U	10 U	11 U	11 U
Ethylbenzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
FREON 113	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
Isopropylbenzene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Methyl acetate	10 U	11 U	13 U	11 U	10 U	11 U	11 U
Methyl tert-butyl ether	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
Methylcyclohexane	10 U	11 U	13 UJ	11 U	10 U	11 U	11 U
Methylene chloride	10 U	11 U	13 U	11 U	10 U	11 U	11 U
m-Xylene & p-Xylene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
o-Xylene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Styrene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Tetrachloroethene	**7.2**	5.4 U	**550 J**	**44**	5.1 U	5.5 U	**2.4 J**
Toluene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 UJ
trans-1,2-Dichloroethene	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U
trans-1,3-Dichloropropene	5.2 U	5.4 U	6.6 UJ	5.7 U	5.1 U	5.5 U	5.3 U
Trichloroethene	5.2 U	5.4 U	**3.1 J**	5.7 U	5.1 U	5.5 U	5.3 U
Trichlorofluoromethane	5.2 U	5.4 U	6.6 U	5.7 U	**2.8 J**	5.5 U	5.3 U
Vinyl chloride	5.2 U	5.4 U	6.6 U	5.7 U	5.1 U	5.5 U	5.3 U

Table 3.2-4a Radiological Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-01-Z1	0-1 ft	06/18/07	2.94 ± 0.44		0.03	0.176 ± 0.065		0.014	3.18 ± 0.48		0.02
140-01-Z2	8-9 ft	06/18/07	0.384 ± 0.091		0.027	0.022 ± 0.021		0.021	0.396 ± 0.092		0.010
140-02-Z1	1-3 ft	06/14/07	2.72 ± 0.41		0.03	0.136 ± 0.055		0.013	2.85 ± 0.43		0.02
140-02-Z2	8-10 ft	06/14/07	0.296 ± 0.076		0.019	0.008 ± 0.014	UJ	0.021	0.250 ± 0.069		0.023
140-03-Z1	1-3 ft	06/13/07	0.64 ± 0.13		0.02	0.040 ± 0.029		0.025	0.60 ± 0.12		0.02
140-03-Z2	8-9 ft	06/13/07	0.359 ± 0.090		0.029	0.007 ± 0.015	U	0.026	0.328 ± 0.084		0.021
140-04-Z1	2.5-4 ft	06/14/07	0.307 ± 0.081		0.028	0.028 ± 0.024		0.022	0.378 ± 0.091		0.010
140-04-Z2	9-11 ft	06/14/07	0.302 ± 0.080		0.021	0.005 ± 0.014	UJ	0.013	0.274 ± 0.075		0.021
140-05-Z1	1-3 ft	06/13/07	0.54 ± 0.12		0.03	0.034 ± 0.028		0.013	0.48 ± 0.11		0.02
140-05-Z2	8-10 ft	06/13/07	0.75 ± 0.15		0.02	0.025 ± 0.024		0.024	0.87 ± 0.17		0.03
140-06-Z1	2-7.5 ft	06/12/07	53.8 ± 8.0	J	0.5	2.6 ± 1.0		0.2	44.7 ± 6.8		0.2
140-06-Z2	8-10 ft	06/12/07	0.265 ± 0.071		0.019	0.004 ± 0.013	UJ	0.012	0.223 ± 0.064		0.01
140-08-Z1	3.5-7.5 ft	06/12/07	1.68 ± 0.27		0.03	0.126 ± 0.052		0.013	1.14 ± 0.20		0.02
140-08-Z2	8-10 ft	06/12/07	0.49 ± 0.11		0.03	0.040 ± 0.031		0.029	0.350 ± 0.088		0.027
140-09-Z1	1-2 ft	06/18/07	4.10 ± 0.59		0.02	0.161 ± 0.060		0.013	2.77 ± 0.42		0.02
140-09-Z2	8-9 ft	06/18/07	1.13 ± 0.20		0.02	0.060 ± 0.036		0.026	1.00 ± 0.18		0.03
140-10-Z1	3-4 ft	06/07/07	0.54 ± 0.12		0.03	0.028 ± 0.026		0.027	0.59 ± 0.13		0.03
140-10-Z2	15-16 ft	06/07/07	0.223 ± 0.067		0.027	0.020 ± 0.024	UJ	0.031	0.180 ± 0.059		0.025
140-11-Z1	2-3 ft	06/07/07	2.29 ± 0.35		0.02	0.126 ± 0.052		0.013	2.10 ± 0.33		0.02
140-11-Z2	14-15 ft	06/07/07	0.289 ± 0.077		0.024	0.014 ± 0.019	UJ	0.013	0.219 ± 0.064		0.020

Table 3.2-4a Radiological Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-01-Z1	0-1 ft	06/18/07	0.62 ± 0.12		0.03	0.61 ± 0.12	J	0.02	0.58 ± 0.11		0.02
140-01-Z2	8-9 ft	06/18/07	0.68 ± 0.13		0.04	0.58 ± 0.12	J	0.03	0.63 ± 0.12		0.03
140-02-Z1	1-3 ft	06/14/07	0.75 ± 0.16		0.04	0.73 ± 0.16		0.03	0.68 ± 0.15		0.03
140-02-Z2	8-10 ft	06/14/07	0.42 ± 0.11		0.03	0.40 ± 0.10		0.03	0.39 ± 0.10		0.02
140-03-Z1	1-3 ft	06/13/07	0.56 ± 0.12		0.03	0.66 ± 0.13		0.02	0.60 ± 0.12		0.02
140-03-Z2	8-9 ft	06/13/07	0.440 ± 0.098		0.024	0.391 ± 0.090		0.015	0.355 ± 0.084		0.018
140-04-Z1	2.5-4 ft	06/14/07	0.49 ± 0.12		0.04	0.42 ± 0.10		0.03	0.54 ± 0.12		0.02
140-04-Z2	9-11 ft	06/14/07	0.411 ± 0.099		0.036	0.397 ± 0.096		0.024	0.420 ± 0.099		0.020
140-05-Z1	1-3 ft	06/13/07	0.82 ± 0.16		0.04	0.60 ± 0.13		0.03	0.62 ± 0.13		0.01
140-05-Z2	8-10 ft	06/13/07	1.07 ± 0.20		0.02	0.79 ± 0.16		0.02	0.95 ± 0.18		0.02
140-06-Z1	2-7.5 ft	06/12/07	0.94 ± 0.18		0.04	0.66 ± 0.14		0.02	0.89 ± 0.18		0.03
140-06-Z2	8-10 ft	06/12/07	0.247 ± 0.073		0.037	0.236 ± 0.068		0.022	0.161 ± 0.055		0.027
140-08-Z1	3.5-7.5 ft	06/12/07	0.44 ± 0.11		0.03	0.378 ± 0.096		0.026	0.42 ± 0.10		0.01
140-08-Z2	8-10 ft	06/12/07	0.343 ± 0.088		0.029	0.320 ± 0.084		0.029	0.267 ± 0.075		0.026
140-09-Z1	1-2 ft	06/18/07	0.57 ± 0.11		0.04	0.49 ± 0.10		0.01	0.54 ± 0.11		0.02
140-09-Z2	8-9 ft	06/18/07	0.79 ± 0.14		0.05	0.61 ± 0.12		0.02	0.70 ± 0.13		0.02
140-10-Z1	3-4 ft	06/07/07	0.94 ± 0.19		0.04	0.75 ± 0.16	J	0.03	0.72 ± 0.16		0.02
140-10-Z2	15-16 ft	06/07/07	0.232 ± 0.073		0.043	0.154 ± 0.054	J	0.021	0.173 ± 0.058		0.026
140-11-Z1	2-3 ft	06/07/07	1.04 ± 0.19		0.02	0.78 ± 0.15		0.02	1.06 ± 0.19		0.02
140-11-Z2	14-15 ft	06/07/07	0.197 ± 0.062		0.027	0.250 ± 0.071		0.029	0.209 ± 0.063		0.01

Table 3.2-4a Radiological Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Bismuth-212			Potassium-40		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-01-Z1	0-1 ft	06/18/07	0.64 ± 0.15		0.17	0.50 ± 0.21		0.29	--			6.6 ± 1.3		1.1
140-01-Z2	8-9 ft	06/18/07	0.30 ± 0.11		0.12	0.47 ± 0.17		0.29	--			11.1 ± 1.7		0.6
140-02-Z1	1-3 ft	06/14/07	0.30 ± 0.12	J	0.15	0.42 ± 0.17		0.26	--			8.0 ± 1.5		0.5
140-02-Z2	8-10 ft	06/14/07	0.24 ± 0.10	J	0.13	0.21 ± 0.15	UJ	0.22	--			8.0 ± 1.4		0.5
140-03-Z1	1-3 ft	06/13/07	0.61 ± 0.14		0.16	0.65 ± 0.19		0.30	--			8.6 ± 1.4		0.6
140-03-Z2	8-9 ft	06/13/07	0.052 ± 0.085	UJ	0.15	0.22 ± 0.11	J	0.20	--			5.4 ± 1.2	J	1
140-04-Z1	2.5-4 ft	06/14/07	0.36 ± 0.12	J	0.15	0.43 ± 0.16		0.28	--			7.7 ± 1.3		0.6
140-04-Z2	9-11 ft	06/14/07	0.39 ± 0.14	J	0.11	0.14 ± 0.18	U	0.30	--			8.3 ± 1.5		0.6
140-05-Z1	1-3 ft	06/13/07	0.82 ± 0.17		0.11	0.86 ± 0.19		0.26	0.73 ± 0.41		0.58	5.0 ± 1.2		1.1
140-05-Z2	8-10 ft	06/13/07	0.98 ± 0.20		0.21	0.90 ± 0.30		0.38	--			11.6 ± 1.7		1.0
140-06-Z1	2-7.5 ft	06/12/07	0.46 ± 0.13	J	0.16	0.61 ± 0.15	J	0.26	--			6.0 ± 1.1	J	0.8
140-06-Z2	8-10 ft	06/12/07	0.178 ± 0.093	J	0.13	-0.05 ± 0.65	UJ	0.29	--			5.7 ± 1.3	J	1
140-08-Z1	3.5-7.5 ft	06/12/07	0.288 ± 0.084	J	0.066	0.11 ± 0.14	UJ	0.22	--			5.3 ± 1.0	J	0.7
140-08-Z2	8-10 ft	06/12/07	0.204 ± 0.099	J	0.14	0.17 ± 0.15	UJ	0.23	--			7.5 ± 1.3	J	0.4
140-09-Z1	1-2 ft	06/18/07	0.294 ± 0.099		0.13	0.24 ± 0.11		0.20	--			8.4 ± 1.2		0.5
140-09-Z2	8-9 ft	06/18/07	0.74 ± 0.23		0.19	0.73 ± 0.23		0.33	--			11.6 ± 2.0		0.8
140-10-Z1	3-4 ft	06/07/07	0.40 ± 0.14		0.17	0.37 ± 0.15		0.35	--			8.1 ± 1.4		0.5
140-10-Z2	15-16 ft	06/07/07	1.91 ± 0.35		0.15	65.7 ± 6.7	J	0.4	--			4.08 ± 0.86		0.70
140-11-Z1	2-3 ft	06/07/07	0.90 ± 0.19		0.12	0.81 ± 0.24		0.39	--			10.0 ± 1.8		0.7
140-11-Z2	14-15 ft	06/07/07	0.178 ± 0.076	J	0.10	0.08 ± 0.12	UJ	0.20	--			3.82 ± 0.82	J	0.75

Table 3.2-4a Radiological Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-210			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-01-Z1	0-1 ft	06/18/07	--			--			0.72 ± 0.16		0.15
140-01-Z2	8-9 ft	06/18/07	--			--			0.68 ± 0.16		0.13
140-02-Z1	1-3 ft	06/14/07	--			--			0.69 ± 0.17		0.15
140-02-Z2	8-10 ft	06/14/07	--			--			0.42 ± 0.10		0.08
140-03-Z1	1-3 ft	06/13/07	--			--			0.91 ± 0.16		0.13
140-03-Z2	8-9 ft	06/13/07	--			--			0.346 ± 0.087	J	0.080
140-04-Z1	2.5-4 ft	06/14/07	--			--			0.63 ± 0.15		0.13
140-04-Z2	9-11 ft	06/14/07	--			--			0.42 ± 0.11		0.11
140-05-Z1	1-3 ft	06/13/07	--			--			0.98 ± 0.12		0.09
140-05-Z2	8-10 ft	06/13/07	4.8 ± 2.5		2.8	--			1.54 ± 0.24		0.19
140-06-Z1	2-7.5 ft	06/12/07	--			50.8 ± 8.8	J	2.5	0.89 ± 0.19	J	0.15
140-06-Z2	8-10 ft	06/12/07	2.1 ± 1.3	J	1.6	--			0.203 ± 0.060	J	0.063
140-08-Z1	3.5-7.5 ft	06/12/07	--			--			0.299 ± 0.083	J	0.076
140-08-Z2	8-10 ft	06/12/07	--			--			0.268 ± 0.086	J	0.087
140-09-Z1	1-2 ft	06/18/07	--			--			0.65 ± 0.14		0.11
140-09-Z2	8-9 ft	06/18/07	--			--			0.84 ± 0.16		0.13
140-10-Z1	3-4 ft	06/07/07	--			--			0.88 ± 0.17		0.13
140-10-Z2	15-16 ft	06/07/07	--			--			0.188 ± 0.063		0.076
140-11-Z1	2-3 ft	06/07/07	--			--			0.92 ± 0.17		0.14
140-11-Z2	14-15 ft	06/07/07	--			--			0.30 ± 0.10	J	0.1

Table 3.2-4a Radiological Results for Building 140 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-01-Z1	0-1 ft	06/18/07	0.63 ± 0.15		0.14	0.336 ± 0.075		0.060	3.32 ± 0.93	J	1.6
140-01-Z2	8-9 ft	06/18/07	0.41 ± 0.11		0.15	0.145 ± 0.059		0.073	--		
140-02-Z1	1-3 ft	06/14/07	0.46 ± 0.13		0.15	0.177 ± 0.061		0.052	2.63 ± 0.94		1.8
140-02-Z2	8-10 ft	06/14/07	0.225 ± 0.080		0.12	--			--		
140-03-Z1	1-3 ft	06/13/07	0.61 ± 0.13		0.15	0.401 ± 0.095		0.071	--		
140-03-Z2	8-9 ft	06/13/07	0.282 ± 0.083	J	0.13	0.059 ± 0.040	UJ	0.059	--		
140-04-Z1	2.5-4 ft	06/14/07	0.47 ± 0.11		0.14	0.240 ± 0.064		0.055	--		
140-04-Z2	9-11 ft	06/14/07	0.29 ± 0.10		0.13	0.160 ± 0.050		0.037	--		
140-05-Z1	1-3 ft	06/13/07	0.90 ± 0.17		0.15	0.298 ± 0.072		0.079	1.80 ± 0.81		1.2
140-05-Z2	8-10 ft	06/13/07	1.23 ± 0.19		0.14	0.459 ± 0.091		0.070	--		
140-06-Z1	2-7.5 ft	06/12/07	0.59 ± 0.14	J	0.16	0.234 ± 0.077	J	0.071	29.6 ± 2.8	J	2.7
140-06-Z2	8-10 ft	06/12/07	0.150 ± 0.074	J	0.10	--			--		
140-08-Z1	3.5-7.5 ft	06/12/07	0.233 ± 0.067	J	0.077	0.139 ± 0.038	J	0.033	0.94 ± 0.36	J	0.71
140-08-Z2	8-10 ft	06/12/07	0.217 ± 0.078	J	0.11	0.150 ± 0.059	J	0.048	--		
140-09-Z1	1-2 ft	06/18/07	0.420 ± 0.094		0.12	0.231 ± 0.075		0.061	2.63 ± 0.78	J	1.1
140-09-Z2	8-9 ft	06/18/07	0.66 ± 0.17		0.18	0.333 ± 0.092		0.068	3.2 ± 1.4	J	1.6
140-10-Z1	3-4 ft	06/07/07	0.46 ± 0.12		0.15	0.134 ± 0.061		0.082	--		
140-10-Z2	15-16 ft	06/07/07	0.175 ± 0.071		0.11	0.103 ± 0.042		0.042	--		
140-11-Z1	2-3 ft	06/07/07	0.82 ± 0.15		0.15	0.484 ± 0.093		0.056	2.97 ± 0.93		1.7
140-11-Z2	14-15 ft	06/07/07	0.175 ± 0.074	J	0.11	--			--		

Table 3.2-4b Radiological Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Building 100											
100-01-Z1	0-2 ft	06/13/07	0.398 ± 0.093		0.026	0.008 ± 0.014	U	0.021	0.47 ± 0.10		0.01
100-01-Z2	9-11 ft	06/13/07	0.45 ± 0.11		0.03	0.015 ± 0.020	UJ	0.013	0.51 ± 0.11		0.02
100-02-Z1	1-2 ft	06/18/07	0.385 ± 0.090		0.017	0.014 ± 0.018	UJ	0.012	0.339 ± 0.084		0.026
100-02-Z2	9-10 ft	06/18/07	0.59 ± 0.12		0.03	0.048 ± 0.033		0.028	0.69 ± 0.14		0.02
100-03-Z1	3-4 ft	06/18/07	0.53 ± 0.11		0.02	0.027 ± 0.024		0.012	0.49 ± 0.11		0.02
100-03-Z2	9-10 ft	06/18/07	0.46 ± 0.11		0.03	0.006 ± 0.017	U	0.030	0.46 ± 0.11		0.02
100-04-Z1	3-5 ft	06/13/07	1.48 ± 0.24		0.03	0.070 ± 0.038		0.027	1.31 ± 0.22		0.02
100-04-Z2	8-9 ft	06/13/07	0.274 ± 0.074		0.025	0.027 ± 0.024		0.012	0.304 ± 0.078		0.01
100-05-Z1	3-5 ft	06/13/07	4.72 ± 0.67		0.02	0.248 ± 0.076		0.013	4.78 ± 0.68		0.02
100-05-Z2	9-11 ft	06/13/07	0.82 ± 0.15		0.02	0.037 ± 0.027		0.021	0.81 ± 0.15		0.01
100-07-Z1	2-3 ft	06/07/07	7.0 ± 1.2	J	0.1	0.49 ± 0.24		0.07	6.7 ± 1.2		0.1
100-07-Z2	8-9 ft	06/07/07	0.44 ± 0.11	J	0.03	0.005 ± 0.015	UJ	0.014	0.332 ± 0.088		0.011
100-08-Z1	6-7 ft	06/07/07	0.320 ± 0.089	J	0.023	0.005 ± 0.016	UJ	0.015	0.251 ± 0.076		0.012
100-08-Z2	13-14 ft	06/07/07	0.57 ± 0.13	J	0.03	0.028 ± 0.028	U	0.031	0.52 ± 0.12		0.03
100-09-Z1	4-5 ft	06/07/07	0.285 ± 0.074		0.016	0.016 ± 0.019	UJ	0.024	0.225 ± 0.064		0.019
100-09-Z2	15-16 ft	06/07/07	0.124 ± 0.048	J	0.027	0.002 ± 0.011	U	0.024	0.105 ± 0.042		0.01
100-10-Z1	4-5 ft	06/08/07	6.47 ± 0.90		0.03	0.344 ± 0.094		0.013	6.72 ± 0.94		0.02
100-10-Z2	13-14 ft	06/08/07	0.133 ± 0.049		0.025	0.0 ± 0.0	U	0.03	0.203 ± 0.061		0.023
100-11-Z1	3-4 ft	06/07/07	35.2 ± 5.9	J	0.5	2.24 ± 0.995		0.51	39.2 ± 6.4		0.4
100-11-Z2	8-9 ft	06/07/07	24.3 ± 3.9	J	0.3	1.12 ± 0.50		0.13	25.3 ± 4.0		0.2

Table 3.2-4b Radiological Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Building 100											
100-01-Z1	0-2 ft	06/13/07	0.62 ± 0.19	J	0.07	0.85 ± 0.24	J	0.05	0.71 ± 0.21	J	0.05
100-01-Z2	9-11 ft	06/13/07	0.59 ± 0.13		0.04	0.49 ± 0.11	J	0.03	0.45 ± 0.11		0.02
100-02-Z1	1-2 ft	06/18/07	0.420 ± 0.095		0.037	0.343 ± 0.083		0.024	0.47 ± 0.10		0.03
100-02-Z2	9-10 ft	06/18/07	0.71 ± 0.13		0.04	0.55 ± 0.11		0.02	0.76 ± 0.14		0.03
100-03-Z1	3-4 ft	06/18/07	0.77 ± 0.13		0.03	0.63 ± 0.12		0.02	0.65 ± 0.12		0.02
100-03-Z2	9-10 ft	06/18/07	0.58 ± 0.12		0.05	0.54 ± 0.11	J	0.01	0.55 ± 0.11		0.02
100-04-Z1	3-5 ft	06/13/07	0.57 ± 0.13		0.04	0.53 ± 0.12	J	0.03	0.58 ± 0.13		0.02
100-04-Z2	8-9 ft	06/13/07	0.38 ± 0.14	J	0.07	0.33 ± 0.13	J	0.05	0.34 ± 0.13	J	0.06
100-05-Z1	3-5 ft	06/13/07	0.85 ± 0.17		0.03	0.72 ± 0.15	J	0.02	0.82 ± 0.16		0.01
100-05-Z2	9-11 ft	06/13/07	1.34 ± 0.25		0.03	0.83 ± 0.17	J	0.03	1.17 ± 0.22		0.02
100-07-Z1	2-3 ft	06/07/07	0.74 ± 0.15		0.04	0.48 ± 0.11		0.02	0.83 ± 0.16		0.01
100-07-Z2	8-9 ft	06/07/07	0.44 ± 0.10		0.02	0.301 ± 0.080		0.022	0.344 ± 0.087		0.017
100-08-Z1	6-7 ft	06/07/07	0.52 ± 0.11		0.03	0.330 ± 0.084		0.020	0.388 ± 0.093		0.019
100-08-Z2	13-14 ft	06/07/07	0.41 ± 0.10		0.03	0.63 ± 0.14		0.02	0.340 ± 0.090		0.022
100-09-Z1	4-5 ft	06/07/07	0.281 ± 0.079		0.036	0.206 ± 0.064	J	0.024	0.245 ± 0.071		0.026
100-09-Z2	15-16 ft	06/07/07	0.238 ± 0.072		0.029	0.175 ± 0.060	J	0.026	0.208 ± 0.066		0.021
100-10-Z1	4-5 ft	06/08/07	0.85 ± 0.17		0.04	0.58 ± 0.13	J	0.01	0.83 ± 0.16		0.02
100-10-Z2	13-14 ft	06/08/07	0.197 ± 0.063		0.033	0.159 ± 0.053	J	0.019	0.191 ± 0.060		0.026
100-11-Z1	3-4 ft	06/07/07	4.52 ± 0.68		0.03	1.23 ± 0.22	J	0.02	4.37 ± 0.66		0.02
100-11-Z2	8-9 ft	06/07/07	2.20 ± 0.36		0.02	0.65 ± 0.13		0.02	2.00 ± 0.33		0.02

Table 3.2-4b Radiological Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Bismuth-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Building 100											
100-01-Z1	0-2 ft	06/13/07	0.31 ± 0.11	J	0.14	0.32 ± 0.14	J	0.21	0.42 ± 0.28	J	0.39
100-01-Z2	9-11 ft	06/13/07	0.249 ± 0.085	J	0.092	0.50 ± 0.17	J	0.19	--		
100-02-Z1	1-2 ft	06/18/07	0.27 ± 0.12		0.16	0.26 ± 0.21	UJ	0.33	--		
100-02-Z2	9-10 ft	06/18/07	0.59 ± 0.13		0.08	0.58 ± 0.16		0.26	--		
100-03-Z1	3-4 ft	06/18/07	0.55 ± 0.15		0.15	0.53 ± 0.22		0.26	--		
100-03-Z2	9-10 ft	06/18/07	0.30 ± 0.11		0.15	0.28 ± 0.17	UJ	0.30	--		
100-04-Z1	3-5 ft	06/13/07	0.49 ± 0.13		0.1	0.33 ± 0.17	UJ	0.35	--		
100-04-Z2	8-9 ft	06/13/07	0.133 ± 0.086	J	0.13	0.20 ± 0.16	UJ	0.24	--		
100-05-Z1	3-5 ft	06/13/07	0.50 ± 0.16		0.21	0.58 ± 0.20		0.30	--		
100-05-Z2	9-11 ft	06/13/07	0.96 ± 0.21		0.20	0.86 ± 0.26		0.39	--		
100-07-Z1	2-3 ft	06/07/07	0.50 ± 0.12		0.08	0.35 ± 0.17	U	0.35	--		
100-07-Z2	8-9 ft	06/07/07	0.20 ± 0.10	J	0.15	0.26 ± 0.12	J	0.19	--		
100-08-Z1	6-7 ft	06/07/07	0.31 ± 0.11	J	0.12	0.17 ± 0.17	UJ	0.27	--		
100-08-Z2	13-14 ft	06/07/07	0.223 ± 0.089	J	0.12	0.11 ± 0.12	UJ	0.20	--		
100-09-Z1	4-5 ft	06/07/07	0.17 ± 0.11		0.16	-0.02 ± 0.59	UJ	0.32	--		
100-09-Z2	15-16 ft	06/07/07	0.216 ± 0.070		0.055	0.109 ± 0.097	UJ	0.14	--		
100-10-Z1	4-5 ft	06/08/07	1.91 ± 0.35		0.15	65.7 ± 6.7	J	0.4	--		
100-10-Z2	13-14 ft	06/08/07	0.091 ± 0.076	UJ	0.12	0.08 ± 0.12	UJ	0.21	--		
100-11-Z1	3-4 ft	06/07/07	0.29 ± 0.15		0.22	3.37 ± 0.46		0.11	1.65 ± 0.68		0.94
100-11-Z2	8-9 ft	06/07/07	0.47 ± 0.13	J	0.16	1.70 ± 0.26	J	0.15	0.76 ± 0.47	J	0.72

Table 3.2-4b Radiological Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Building 100											
100-01-Z1	0-2 ft	06/13/07	7.1 ± 1.1	J	0.7	--			0.51 ± 0.12	J	0.12
100-01-Z2	9-11 ft	06/13/07	8.4 ± 1.2	J	0.5	--			0.381 ± 0.088	J	0.089
100-02-Z1	1-2 ft	06/18/07	4.0 ± 1.0		0.5	--			0.39 ± 0.10		0.09
100-02-Z2	9-10 ft	06/18/07	7.1 ± 1.4		1.1	--			0.88 ± 0.17		0.12
100-03-Z1	3-4 ft	06/18/07	9.5 ± 1.6		0.4	--			0.60 ± 0.12		0.12
100-03-Z2	9-10 ft	06/18/07	7.8 ± 1.3		0.8	--			0.60 ± 0.18		0.16
100-04-Z1	3-5 ft	06/13/07	8.4 ± 1.6		0.6	--			0.53 ± 0.10		0.09
100-04-Z2	8-9 ft	06/13/07	7.4 ± 1.3	J	0.7	--			0.386 ± 0.099	J	0.082
100-05-Z1	3-5 ft	06/13/07	10 ± 1.5		0.9	--			0.79 ± 0.14		0.13
100-05-Z2	9-11 ft	06/13/07	14.7 ± 2.2		0.7	--			1.78 ± 0.26		0.17
100-07-Z1	2-3 ft	06/07/07	6.5 ± 1.4		0.9	--			0.60 ± 0.14		0.13
100-07-Z2	8-9 ft	06/07/07	5.52 ± 0.99	J	0.77	--			0.44 ± 0.12	J	0.11
100-08-Z1	6-7 ft	06/07/07	6.4 ± 1.1	J	0.4	--			0.48 ± 0.13	J	0.11
100-08-Z2	13-14 ft	06/07/07	4.73 ± 0.97	J	0.90	--			0.36 ± 0.10	J	0.09
100-09-Z1	4-5 ft	06/07/07	5.5 ± 1.2		0.6	--			0.36 ± 0.12		0.12
100-09-Z2	15-16 ft	06/07/07	2.48 ± 0.74		0.62	--			0.233 ± 0.058		0.048
100-10-Z1	4-5 ft	06/08/07	7.8 ± 1.3	J	0.5	--			0.70 ± 0.11	J	0.08
100-10-Z2	13-14 ft	06/08/07	5.4 ± 1.1	J	0.4	--			0.117 ± 0.052	J	0.066
100-11-Z1	3-4 ft	06/07/07	10.9 ± 1.6		0.5	18.2 ± 8.5		11	3.44 ± 0.36		0.22
100-11-Z2	8-9 ft	06/07/07	9.2 ± 1.3	J	0.6	25.9 ± 7.5	J	7.7	1.41 ± 0.16	J	0.11

Table 3.2-4b Radiological Results for Building 100 Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Building 100											
100-01-Z1	0-2 ft	06/13/07	0.46 ± 0.11	J	0.10	0.211 ± 0.053	J	0.047	0.79 ± 0.93	UJ	1.2
100-01-Z2	9-11 ft	06/13/07	0.319 ± 0.083	J	0.11	0.115 ± 0.049	J	0.071	--		
100-02-Z1	1-2 ft	06/18/07	0.33 ± 0.11		0.15	--			--		
100-02-Z2	9-10 ft	06/18/07	0.61 ± 0.13		0.12	0.226 ± 0.065		0.054	1.52 ± 0.61	J	1.2
100-03-Z1	3-4 ft	06/18/07	0.75 ± 0.13		0.1	0.160 ± 0.063		0.077	--		
100-03-Z2	9-10 ft	06/18/07	0.426 ± 0.097		0.15	0.091 ± 0.055		0.086	--		
100-04-Z1	3-5 ft	06/13/07	0.51 ± 0.13		0.16	0.272 ± 0.078		0.058	1.78 ± 0.77		1.4
100-04-Z2	8-9 ft	06/13/07	0.227 ± 0.072	J	0.096	--			--		
100-05-Z1	3-5 ft	06/13/07	0.70 ± 0.14		0.19	0.310 ± 0.074		0.065	3.99 ± 0.94		1.7
100-05-Z2	9-11 ft	06/13/07	1.08 ± 0.19		0.19	0.50 ± 0.10		0.06	--		
100-07-Z1	2-3 ft	06/07/07	0.44 ± 0.13		0.16	0.291 ± 0.069		0.039	5.3 ± 1.0		1.4
100-07-Z2	8-9 ft	06/07/07	0.198 ± 0.082	J	0.12	--			--		
100-08-Z1	6-7 ft	06/07/07	0.316 ± 0.094	J	0.11	0.075 ± 0.046	J	0.069	--		
100-08-Z2	13-14 ft	06/07/07	0.258 ± 0.070	J	0.097	--			--		
100-09-Z1	4-5 ft	06/07/07	0.237 ± 0.093		0.13	--			--		
100-09-Z2	15-16 ft	06/07/07	0.152 ± 0.054		0.061	--			--		
100-10-Z1	4-5 ft	06/08/07	0.48 ± 0.11	J	0.13	0.379 ± 0.081		0.055	3.66 ± 0.77		1.6
100-10-Z2	13-14 ft	06/08/07	0.124 ± 0.076	J	0.11	--			--		
100-11-Z1	3-4 ft	06/07/07	0.40 ± 0.16		0.24	1.21 ± 0.17		0.09	19.1 ± 2.4		5.1
100-11-Z2	8-9 ft	06/07/07	0.79 ± 0.19	J	0.15	0.527 ± 0.098	J	0.072	14.2 ± 1.6	J	2.6

Table 3.2-4c Radiological Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238			Thorium-228		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-01-Z1	5-8 ft	06/12/07	0.248 ± 0.071		0.026	0.026 ± 0.024		0.025	0.327 ± 0.083		0.026	0.357 ± 0.090		0.032
SU08-01-Z2	12-14 ft	06/12/07	0.174 ± 0.058		0.028	0.015 ± 0.020	UJ	0.013	0.174 ± 0.057		0.018	0.162 ± 0.065		0.048
SU08-03-Z1	6-8 ft	06/11/07	0.253 ± 0.069		0.017	0.023 ± 0.023		0.012	0.270 ± 0.073		0.026	0.47 ± 0.11		0.03
SU08-03-Z2	14-16 ft	06/11/07	0.235 ± 0.066		0.025	0.014 ± 0.019	UJ	0.026	0.210 ± 0.061		0.021	0.175 ± 0.060		0.028
SU08-04-Z1	6-8 ft	06/11/07	0.265 ± 0.071		0.019	0.004 ± 0.013	UJ	0.012	0.178 ± 0.056		0.019	0.333 ± 0.093		0.044
SU08-04-Z2	10-12 ft	06/11/07	0.129 ± 0.046		0.019	0.002 ± 0.011	U	0.023	0.133 ± 0.048		0.024	0.130 ± 0.051		0.034
SU08-05-Z1	3-7 ft	06/11/07	7.9 ± 1.1		0.02	0.328 ± 0.093		0.023	7.9 ± 1.1		0.03	0.50 ± 0.12		0.03
SU08-05-Z2	14-16 ft	06/11/07	0.183 ± 0.061		0.029	0.009 ± 0.015	UJ	0.023	0.161 ± 0.056		0.011	0.146 ± 0.055		0.028
SU08-06-Z1	5-7 ft	06/11/07	2.22 ± 0.33		0.02	0.132 ± 0.051		0.022	2.18 ± 0.33		0.02	0.337 ± 0.088		0.041
SU08-06-Z2	13-15 ft	06/11/07	0.88 ± 0.16		0.02	0.046 ± 0.031		0.013	0.86 ± 0.16		0.02	0.309 ± 0.083		0.042
SU08-07-Z1	2-3 ft	06/08/07	1.44 ± 0.23		0.02	0.093 ± 0.043		0.012	1.63 ± 0.26		0.02	0.399 ± 0.097		0.027
SU08-07-Z2	14-15 ft	06/08/07	0.146 ± 0.062		0.038	0.012 ± 0.020	UJ	0.030	0.127 ± 0.056		0.014	0.129 ± 0.050		0.036
SU08-08-Z1	3-4 ft	06/08/07	6.27 ± 0.86		0.03	0.264 ± 0.077		0.024	4.28 ± 0.60		0.02	0.55 ± 0.12		0.03
SU08-08-Z2	11-12 ft	06/08/07	0.234 ± 0.067		0.025	0.007 ± 0.014	U	0.024	0.219 ± 0.064		0.025	0.139 ± 0.054		0.030
SU08-09-Z1	6-7 ft	06/06/07	0.53 ± 0.11		0.02	0.028 ± 0.026		0.027	0.400 ± 0.093		0.019	0.51 ± 0.12		0.03
SU08-09-Z2	18-19 ft	06/06/07	0.161 ± 0.052		0.023	0.0 ± 0.0	U	0.01	0.134 ± 0.047		0.009	0.157 ± 0.057		0.033
SU08-10-Z1	6-7 ft	06/06/07	0.56 ± 0.12		0.02	0.050 ± 0.032		0.012	0.59 ± 0.12		0.02	0.60 ± 0.13		0.02
SU08-10-Z2	11-12 ft	06/06/07	0.195 ± 0.063		0.022	0.025 ± 0.024		0.024	0.197 ± 0.064		0.027	0.275 ± 0.079		0.030
SU08-12-Z1	3-4 ft	06/08/07	0.80 ± 0.17		0.03	0.047 ± 0.035		0.029	0.79 ± 0.16		0.01	0.79 ± 0.15		0.03
SU08-12-Z2	10-11 ft	06/08/07	0.294 ± 0.077		0.017	0.016 ± 0.020	UJ	0.025	0.248 ± 0.069		0.020	0.184 ± 0.060		0.027
SU08-13-Z1	2-3 ft	06/06/07	5.40 ± 0.75		0.02	0.235 ± 0.072		0.024	3.39 ± 0.49		0.02	0.57 ± 0.13		0.04
SU08-13-Z2	8-9 ft	06/06/07	0.57 ± 0.12		0.02	0.057 ± 0.035		0.013	0.57 ± 0.12		0.02	0.92 ± 0.17		0.03
SU08-15-Z1	6-7 ft	06/07/07	0.301 ± 0.078		0.020	0.008 ± 0.014	UJ	0.021	0.280 ± 0.075		0.024	0.52 ± 0.12		0.03
SU08-15-Z2	15-16 ft	06/07/07	0.178 ± 0.056		0.025	0.0032 ± 0.009	U	0.020	0.169 ± 0.053		0.009	0.178 ± 0.057		0.020

Table 3.2-4c Radiological Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-230			Thorium-232			Radium-226[11]			Radium-228[12]		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-01-Z1	5-8 ft	06/12/07	0.319 ± 0.083	J	0.020	0.322 ± 0.083		0.017	0.19 ± 0.10		0.14	0.15 ± 0.15	U	0.25
SU08-01-Z2	12-14 ft	06/12/07	0.224 ± 0.071		0.012	0.117 ± 0.049		0.020	0.143 ± 0.085		0.12	0.21 ± 0.15	UJ	0.23
SU08-03-Z1	6-8 ft	06/11/07	0.303 ± 0.082		0.023	0.409 ± 0.099		0.021	0.49 ± 0.12		0.07	0.10 ± 0.19	U	0.34
SU08-03-Z2	14-16 ft	06/11/07	0.146 ± 0.053		0.025	0.137 ± 0.051		0.011	0.138 ± 0.085		0.13	0.11 ± 0.13	UJ	0.21
SU08-04-Z1	6-8 ft	06/11/07	0.254 ± 0.076		0.025	0.342 ± 0.091		0.025	0.202 ± 0.090		0.12	0.28 ± 0.14		0.24
SU08-04-Z2	10-12 ft	06/11/07	0.168 ± 0.056	J	0.023	0.096 ± 0.040		0.019	0.107 ± 0.078	UJ	0.13	0.1 ± 0.13	U	0.22
SU08-05-Z1	3-7 ft	06/11/07	0.52 ± 0.12		0.02	0.372 ± 0.094		0.021	0.34 ± 0.12		0.14	0.27 ± 0.18		0.26
SU08-05-Z2	14-16 ft	06/11/07	0.189 ± 0.064		0.031	0.181 ± 0.061		0.022	0.227 ± 0.068		0.050	0.07 ± 0.11	U	0.19
SU08-06-Z1	5-7 ft	06/11/07	0.333 ± 0.085		0.010	0.320 ± 0.082		0.017	0.203 ± 0.077		0.082	0.17 ± 0.12	U	0.17
SU08-06-Z2	13-15 ft	06/11/07	0.323 ± 0.081		0.019	0.221 ± 0.064		0.021	0.160 ± 0.077		0.11	0.08 ± 0.12	U	0.20
SU08-07-Z1	2-3 ft	06/08/07	0.404 ± 0.097		0.017	0.314 ± 0.082		0.020	0.199 ± 0.083		0.12	0.20 ± 0.13	UJ	0.20
SU08-07-Z2	14-15 ft	06/08/07	0.204 ± 0.061		0.021	0.206 ± 0.061		0.009	0.098 ± 0.066		0.093	0.111 ± 0.088	UJ	0.24
SU08-08-Z1	3-4 ft	06/08/07	0.49 ± 0.11		0.03	0.63 ± 0.14		0.02	0.347 ± 0.090		0.065	0.25 ± 0.12	J	0.24
SU08-08-Z2	11-12 ft	06/08/07	0.164 ± 0.058	J	0.022	0.146 ± 0.054		0.022	1.91 ± 0.35		0.15	65.7 ± 6.7	J	0.4
SU08-09-Z1	6-7 ft	06/06/07	0.394 ± 0.099		0.032	0.46 ± 0.11		0.01	0.33 ± 0.11	J	0.13	0.37 ± 0.16		0.21
SU08-09-Z2	18-19 ft	06/06/07	0.191 ± 0.061	J	0.021	0.161 ± 0.055		0.017	0.095 ± 0.066	UJ	0.11	0.111 ± 0.099	UJ	0.16
SU08-10-Z1	6-7 ft	06/06/07	0.60 ± 0.13	J	0.02	0.55 ± 0.12		0.02	0.30 ± 0.10		0.12	0.25 ± 0.11		0.20
SU08-10-Z2	11-12 ft	06/06/07	0.195 ± 0.064	J	0.026	0.190 ± 0.063		0.011	0.095 ± 0.074	UJ	0.11	0.04 ± 0.13	U	0.24
SU08-12-Z1	3-4 ft	06/08/07	0.64 ± 0.13	J	0.02	0.75 ± 0.15		0.03	0.61 ± 0.15		0.17	0.57 ± 0.16	J	0.24
SU08-12-Z2	10-11 ft	06/08/07	0.247 ± 0.071		0.022	0.170 ± 0.056		0.010	0.213 ± 0.077		0.068	-0.04 ± 1.2	UJ	0.3
SU08-13-Z1	2-3 ft	06/06/07	0.51 ± 0.11		0.02	0.56 ± 0.12		0.03	0.29 ± 0.10	J	0.14	0.42 ± 0.17		0.23
SU08-13-Z2	8-9 ft	06/06/07	0.69 ± 0.14	J	0.02	0.88 ± 0.17		0.03	0.59 ± 0.16	J	0.16	0.60 ± 0.19		0.33
SU08-15-Z1	6-7 ft	06/07/07	0.402 ± 0.098		0.023	0.50 ± 0.11		0.02	0.31 ± 0.11		0.13	0.32 ± 0.15		0.20
SU08-15-Z2	15-16 ft	06/07/07	0.211 ± 0.063		0.020	0.171 ± 0.057		0.025	0.16 ± 0.10		0.15	0.08 ± 0.10	U	0.18

Table 3.2-4c Radiological Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Potassium-40			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-01-Z1	5-8 ft	06/12/07	--			6.9 ± 1.3		0.5	--			0.313 ± 0.091		0.094
SU08-01-Z2	12-14 ft	06/12/07	--			6.7 ± 1.2		0.4	--			0.199 ± 0.067		0.068
SU08-03-Z1	6-8 ft	06/11/07	--			6.9 ± 1.4		1	--			0.365 ± 0.092		0.087
SU08-03-Z2	14-16 ft	06/11/07	--			6.2 ± 1.2		0.6	--			0.255 ± 0.072		0.065
SU08-04-Z1	6-8 ft	06/11/07	--			6.7 ± 1.2		0.7	--			0.309 ± 0.077		0.073
SU08-04-Z2	10-12 ft	06/11/07	--			6.8 ± 1.1		0.5	--			0.135 ± 0.052		0.071
SU08-05-Z1	3-7 ft	06/11/07	--			6.5 ± 1.3		0.6	--			0.350 ± 0.099		0.10
SU08-05-Z2	14-16 ft	06/11/07	--			4.38 ± 0.92		0.53	--			0.105 ± 0.059		0.066
SU08-06-Z1	5-7 ft	06/11/07	--			5.6 ± 1.1		0.7	--			0.47 ± 0.10		0.08
SU08-06-Z2	13-15 ft	06/11/07	--			4.88 ± 0.95		0.80	--			0.261 ± 0.084		0.084
SU08-07-Z1	2-3 ft	06/08/07	--			8.9 ± 1.2	J	0.7	--			0.230 ± 0.078	J	0.088
SU08-07-Z2	14-15 ft	06/08/07	--			4.29 ± 0.97	J	0.79	--			0.254 ± 0.077	J	0.069
SU08-08-Z1	3-4 ft	06/08/07	--			5.0 ± 1.0	J	0.8	--			0.46 ± 0.11	J	0.09
SU08-08-Z2	11-12 ft	06/08/07	--			4.71 ± 0.99	J	0.35	--			0.096 ± 0.061	J	0.077
SU08-09-Z1	6-7 ft	06/06/07	--			6.8 ± 1.2		0.4	--			0.54 ± 0.12		0.1
SU08-09-Z2	18-19 ft	06/06/07	--			4.22 ± 0.88		0.82	--			0.264 ± 0.084		0.079
SU08-10-Z1	6-7 ft	06/06/07	--			8.9 ± 1.2		0.5	--			0.55 ± 0.12		0.11
SU08-10-Z2	11-12 ft	06/06/07	--			5.6 ± 1.0		0.4	--			0.252 ± 0.073		0.066
SU08-12-Z1	3-4 ft	06/08/07	0.76 ± 0.26		0.15	8.7 ± 1.3	J	0.6	--			0.89 ± 0.17	J	0.14
SU08-12-Z2	10-11 ft	06/08/07	--			4.5 ± 1.1	J	0.8	--			0.177 ± 0.098	J	0.098
SU08-13-Z1	2-3 ft	06/06/07	--			5.45 ± 0.98		0.76	--			0.55 ± 0.15		0.13
SU08-13-Z2	8-9 ft	06/06/07	0.84 ± 0.31		0.21	8.8 ± 1.5		0.9	-0.1 ± 5.6	U	11	0.92 ± 0.20		0.16
SU08-15-Z1	6-7 ft	06/07/07	--			8.1 ± 1.2		0.6	--			0.376 ± 0.089		0.093
SU08-15-Z2	15-16 ft	06/07/07	--			5.8 ± 1.2		0.6	--			0.148 ± 0.056		0.070

Table 3.2-4c Radiological Results for the Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-01-Z1	5-8 ft	06/12/07	0.342 ± 0.089		0.087	0.073 ± 0.048	J	0.071	0.15 ± 0.58	UJ	1.0
SU08-01-Z2	12-14 ft	06/12/07	0.134 ± 0.063		0.093	--			--		
SU08-03-Z1	6-8 ft	06/11/07	0.36 ± 0.11		0.14	--			--		
SU08-03-Z2	14-16 ft	06/11/07	0.166 ± 0.064		0.081	--			--		
SU08-04-Z1	6-8 ft	06/11/07	0.347 ± 0.093		0.12	0.086 ± 0.047		0.066	--		
SU08-04-Z2	10-12 ft	06/11/07	0.125 ± 0.065		0.11	--			--		
SU08-05-Z1	3-7 ft	06/11/07	0.42 ± 0.10		0.14	0.164 ± 0.060		0.072	5.39 ± 0.95	J	1.5
SU08-05-Z2	14-16 ft	06/11/07	0.124 ± 0.057		0.10	0.066 ± 0.028		0.035	--		
SU08-06-Z1	5-7 ft	06/11/07	0.219 ± 0.075		0.10	0.079 ± 0.048		0.072	--		
SU08-06-Z2	13-15 ft	06/11/07	0.150 ± 0.057		0.10	--			0.39 ± 0.25	UJ	0.96
SU08-07-Z1	2-3 ft	06/08/07	0.236 ± 0.070	J	0.11	0.071 ± 0.037		0.055	--		
SU08-07-Z2	14-15 ft	06/08/07	0.162 ± 0.066	J	0.093	--			--		
SU08-08-Z1	3-4 ft	06/08/07	0.285 ± 0.070	J	0.088	0.078 ± 0.047		0.072	3.27 ± 0.89		0.88
SU08-08-Z2	11-12 ft	06/08/07	0.148 ± 0.060	J	0.11	--			--		
SU08-09-Z1	6-7 ft	06/06/07	0.252 ± 0.082		0.12	0.089 ± 0.043		0.060	--		
SU08-09-Z2	18-19 ft	06/06/07	0.112 ± 0.058		0.085	--			--		
SU08-10-Z1	6-7 ft	06/06/07	0.278 ± 0.083	J	0.11	0.181 ± 0.042		0.031	--		
SU08-10-Z2	11-12 ft	06/06/07	0.113 ± 0.065	J	0.094	--			--		
SU08-12-Z1	3-4 ft	06/08/07	0.72 ± 0.16	J	0.13	0.401 ± 0.081		0.059	--		
SU08-12-Z2	10-11 ft	06/08/07	0.132 ± 0.071	J	0.10	--			--		
SU08-13-Z1	2-3 ft	06/06/07	0.246 ± 0.078		0.13	0.094 ± 0.042		0.055	1.84 ± 0.54		1.0
SU08-13-Z2	8-9 ft	06/06/07	0.58 ± 0.13		0.13	0.255 ± 0.077		0.089	0.6 ± 1.8	U	3.1
SU08-15-Z1	6-7 ft	06/07/07	0.314 ± 0.085		0.10	0.194 ± 0.055		0.048	--		
SU08-15-Z2	15-16 ft	06/07/07	0.127 ± 0.066		0.12	--			--		

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-01-Z1	4-5.5 ft	05/23/07	0.302 ± 0.081		0.024	0.022 ± 0.024	UJ	0.026	0.281 ± 0.077		0.024
SU09-01-Z2	12-13.5 ft	05/23/07	0.199 ± 0.060		0.019	0.022 ± 0.021		0.021	0.215 ± 0.063		0.01
SU09-01-Z3	20-21.5 ft	05/23/07	0.245 ± 0.075		0.027	0.01 ± 0.017	UJ	0.026	0.198 ± 0.067		0.029
SU09-02-Z1	4-5 ft	05/16/07	0.62 ± 0.12		0.01	0.021 ± 0.021	J	0.020	0.55 ± 0.11		0.02
SU09-02-Z2	12-13.5 ft	05/16/07	0.120 ± 0.047		0.025	0.002 ± 0.012	U	0.026	0.150 ± 0.052		0.018
SU09-03-Z1	4-5 ft	05/16/07	0.59 ± 0.12		0.02	0.045 ± 0.030	J	0.021	0.49 ± 0.11		0.03
SU09-03-Z2	10.5-12 ft	05/16/07	0.96 ± 0.17		0.02	0.066 ± 0.036	J	0.012	1.07 ± 0.19		0.02
SU09-04-Z1	2-4 ft	05/15/07	0.189 ± 0.056		0.015	0.012 ± 0.015	UJ	0.019	0.134 ± 0.047		0.023
SU09-04-Z2	13-15 ft	05/15/07	0.86 ± 0.16		0.01	0.040 ± 0.028		0.021	0.80 ± 0.15		0.02
SU09-05-Z1	1-3 ft	05/15/07	2.97 ± 0.43		0.02	0.183 ± 0.062		0.012	3.17 ± 0.46		0.02
SU09-05-Z2	9-11 ft	05/15/07	0.74 ± 0.14		0.02	0.058 ± 0.034		0.012	0.99 ± 0.17		0.02
SU09-06-Z1	2.5-3.5 ft	05/21/07	0.347 ± 0.090		0.023	0.001 ± 0.014	U	0.031	0.294 ± 0.081		0.025
SU09-06-Z2	14-15.5 ft	05/21/07	0.149 ± 0.052		0.021	0.005 ± 0.014	UJ	0.013	0.165 ± 0.055		0.018
SU09-06-Z3	17-18.5 ft	05/21/07	0.285 ± 0.085		0.022	-0.003 ± 0.015	U	0.033	0.246 ± 0.078		0.013
SU09-07-Z1	7-9 ft	05/15/07	0.225 ± 0.064		0.025	0.005 ± 0.014	U	0.025	0.213 ± 0.061		0.022
SU09-07-Z2	14-15 ft	05/15/07	0.182 ± 0.058		0.027	0.013 ± 0.018	UJ	0.012	0.112 ± 0.043	U	0.019
SU09-08/D-Z1	5-6 ft	05/15/07	0.81 ± 0.16		0.03	0.049 ± 0.033		0.013	0.99 ± 0.18		0.02
SU09-08/D-Z1A	10.5-12 ft	05/16/07	0.277 ± 0.073		0.016	0.017 ± 0.019	UJ	0.020	0.280 ± 0.074		0.025
SU09-08/D-Z2	17-18.5 ft	05/15/07	0.136 ± 0.047		0.022	0.012 ± 0.015	UJ	0.019	0.221 ± 0.062		0.020
SU09-08/D-Z3	26-27 ft	05/15/07	0.163 ± 0.057		0.024	0.013 ± 0.019	UJ	0.027	0.097 ± 0.042	J	0.011
SU09-08/D-Z4	36.5-37 ft	05/15/07	0.174 ± 0.057		0.025	0.028 ± 0.025	J	0.013	0.207 ± 0.063		0.025
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.53 ± 0.11		0.02	0.028 ± 0.025		0.013	0.45 ± 0.10		0.02
SU09-08/D-Z6	50-52 ft	05/15/07	0.133 ± 0.046		0.020	0.017 ± 0.019	UJ	0.011	0.134 ± 0.047		0.023
SU09-09-Z1	4-5 ft	05/16/07	0.331 ± 0.080		0.024	0.001 ± 0.011	U	0.025	0.255 ± 0.067		0.021
SU09-09-Z2	12-13 ft	05/16/07	0.288 ± 0.079		0.030	0.015 ± 0.020	UJ	0.013	0.256 ± 0.073		0.021
SU09-10-Z1	1-2 ft	05/17/07	2.36 ± 0.36		0.02	0.212 ± 0.068		0.012	2.28 ± 0.35		0.02
SU09-10-Z2	14-15 ft	05/17/07	0.139 ± 0.050		0.028	0.014 ± 0.018	UJ	0.012	0.158 ± 0.053		0.019
SU09-10-Z3	20-21 ft	05/17/07	0.133 ± 0.048		0.026	0.013 ± 0.018	UJ	0.012	0.157 ± 0.052		0.019
SU09-10-Z4	28-29 ft	05/17/07	0.075 ± 0.035	J	0.022	0.016 ± 0.018	UJ	0.019	0.107 ± 0.042		0.020
SU09-10-Z5	36-37 ft	05/17/07	0.196 ± 0.060		0.022	0.007 ± 0.015	UJ	0.024	0.195 ± 0.060		0.01
SU09-10-Z6	44-45 ft	05/17/07	0.153 ± 0.052		0.020	0.005 ± 0.013	UJ	0.012	0.151 ± 0.052		0.024
SU09-10-Z7	52-53.5 ft	05/17/07	0.133 ± 0.047		0.020	0.008 ± 0.013	UJ	0.020	0.173 ± 0.054		0.016

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-11-Z1	2-3 ft	05/17/07	4.13 ± 0.58		0.02	0.293 ± 0.081		0.012	4.91 ± 0.68		0.02
SU09-11-Z2	12-13 ft	05/17/07	0.152 ± 0.053		0.024	-0.002 ± 0.011	U	0.025	0.211 ± 0.062		0.017
SU09-12-Z1	1.5-2.5 ft	05/21/07	6.78 ± 0.94		0.02	0.309 ± 0.087		0.013	5.67 ± 0.79		0.02
SU09-12-Z2	12-13 ft	05/21/07	0.186 ± 0.060		0.021	0.014 ± 0.018	UJ	0.023	0.155 ± 0.054		0.018
SU09-13-Z1	4-5 ft	05/16/07	0.51 ± 0.11		0.02	0.013 ± 0.018	UJ	0.012	0.65 ± 0.13		0.02
SU09-13-Z2	13-14.5 ft	05/16/07	0.248 ± 0.071		0.023	0.01 ± 0.017	UJ	0.013	0.169 ± 0.057		0.026
SU09-14-Z1	3-5 ft	05/15/07	0.37 ± 0.11		0.04	0.026 ± 0.032	UJ	0.040	0.313 ± 0.099		0.028
SU09-14-Z2	13-15 ft	05/15/07	0.170 ± 0.065		0.030	0.024 ± 0.026	UJ	0.029	0.215 ± 0.075		0.039
SU13-01-Z1	6-7.5 ft	05/21/07	5.66 ± 0.78		0.02	0.274 ± 0.079		0.024	5.64 ± 0.78		0.02
SU13-01-Z2	9-10.5 ft	05/21/07	0.71 ± 0.14		0.02	0.017 ± 0.021	UJ	0.026	0.69 ± 0.14		0.02
SU13-02-Z1	6-7.5 ft	05/21/07	0.264 ± 0.077		0.025	0.011 ± 0.019	UJ	0.014	0.281 ± 0.079		0.023
SU13-02-Z2	13-14.5 ft	05/21/07	0.171 ± 0.055		0.019	0.009 ± 0.016	UJ	0.012	0.231 ± 0.065		0.021
SU13-03-Z1	2-3 ft	05/21/07	1.53 ± 0.26		0.03	0.068 ± 0.040		0.024	1.51 ± 0.26		0.03
SU13-03-Z2	13-14 ft	05/21/07	0.169 ± 0.055		0.017	0.021 ± 0.022	UJ	0.024	0.177 ± 0.056		0.01
SU13-04-Z1	6-7 ft	05/22/07	0.47 ± 0.11		0.02	0.045 ± 0.032		0.023	0.50 ± 0.11		0.02
SU13-04-Z2	8.5-9.5 ft	05/22/07	0.299 ± 0.081		0.028	0.008 ± 0.016	U	0.027	0.318 ± 0.084		0.022
SU13-05-Z1	2-3 ft	05/22/07	1.58 ± 0.27		0.03	0.114 ± 0.055		0.015	1.39 ± 0.25		0.02
SU13-05-Z2	12-13.5 ft	05/22/07	0.46 ± 0.10		0.02	0.052 ± 0.033		0.013	0.47 ± 0.10		0.01
SU13-06-Z1	4-5 ft	05/22/07	0.90 ± 0.17		0.03	0.025 ± 0.026	UJ	0.031	0.89 ± 0.17		0.03
SU13-06-Z2	8-9 ft	05/22/07	0.267 ± 0.075		0.023	0.002 ± 0.012	U	0.026	0.256 ± 0.072		0.021
SU13-08-Z1	4.5-5.5 ft	05/22/07	1.50 ± 0.26		0.01	0.071 ± 0.042		0.032	1.56 ± 0.27		0.01
SU13-08-Z2	13-14 ft	05/22/07	0.124 ± 0.046		0.017	0.018 ± 0.019	UJ	0.021	0.126 ± 0.047		0.020
SU13-09-Z1	5-6 ft	05/22/07	0.61 ± 0.13		0.01	0.019 ± 0.022	UJ	0.024	0.54 ± 0.12		0.01
SU13-09-Z2	8-9 ft	05/22/07	0.273 ± 0.075		0.025	0.005 ± 0.014	UJ	0.013	0.193 ± 0.061		0.021
SU13-10-Z1	1.5-2.5 ft	05/22/07	1.89 ± 0.31		0.01	0.070 ± 0.040		0.027	1.92 ± 0.31		0.01
SU13-10-Z2	12.5-13.5 f	05/22/07	0.188 ± 0.076		0.034	0.008 ± 0.022	UJ	0.021	0.218 ± 0.082		0.037
SU13-11-Z1	0-8 ft	05/21/07	0.56 ± 0.13		0.02	0.026 ± 0.026		0.025	0.72 ± 0.15		0.01
SU13-11-Z2	8-16 ft	05/21/07	0.122 ± 0.080	J	0.064	-0.003 ± 0.030	UJ	0.061	0.141 ± 0.087	J	0.069
SU13-12-Z1	0-8 ft	05/21/07	0.92 ± 0.17		0.02	0.061 ± 0.038		0.014	0.87 ± 0.17		0.02
SU13-12-Z2	8-16 ft	05/21/07	0.375 ± 0.091		0.022	0.007 ± 0.015	U	0.025	0.309 ± 0.080		0.022
SU13-13-Z1	0-8 ft	05/21/07	0.51 ± 0.11		0.01	0.009 ± 0.015	UJ	0.023	0.45 ± 0.10		0.01
SU13-13-Z2	8-16 ft	05/21/07	0.223 ± 0.071		0.027	0.011 ± 0.020	UJ	0.015	0.245 ± 0.075		0.027
SU13-14-Z1	0-8 ft	05/21/07	1.20 ± 0.25		0.03	0.040 ± 0.039		0.038	1.12 ± 0.24		0.04
SU13-14-Z2	8-16 ft	05/21/07	0.178 ± 0.055		0.018	0.0 ± 0.0	U	0.01	0.180 ± 0.055		0.020
SU13-15-Z1	0-8 ft	05/21/07	0.73 ± 0.15		0.02	0.028 ± 0.028		0.015	0.62 ± 0.14		0.01
SU13-15-Z2	8-16 ft	05/21/07	0.264 ± 0.073		0.023	0.018 ± 0.020	UJ	0.022	0.356 ± 0.088		0.023

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU14-01-Z1	3-4 ft	05/23/07	0.74 ± 0.15		0.03	0.035 ± 0.030		0.029	0.81 ± 0.16		0.01
SU14-01-Z2	13.5-14.5 f	05/23/07	0.200 ± 0.062		0.021	0.006 ± 0.016	U	0.028	0.179 ± 0.058		0.023
SU14-02-Z1	1.5-2.5 ft	05/23/07	2.24 ± 0.35		0.02	0.130 ± 0.055		0.014	1.94 ± 0.31		0.02
SU14-02-Z2	12-13 ft	05/23/07	0.166 ± 0.055		0.022	0.012 ± 0.018	UJ	0.025	0.173 ± 0.056		0.022
SU14-04-Z1	5-7 ft	05/24/07	0.47 ± 0.10		0.02	0.016 ± 0.020	UJ	0.025	0.283 ± 0.075		0.010
SU14-04-Z2	9-11 ft	05/24/07	0.362 ± 0.088		0.020	0.020 ± 0.023	UJ	0.028	0.273 ± 0.074		0.022
SU14-05-Z1	4-6 ft	05/24/07	0.271 ± 0.074		0.020	0.019 ± 0.022	UJ	0.013	0.252 ± 0.071		0.017
SU14-05-Z2	12-14 ft	05/24/07	0.246 ± 0.067		0.019	0.026 ± 0.024		0.012	0.320 ± 0.079		0.016
SU14-05-Z3	17-18.5 ft	05/24/07	0.152 ± 0.051		0.019	0.008 ± 0.013	UJ	0.020	0.107 ± 0.041		0.016
SU14-06-Z1	4-6 ft	05/24/07	0.170 ± 0.056		0.020	0.005 ± 0.013	UJ	0.013	0.170 ± 0.056		0.017
SU14-06-Z2	12-14 ft	05/24/07	0.161 ± 0.054		0.020	0.008 ± 0.014	UJ	0.021	0.173 ± 0.056		0.017
SU14-07-Z1	4-6 ft	05/23/07	0.356 ± 0.090		0.022	0.020 ± 0.023	UJ	0.014	0.316 ± 0.083		0.018
SU14-07-Z2	13-15 ft	05/23/07	0.193 ± 0.062		0.022	0.004 ± 0.011	U	0.023	0.238 ± 0.070		0.018
SU14-08-Z1	1.5-2.5 ft	05/24/07	0.389 ± 0.092		0.026	0.023 ± 0.025	UJ	0.030	0.360 ± 0.088		0.024
SU14-08-Z2	8-10 ft	05/24/07	0.297 ± 0.076		0.024	0.007 ± 0.014	U	0.024	0.349 ± 0.084		0.019
SU14-09-Z1	2-4 ft	05/23/07	0.50 ± 0.12		0.03	0.020 ± 0.024	UJ	0.030	0.62 ± 0.13		0.02
SU14-09-Z2	12-14 ft	05/23/07	0.124 ± 0.046		0.021	0.025 ± 0.023		0.024	0.124 ± 0.046		0.019
SU14-11-Z1	6-8 ft	05/23/07	0.77 ± 0.15		0.01	0.016 ± 0.022	UJ	0.029	0.396 ± 0.095		0.011
SU14-11-Z2	13-15 ft	05/23/07	0.186 ± 0.057		0.019	0.009 ± 0.015	UJ	0.012	0.197 ± 0.059		0.016
SU14-12-Z1	6-8 ft	05/23/07	0.255 ± 0.071		0.020	0.005 ± 0.014	UJ	0.013	0.236 ± 0.068		0.017
SU14-12-Z2	13-15 ft	05/23/07	0.168 ± 0.057		0.021	0.024 ± 0.023		0.023	0.168 ± 0.057		0.018
SU14-13-Z1	5-7 ft	05/22/07	5.60 ± 0.78		0.02	0.260 ± 0.077		0.012	0.359 ± 0.086		0.016
SU14-13-Z2	13-15 ft	05/22/07	1.51 ± 0.26		0.02	0.048 ± 0.034		0.014	0.258 ± 0.075		0.025
SU14-14-Z1	4-6 ft	05/22/07	0.71 ± 0.15		0.03	0.043 ± 0.034		0.030	0.74 ± 0.15		0.01
SU14-14-Z2	8-10 ft	05/22/07	0.288 ± 0.077		0.020	0.011 ± 0.019	UJ	0.028	0.205 ± 0.063		0.023
SU14-15-Z1	2-4 ft	05/22/07	0.53 ± 0.12		0.02	0.032 ± 0.028		0.014	0.52 ± 0.12		0.01
SU14-15-Z2	10-12 ft	05/22/07	0.206 ± 0.062		0.022	0.003 ± 0.010	U	0.021	0.231 ± 0.066		0.022
SU14-16-Z1	2-4 ft	05/22/07	2.45 ± 0.38		0.02	0.092 ± 0.045		0.022	1.79 ± 0.29		0.02
SU14-16-Z2	10-12 ft	05/22/07	0.189 ± 0.060		0.023	0.018 ± 0.020	UJ	0.022	0.111 ± 0.045		0.024
SU14-17-Z1	3-5 ft	05/22/07	0.74 ± 0.14		0.02	0.021 ± 0.022	UJ	0.025	0.79 ± 0.15		0.01
SU14-17-Z2	8-10 ft	05/22/07	0.294 ± 0.079		0.023	0.017 ± 0.021	UJ	0.026	0.231 ± 0.068		0.023
SU14-18-Z1	2-4 ft	05/22/07	0.66 ± 0.14		0.03	0.025 ± 0.025		0.024	0.56 ± 0.12		0.03
SU14-18-Z2	13-15 ft	05/22/07	0.158 ± 0.053		0.017	0.009 ± 0.016	UJ	0.012	0.149 ± 0.051		0.020
SU14-19-Z1	1-3 ft	05/23/07	1.36 ± 0.23		0.02	0.070 ± 0.039		0.026	0.88 ± 0.16		0.02
SU14-19-Z2	14-16 ft	05/23/07	0.136 ± 0.050		0.020	0.01 ± 0.017	UJ	0.013	0.111 ± 0.044		0.010
SU14-20-Z1	1-3 ft	05/23/07	1.20 ± 0.21		0.02	0.066 ± 0.037		0.013	0.91 ± 0.17		0.02
SU14-20-Z2	8-10 ft	05/23/07	0.45 ± 0.10		0.02	0.004 ± 0.011	U	0.023	0.49 ± 0.11		0.02

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-01-Z1	4-5.5 ft	05/23/07	0.397 ± 0.099		0.040	0.291 ± 0.079	J	0.021	0.334 ± 0.087		0.025
SU09-01-Z2	12-13.5 ft	05/23/07	0.179 ± 0.070		0.053	0.209 ± 0.069	J	0.024	0.171 ± 0.062		0.026
SU09-01-Z3	20-21.5 ft	05/23/07	0.230 ± 0.073		0.043	0.189 ± 0.061	J	0.018	0.233 ± 0.070		0.025
SU09-02-Z1	4-5 ft	05/16/07	0.79 ± 0.15		0.04	0.59 ± 0.12	J	0.02	0.78 ± 0.15		0.009
SU09-02-Z2	12-13.5 ft	05/16/07	0.174 ± 0.063		0.042	0.146 ± 0.053	J	0.025	0.128 ± 0.049		0.021
SU09-03-Z1	4-5 ft	05/16/07	0.46 ± 0.11		0.04	0.46 ± 0.11		0.02	0.51 ± 0.11		0.03
SU09-03-Z2	10.5-12 ft	05/16/07	1.20 ± 0.24		0.05	1.07 ± 0.22		0.03	1.26 ± 0.24		0.03
SU09-04-Z1	2-4 ft	05/15/07	0.267 ± 0.076		0.036	0.253 ± 0.071	J	0.017	0.192 ± 0.061		0.024
SU09-04-Z2	13-15 ft	05/15/07	0.84 ± 0.16		0.04	0.79 ± 0.15	J	0.02	0.90 ± 0.17		0.01
SU09-05-Z1	1-3 ft	05/15/07	1.05 ± 0.19		0.03	0.71 ± 0.14		0.02	0.90 ± 0.17		0.02
SU09-05-Z2	9-11 ft	05/15/07	1.16 ± 0.21		0.03	0.82 ± 0.16		0.02	0.91 ± 0.17		0.03
SU09-06-Z1	2.5-3.5 ft	05/21/07	0.270 ± 0.085		0.041	0.279 ± 0.084		0.028	0.219 ± 0.072		0.021
SU09-06-Z2	14-15.5 ft	05/21/07	0.270 ± 0.092		0.035	0.200 ± 0.079		0.043	0.279 ± 0.094		0.038
SU09-06-Z3	17-18.5 ft	05/21/07	0.298 ± 0.082		0.030	0.268 ± 0.076		0.018	0.332 ± 0.087		0.011
SU09-07-Z1	7-9 ft	05/15/07	0.304 ± 0.079		0.026	0.311 ± 0.079		0.019	0.278 ± 0.074		0.019
SU09-07-Z2	14-15 ft	05/15/07	0.195 ± 0.067		0.041	0.249 ± 0.073		0.026	0.192 ± 0.063		0.025
SU09-08/D-Z1	5-6 ft	05/15/07	1.11 ± 0.20		0.04	0.90 ± 0.17		0.02	1.10 ± 0.20		0.02
SU09-08/D-Z1A	10.5-12 ft	05/16/07	0.220 ± 0.071		0.040	0.226 ± 0.069	J	0.019	0.258 ± 0.076		0.026
SU09-08/D-Z2	17-18.5 ft	05/15/07	0.142 ± 0.053		0.028	0.148 ± 0.053	U	0.023	0.093 ± 0.041	J	0.025
SU09-08/D-Z3	26-27 ft	05/15/07	0.091 ± 0.038	J	0.018	0.139 ± 0.049	U	0.020	0.140 ± 0.048		0.016
SU09-08/D-Z4	36.5-37 ft	05/15/07	0.130 ± 0.055		0.043	0.160 ± 0.057	U	0.027	0.125 ± 0.049		0.025
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.90 ± 0.17		0.05	0.61 ± 0.13		0.02	0.92 ± 0.17		0.02
SU09-08/D-Z6	50-52 ft	05/15/07	0.222 ± 0.069		0.046	0.120 ± 0.045	J	0.022	0.226 ± 0.064		0.020
SU09-09-Z1	4-5 ft	05/16/07	0.309 ± 0.080		0.035	0.314 ± 0.079	J	0.022	0.251 ± 0.068		0.022
SU09-09-Z2	12-13 ft	05/16/07	0.340 ± 0.095		0.046	0.311 ± 0.088		0.030	0.292 ± 0.083		0.020
SU09-10-Z1	1-2 ft	05/17/07	0.47 ± 0.11		0.03	0.380 ± 0.090		0.01	0.47 ± 0.10		0.02
SU09-10-Z2	14-15 ft	05/17/07	0.190 ± 0.066		0.042	0.172 ± 0.059	J	0.026	0.149 ± 0.054		0.021
SU09-10-Z3	20-21 ft	05/17/07	0.156 ± 0.055		0.028	0.169 ± 0.056	U	0.020	0.129 ± 0.048		0.01
SU09-10-Z4	28-29 ft	05/17/07	0.109 ± 0.047		0.031	0.136 ± 0.051	U	0.027	0.116 ± 0.046		0.018
SU09-10-Z5	36-37 ft	05/17/07	0.245 ± 0.071		0.026	0.181 ± 0.059		0.010	0.209 ± 0.064		0.017
SU09-10-Z6	44-45 ft	05/17/07	0.347 ± 0.092		0.039	0.223 ± 0.068	J	0.018	0.340 ± 0.089		0.026
SU09-10-Z7	52-53.5 ft	05/17/07	0.285 ± 0.077		0.033	0.233 ± 0.067		0.021	0.313 ± 0.080		0.023

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-11-Z1	2-3 ft	05/17/07	0.242 ± 0.073		0.042	0.224 ± 0.066	J	0.020	0.288 ± 0.077		0.022
SU09-11-Z2	12-13 ft	05/17/07	0.176 ± 0.067		0.046	0.228 ± 0.072		0.023	0.211 ± 0.069		0.012
SU09-12-Z1	1.5-2.5 ft	05/21/07	0.55 ± 0.12		0.03	0.53 ± 0.11		0.02	0.67 ± 0.14		0.02
SU09-12-Z2	12-13 ft	05/21/07	0.145 ± 0.054		0.035	0.182 ± 0.058		0.017	0.162 ± 0.055		0.020
SU09-13-Z1	4-5 ft	05/16/07	0.83 ± 0.16		0.03	0.59 ± 0.12		0.02	0.71 ± 0.14		0.03
SU09-13-Z2	13-14.5 ft	05/16/07	0.204 ± 0.064		0.028	0.246 ± 0.071		0.020	0.207 ± 0.064		0.020
SU09-14-Z1	3-5 ft	05/15/07	0.45 ± 0.10		0.04	0.268 ± 0.073		0.023	0.396 ± 0.093		0.019
SU09-14-Z2	13-15 ft	05/15/07	0.150 ± 0.054		0.037	0.174 ± 0.054	U	0.016	0.145 ± 0.050		0.023
SU13-01-Z1	6-7.5 ft	05/21/07	0.49 ± 0.11		0.03	0.308 ± 0.080		0.017	0.424 ± 0.099		0.017
SU13-01-Z2	9-10.5 ft	05/21/07	0.274 ± 0.079		0.034	0.44 ± 0.11		0.02	0.359 ± 0.092		0.011
SU13-02-Z1	6-7.5 ft	05/21/07	0.417 ± 0.097		0.027	0.288 ± 0.076		0.021	0.411 ± 0.096		0.01
SU13-02-Z2	13-14.5 ft	05/21/07	0.236 ± 0.069		0.029	0.206 ± 0.062		0.016	0.248 ± 0.069		0.016
SU13-03-Z1	2-3 ft	05/21/07	0.50 ± 0.11		0.03	0.50 ± 0.11		0.02	0.54 ± 0.12		0.02
SU13-03-Z2	13-14 ft	05/21/07	0.153 ± 0.058		0.034	0.194 ± 0.064		0.019	0.126 ± 0.050		0.019
SU13-04-Z1	6-7 ft	05/22/07	0.43 ± 0.10		0.03	0.319 ± 0.082		0.017	0.49 ± 0.11		0.02
SU13-04-Z2	8.5-9.5 ft	05/22/07	0.259 ± 0.075		0.037	0.198 ± 0.061		0.020	0.237 ± 0.068		0.022
SU13-05-Z1	2-3 ft	05/22/07	0.55 ± 0.12		0.04	0.42 ± 0.10		0.02	0.66 ± 0.14		0.02
SU13-05-Z2	12-13.5 ft	05/22/07	0.309 ± 0.082		0.032	0.362 ± 0.089		0.017	0.331 ± 0.083		0.017
SU13-06-Z1	4-5 ft	05/22/07	0.52 ± 0.11		0.03	0.375 ± 0.090		0.016	0.55 ± 0.12		0.01
SU13-06-Z2	8-9 ft	05/22/07	0.214 ± 0.067		0.030	0.275 ± 0.077	J	0.018	0.223 ± 0.067		0.018
SU13-08-Z1	4.5-5.5 ft	05/22/07	0.65 ± 0.14		0.03	0.56 ± 0.12		0.02	0.61 ± 0.13		0.01
SU13-08-Z2	13-14 ft	05/22/07	0.163 ± 0.058		0.031	0.195 ± 0.063		0.024	0.193 ± 0.063		0.011
SU13-09-Z1	5-6 ft	05/22/07	0.41 ± 0.10		0.03	0.355 ± 0.090		0.018	0.396 ± 0.097		0.018
SU13-09-Z2	8-9 ft	05/22/07	0.224 ± 0.068		0.041	0.252 ± 0.070		0.022	0.201 ± 0.060		0.019
SU13-10-Z1	1.5-2.5 ft	05/22/07	0.80 ± 0.17		0.03	0.50 ± 0.12		0.02	0.78 ± 0.16		0.02
SU13-10-Z2	12.5-13.5 f	05/22/07	0.177 ± 0.060		0.032	0.162 ± 0.056		0.025	0.152 ± 0.053		0.020
SU13-11-Z1	0-8 ft	05/21/07	0.55 ± 0.13		0.03	0.54 ± 0.13		0.02	0.53 ± 0.12		0.02
SU13-11-Z2	8-16 ft	05/21/07	0.102 ± 0.048		0.033	0.106 ± 0.047		0.026	0.132 ± 0.053		0.026
SU13-12-Z1	0-8 ft	05/21/07	0.70 ± 0.17		0.07	0.48 ± 0.13		0.04	0.66 ± 0.16		0.03
SU13-12-Z2	8-16 ft	05/21/07	0.253 ± 0.076		0.031	0.41 ± 0.10		0.02	0.231 ± 0.071		0.024
SU13-13-Z1	0-8 ft	05/21/07	0.52 ± 0.13		0.05	0.38 ± 0.10	J	0.02	0.45 ± 0.12		0.03
SU13-13-Z2	8-16 ft	05/21/07	0.305 ± 0.087		0.041	0.225 ± 0.070		0.019	0.281 ± 0.080		0.012
SU13-14-Z1	0-8 ft	05/21/07	0.64 ± 0.15		0.05	0.50 ± 0.12	J	0.02	0.76 ± 0.16		0.03
SU13-14-Z2	8-16 ft	05/21/07	0.181 ± 0.066		0.048	0.184 ± 0.061	J	0.021	0.166 ± 0.058		0.024
SU13-15-Z1	0-8 ft	05/21/07	1.00 ± 0.21		0.04	0.80 ± 0.18		0.02	0.99 ± 0.21		0.01
SU13-15-Z2	8-16 ft	05/21/07	0.31 ± 0.11		0.05	0.230 ± 0.088		0.035	0.245 ± 0.091		0.018

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU14-01-Z1	3-4 ft	05/23/07	1.09 ± 0.20		0.03	0.93 ± 0.18		0.02	1.26 ± 0.23		0.02
SU14-01-Z2	13.5-14.5 f	05/23/07	0.195 ± 0.064		0.036	0.254 ± 0.072		0.010	0.219 ± 0.066		0.023
SU14-02-Z1	1.5-2.5 ft	05/23/07	0.41 ± 0.10		0.03	0.51 ± 0.12		0.02	0.66 ± 0.14		0.02
SU14-02-Z2	12-13 ft	05/23/07	0.297 ± 0.083		0.027	0.207 ± 0.066		0.022	0.211 ± 0.067		0.019
SU14-04-Z1	5-7 ft	05/24/07	0.357 ± 0.091		0.031	0.289 ± 0.079		0.021	0.285 ± 0.078		0.018
SU14-04-Z2	9-11 ft	05/24/07	0.250 ± 0.074		0.036	0.254 ± 0.073		0.010	0.239 ± 0.070		0.023
SU14-05-Z1	4-6 ft	05/24/07	0.277 ± 0.075		0.027	0.260 ± 0.071		0.016	0.333 ± 0.084		0.021
SU14-05-Z2	12-14 ft	05/24/07	0.328 ± 0.088		0.031	0.369 ± 0.094		0.021	0.241 ± 0.071		0.011
SU14-05-Z3	17-18.5 ft	05/24/07	0.125 ± 0.049		0.026	0.147 ± 0.053		0.021	0.122 ± 0.048		0.021
SU14-06-Z1	4-6 ft	05/24/07	0.269 ± 0.079		0.036	0.220 ± 0.069		0.024	0.257 ± 0.075		0.019
SU14-06-Z2	12-14 ft	05/24/07	0.217 ± 0.071		0.046	0.165 ± 0.057		0.027	0.141 ± 0.051		0.022
SU14-07-Z1	4-6 ft	05/23/07	0.386 ± 0.099		0.032	0.347 ± 0.091		0.019	0.392 ± 0.099		0.011
SU14-07-Z2	13-15 ft	05/23/07	0.386 ± 0.094		0.028	0.220 ± 0.065		0.020	0.47 ± 0.11		0.01
SU14-08-Z1	1.5-2.5 ft	05/24/07	0.43 ± 0.11		0.03	0.44 ± 0.11		0.03	0.43 ± 0.11		0.03
SU14-08-Z2	8-10 ft	05/24/07	0.285 ± 0.077		0.030	0.300 ± 0.078		0.016	0.256 ± 0.071		0.01
SU14-09-Z1	2-4 ft	05/23/07	0.79 ± 0.18		0.06	0.63 ± 0.15		0.04	0.73 ± 0.16		0.03
SU14-09-Z2	12-14 ft	05/23/07	0.210 ± 0.066		0.026	0.194 ± 0.063		0.026	0.164 ± 0.058		0.027
SU14-11-Z1	6-8 ft	05/23/07	0.53 ± 0.12		0.04	0.45 ± 0.11		0.02	0.57 ± 0.13		0.01
SU14-11-Z2	13-15 ft	05/23/07	0.260 ± 0.078		0.032	0.314 ± 0.086		0.019	0.258 ± 0.076		0.011
SU14-12-Z1	6-8 ft	05/23/07	0.328 ± 0.086		0.025	0.263 ± 0.075		0.021	0.384 ± 0.095		0.021
SU14-12-Z2	13-15 ft	05/23/07	0.166 ± 0.062		0.038	0.201 ± 0.067	J	0.026	0.129 ± 0.051		0.020
SU14-13-Z1	5-7 ft	05/22/07	0.51 ± 0.13		0.04	0.42 ± 0.11		0.02	0.46 ± 0.12		0.03
SU14-13-Z2	13-15 ft	05/22/07	0.205 ± 0.063		0.028	0.146 ± 0.051		0.019	0.175 ± 0.056		0.016
SU14-14-Z1	4-6 ft	05/22/07	0.79 ± 0.17		0.04	0.73 ± 0.16		0.03	0.81 ± 0.17		0.02
SU14-14-Z2	8-10 ft	05/22/07	0.265 ± 0.078		0.038	0.250 ± 0.073		0.011	0.221 ± 0.068		0.024
SU14-15-Z1	2-4 ft	05/22/07	0.88 ± 0.19		0.05	0.75 ± 0.16		0.02	0.88 ± 0.18		0.01
SU14-15-Z2	10-12 ft	05/22/07	0.271 ± 0.076		0.041	0.190 ± 0.059		0.023	0.233 ± 0.066		0.019
SU14-16-Z1	2-4 ft	05/22/07	0.59 ± 0.13		0.04	0.60 ± 0.13	J	0.02	0.63 ± 0.13		0.03
SU14-16-Z2	10-12 ft	05/22/07	0.214 ± 0.072		0.045	0.209 ± 0.066	J	0.019	0.139 ± 0.053		0.026
SU14-17-Z1	3-5 ft	05/22/07	0.338 ± 0.092		0.049	0.268 ± 0.077		0.029	0.400 ± 0.098		0.023
SU14-17-Z2	8-10 ft	05/22/07	0.224 ± 0.068		0.025	0.197 ± 0.063		0.025	0.207 ± 0.065		0.027
SU14-18-Z1	2-4 ft	05/22/07	0.98 ± 0.20		0.04	0.72 ± 0.16		0.01	0.97 ± 0.19		0.03
SU14-18-Z2	13-15 ft	05/22/07	0.170 ± 0.058		0.028	0.229 ± 0.067		0.017	0.116 ± 0.045		0.010
SU14-19-Z1	1-3 ft	05/23/07	1.01 ± 0.19		0.03	0.80 ± 0.16		0.03	1.0 ± 0.19		0.03
SU14-19-Z2	14-16 ft	05/23/07	0.189 ± 0.062		0.029	0.152 ± 0.053		0.017	0.149 ± 0.053		0.010
SU14-20-Z1	1-3 ft	05/23/07	0.63 ± 0.14		0.03	0.63 ± 0.13		0.03	0.69 ± 0.14		0.02
SU14-20-Z2	8-10 ft	05/23/07	0.42 ± 0.11		0.04	0.39 ± 0.10	J	0.03	0.48 ± 0.12		0.02

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Bismuth-212			Cesium-137		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-01-Z1	4-5.5 ft	05/23/07	0.24 ± 0.11	J	0.14	0.39 ± 0.14	J	0.24	--			--		
SU09-01-Z2	12-13.5 ft	05/23/07	0.137 ± 0.069	J	0.10	0.07 ± 0.11	UJ	0.18	--			--		
SU09-01-Z3	20-21.5 ft	05/23/07	0.061 ± 0.080	UJ	0.14	0.13 ± 0.11	UJ	0.17	--			--		
SU09-02-Z1	4-5 ft	05/16/07	0.48 ± 0.10	J	0.02	0.53 ± 0.14	J	0.1	0.26 ± 0.28	UJ	0.20	--		
SU09-02-Z2	12-13.5 ft	05/16/07	0.158 ± 0.081	J	0.11	0.09 ± 0.16	U	0.27	--			--		
SU09-03-Z1	4-5 ft	05/16/07	0.381 ± 0.098	J	0.027	0.26 ± 0.14	J	0.07	--			--		
SU09-03-Z2	10.5-12 ft	05/16/07	0.92 ± 0.21	J	0.10	1.11 ± 0.27		0.17	0.96 ± 0.55		0.34	--		
SU09-04-Z1	2-4 ft	05/15/07	0.135 ± 0.084	UJ	0.13	0.26 ± 0.14	J	0.19	--			--		
SU09-04-Z2	13-15 ft	05/15/07	0.72 ± 0.15	J	0.15	0.62 ± 0.19	J	0.32	--			--		
SU09-05-Z1	1-3 ft	05/15/07	0.56 ± 0.17		0.09	0.81 ± 0.22		0.14	--			--		
SU09-05-Z2	9-11 ft	05/15/07	0.91 ± 0.18	J	0.13	0.74 ± 0.18	J	0.28	0.56 ± 0.37	J	0.56	--		
SU09-06-Z1	2.5-3.5 ft	05/21/07	0.165 ± 0.087		0.14	0.25 ± 0.11		0.19	--			--		
SU09-06-Z2	14-15.5 ft	05/21/07	0.119 ± 0.091	U	0.14	0.09 ± 0.18	U	0.33	--			--		
SU09-06-Z3	17-18.5 ft	05/21/07	1.91 ± 0.35		0.15	65.7 ± 6.7	J	0.4	--			--		
SU09-07-Z1	7-9 ft	05/15/07	0.092 ± 0.077	J	0.13	-0.01 ± 0.18	UJ	0.13	--			--		
SU09-07-Z2	14-15 ft	05/15/07	0.218 ± 0.093	J	0.053	0.09 ± 0.13	UJ	0.1	--			--		
SU09-08/D-Z1	5-6 ft	05/15/07	0.41 ± 0.13	J	0.07	0.64 ± 0.19	J	0.12	0.23 ± 0.29	UJ	0.20	--		
SU09-08/D-Z1A	10.5-12 ft	05/16/07	0.073 ± 0.069	J	0.050	0.06 ± 0.13	UJ	0.10	--			--		
SU09-08/D-Z2	17-18.5 ft	05/15/07	0.080 ± 0.080	UJ	0.14	0.03 ± 0.14	UJ	0.25	--			--		
SU09-08/D-Z3	26-27 ft	05/15/07	0.085 ± 0.087	U	0.15	0.07 ± 0.12	U	0.22	--			--		
SU09-08/D-Z4	36.5-37 ft	05/15/07	0.090 ± 0.089		0.066	0.07 ± 0.15	UJ	0.12	--			--		
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.55 ± 0.12	J	0.13	0.63 ± 0.18	J	0.16	--			--		
SU09-08/D-Z6	50-52 ft	05/15/07	0.14 ± 0.10		0.07	0.19 ± 0.19		0.13	--			--		
SU09-09-Z1	4-5 ft	05/16/07	0.36 ± 0.11	J	0.05	0.15 ± 0.15	J	0.11	--			--		
SU09-09-Z2	12-13 ft	05/16/07	0.244 ± 0.083	J	0.029	0.06 ± 0.16	UJ	0.12	--			--		
SU09-10-Z1	1-2 ft	05/17/07	0.37 ± 0.13	J	0.13	0.19 ± 0.11	J	0.22	--			--		
SU09-10-Z2	14-15 ft	05/17/07	0.087 ± 0.079	UJ	0.12	-0.015 ± 0.061	UJ	0.090	--			--		
SU09-10-Z3	20-21 ft	05/17/07	0.093 ± 0.073	UJ	0.12	0.055 ± 0.093	UJ	0.16	--			--		
SU09-10-Z4	28-29 ft	05/17/07	0.079 ± 0.091	UJ	0.15	0.04 ± 0.11	UJ	0.22	--			--		
SU09-10-Z5	36-37 ft	05/17/07	0.122 ± 0.090	UJ	0.14	0.10 ± 0.14	UJ	0.25	--			--		
SU09-10-Z6	44-45 ft	05/17/07	0.120 ± 0.096		0.067	0.27 ± 0.18		0.11	--			--		
SU09-10-Z7	52-53.5 ft	05/17/07	0.107 ± 0.078		0.052	0.06 ± 0.12	UJ	0.09	--			--		

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Bismuth-212			Cesium-137		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-11-Z1	2-3 ft	05/17/07	0.191 ± 0.088	J	0.13	0.17 ± 0.13	UJ	0.20	--			--		
SU09-11-Z2	12-13 ft	05/17/07	0.101 ± 0.086	UJ	0.14	0.09 ± 0.11	UJ	0.18	--			--		
SU09-12-Z1	1.5-2.5 ft	05/21/07	0.30 ± 0.12		0.16	0.32 ± 0.16		0.27	--			--		
SU09-12-Z2	12-13 ft	05/21/07	0.075 ± 0.082	U	0.14	0.06 ± 0.13	U	0.24	--			--		
SU09-13-Z1	4-5 ft	05/16/07	0.56 ± 0.14	J	0.04	0.33 ± 0.15	J	0.14	0.24 ± 0.31	UJ	0.23	--		
SU09-13-Z2	13-14.5 ft	05/16/07	0.101 ± 0.086	J	0.062	0.16 ± 0.11	J	0.06	--			--		
SU09-14-Z1	3-5 ft	05/15/07	0.209 ± 0.088	J	0.13	0.25 ± 0.12	J	0.22	--			--		
SU09-14-Z2	13-15 ft	05/15/07	0.069 ± 0.087	UJ	0.065	0.16 ± 0.14		0.09	--			--		
SU13-01-Z1	6-7.5 ft	05/21/07	0.32 ± 0.12		0.14	0.32 ± 0.14		0.25	--			--		
SU13-01-Z2	9-10.5 ft	05/21/07	0.29 ± 0.10	J	0.13	0.229 ± 0.091	J	0.17	--			--		
SU13-02-Z1	6-7.5 ft	05/21/07	0.280 ± 0.096		0.10	0.22 ± 0.14		0.20	--			--		
SU13-02-Z2	13-14.5 ft	05/21/07	0.095 ± 0.069	UJ	0.12	0.145 ± 0.093	UJ	0.21	--			--		
SU13-03-Z1	2-3 ft	05/21/07	0.41 ± 0.11	J	0.12	0.33 ± 0.13	J	0.27	--			--		
SU13-03-Z2	13-14 ft	05/21/07	0.180 ± 0.076	J	0.12	0.024 ± 0.095	UJ	0.18	--			--		
SU13-04-Z1	6-7 ft	05/22/07	0.42 ± 0.12		0.1	0.33 ± 0.17		0.27	--			--		
SU13-04-Z2	8.5-9.5 ft	05/22/07	0.338 ± 0.091		0.069	0.09 ± 0.14	U	0.24	--			--		
SU13-05-Z1	2-3 ft	05/22/07	0.40 ± 0.12		0.09	0.41 ± 0.17		0.21	--			--		
SU13-05-Z2	12-13.5 ft	05/22/07	0.199 ± 0.081		0.10	0.14 ± 0.13	UJ	0.22	--			--		
SU13-06-Z1	4-5 ft	05/22/07	0.250 ± 0.098		0.12	0.21 ± 0.14	UJ	0.31	--			--		
SU13-06-Z2	8-9 ft	05/22/07	0.108 ± 0.093	UJ	0.15	0.07 ± 0.15	U	0.28	--			--		
SU13-08-Z1	4.5-5.5 ft	05/22/07	0.35 ± 0.10		0.13	0.45 ± 0.14		0.22	--			--		
SU13-08-Z2	13-14 ft	05/22/07	0.146 ± 0.063		0.069	0.03 ± 0.12	U	0.23	--			--		
SU13-09-Z1	5-6 ft	05/22/07	0.27 ± 0.10		0.14	0.40 ± 0.16		0.21	--			--		
SU13-09-Z2	8-9 ft	05/22/07	0.154 ± 0.096		0.14	0.08 ± 0.16	U	0.29	--			--		
SU13-10-Z1	1.5-2.5 ft	05/22/07	0.65 ± 0.14		0.08	0.44 ± 0.19		0.33	--			--		
SU13-10-Z2	12.5-13.5 f	05/22/07	0.086 ± 0.075	UJ	0.12	0.09 ± 0.13	UJ	0.21	--			--		
SU13-11-Z1	0-8 ft	05/21/07	0.366 ± 0.099		0.12	0.33 ± 0.11		0.20	--			--		
SU13-11-Z2	8-16 ft	05/21/07	0.121 ± 0.088	UJ	0.14	0.1 ± 0.15	U	0.25	--			--		
SU13-12-Z1	0-8 ft	05/21/07	0.315 ± 0.094		0.12	0.38 ± 0.13		0.23	--			--		
SU13-12-Z2	8-16 ft	05/21/07	0.216 ± 0.095		0.12	0.09 ± 0.15	U	0.27	--			--		
SU13-13-Z1	0-8 ft	05/21/07	0.207 ± 0.086		0.12	0.25 ± 0.14		0.20	--			--		
SU13-13-Z2	8-16 ft	05/21/07	0.085 ± 0.085	U	0.14	0.138 ± 0.087	UJ	0.29	--			--		
SU13-14-Z1	0-8 ft	05/21/07	0.45 ± 0.12		0.16	0.47 ± 0.15		0.25	--			--		
SU13-14-Z2	8-16 ft	05/21/07	0.145 ± 0.066		0.078	0.02 ± 0.13	U	0.24	--			--		
SU13-15-Z1	0-8 ft	05/21/07	0.76 ± 0.16		0.10	0.57 ± 0.22		0.36	--			--		
SU13-15-Z2	8-16 ft	05/21/07	0.17 ± 0.11	U	0.17	0.10 ± 0.16	U	0.27	--			--		

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Bismuth-212			Cesium-137		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU14-01-Z1	3-4 ft	05/23/07	1.15 ± 0.19		0.05	0.69 ± 0.23		0.34	--			--		
SU14-01-Z2	13.5-14.5 f	05/23/07	0.039 ± 0.062	UJ	0.11	0.118 ± 0.086	UJ	0.12	--			--		
SU14-02-Z1	1.5-2.5 ft	05/23/07	0.57 ± 0.15	J	0.12	0.33 ± 0.17	UJ	0.36	--			0.100 ± 0.058	J	0.086
SU14-02-Z2	12-13 ft	05/23/07	0.119 ± 0.086	UJ	0.13	0.08 ± 0.17	UJ	0.31	--			--		
SU14-04-Z1	5-7 ft	05/24/07	0.210 ± 0.098	J	0.12	0.49 ± 0.21	J	0.24	--			--		
SU14-04-Z2	9-11 ft	05/24/07	0.217 ± 0.090	J	0.12	0.23 ± 0.14	UJ	0.25	--			--		
SU14-05-Z1	4-6 ft	05/24/07	0.24 ± 0.11	J	0.15	0.11 ± 0.15	UJ	0.26	--			--		
SU14-05-Z2	12-14 ft	05/24/07	0.20 ± 0.10	J	0.14	0.11 ± 0.15	UJ	0.27	--			--		
SU14-05-Z3	17-18.5 ft	05/24/07	0.067 ± 0.090	UJ	0.16	0.09 ± 0.16	UJ	0.28	--			--		
SU14-06-Z1	4-6 ft	05/24/07	0.31 ± 0.12	J	0.11	0.11 ± 0.17	UJ	0.29	--			--		
SU14-06-Z2	12-14 ft	05/24/07	0.115 ± 0.073	J	0.11	0.08 ± 0.12	UJ	0.20	--			--		
SU14-07-Z1	4-6 ft	05/23/07	0.32 ± 0.11	J	0.12	0.32 ± 0.14	J	0.22	--			--		
SU14-07-Z2	13-15 ft	05/23/07	0.153 ± 0.088	J	0.14	0.12 ± 0.11	UJ	0.19	--			--		
SU14-08-Z1	1.5-2.5 ft	05/24/07	0.213 ± 0.092	J	0.12	0.24 ± 0.13	UJ	0.25	--			--		
SU14-08-Z2	8-10 ft	05/24/07	0.163 ± 0.081	J	0.11	0.16 ± 0.13	UJ	0.19	--			--		
SU14-09-Z1	2-4 ft	05/23/07	0.45 ± 0.13	J	0.10	0.51 ± 0.17	J	0.30	--			--		
SU14-09-Z2	12-14 ft	05/23/07	0.118 ± 0.090	UJ	0.14	0.08 ± 0.17	UJ	0.30	--			--		
SU14-11-Z1	6-8 ft	05/23/07	0.36 ± 0.13	J	0.16	0.35 ± 0.16	J	0.26	--			--		
SU14-11-Z2	13-15 ft	05/23/07	0.120 ± 0.070	J	0.097	0.05 ± 0.13	J	0.23	--			--		
SU14-12-Z1	6-8 ft	05/23/07	0.26 ± 0.10	J	0.12	0.29 ± 0.14	J	0.27	--			--		
SU14-12-Z2	13-15 ft	05/23/07	0.145 ± 0.074	J	0.11	0.14 ± 0.10	UJ	0.15	--			--		
SU14-13-Z1	5-7 ft	05/22/07	0.207 ± 0.094		0.13	0.18 ± 0.12	U	0.19	--			--		
SU14-13-Z2	13-15 ft	05/22/07	0.161 ± 0.075		0.099	0.15 ± 0.12	U	0.17	--			--		
SU14-14-Z1	4-6 ft	05/22/07	0.52 ± 0.14		0.10	0.29 ± 0.19		0.28	--			--		
SU14-14-Z2	8-10 ft	05/22/07	0.076 ± 0.065	UJ	0.10	0.02 ± 0.11	U	0.21	--			--		
SU14-15-Z1	2-4 ft	05/22/07	0.40 ± 0.10		0.12	0.53 ± 0.14		0.20	0.44 ± 0.28		0.40	--		
SU14-15-Z2	10-12 ft	05/22/07	0.150 ± 0.090		0.13	0.09 ± 0.14	U	0.24	--			--		
SU14-16-Z1	2-4 ft	05/22/07	0.33 ± 0.10		0.13	0.43 ± 0.15		0.23	--			--		
SU14-16-Z2	10-12 ft	05/22/07	0.117 ± 0.060		0.11	0.07 ± 0.12	U	0.22	--			--		
SU14-17-Z1	3-5 ft	05/22/07	0.163 ± 0.080		0.11	0.17 ± 0.15	UJ	0.24	--			--		
SU14-17-Z2	8-10 ft	05/22/07	0.143 ± 0.073		0.11	0.18 ± 0.13	UJ	0.19	--			--		
SU14-18-Z1	2-4 ft	05/22/07	0.36 ± 0.12		0.15	0.37 ± 0.15		0.26	--			--		
SU14-18-Z2	13-15 ft	05/22/07	0.073 ± 0.078	U	0.14	0.04 ± 0.12	U	0.22	--			--		
SU14-19-Z1	1-3 ft	05/23/07	0.74 ± 0.19		0.13	0.68 ± 0.23		0.40	--			--		
SU14-19-Z2	14-16 ft	05/23/07	0.028 ± 0.061	UJ	0.11	-0.006 ± 0.37	UJ	0.23	--			--		
SU14-20-Z1	1-3 ft	05/23/07	0.45 ± 0.12		0.15	0.65 ± 0.18		0.24	1.10 ± 0.41		0.29	--		
SU14-20-Z2	8-10 ft	05/23/07	0.18 ± 0.11	J	0.16	0.21 ± 0.15	UJ	0.23	--			--		

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead-210			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-01-Z1	4-5.5 ft	05/23/07	6.9 ± 1.2	J	1	--			0.398 ± 0.091	J	0.096
SU09-01-Z2	12-13.5 ft	05/23/07	4.73 ± 0.92	J	0.73	--			0.174 ± 0.068	J	0.080
SU09-01-Z3	20-21.5 ft	05/23/07	6.3 ± 1.2	J	0.4	--			0.222 ± 0.062	J	0.057
SU09-02-Z1	4-5 ft	05/16/07	9.2 ± 1.4	J	0.1	--			0.65 ± 0.13	J	0.05
SU09-02-Z2	12-13.5 ft	05/16/07	5.9 ± 1.1	J	0.5	--			0.170 ± 0.061	J	0.078
SU09-03-Z1	4-5 ft	05/16/07	6.7 ± 1.2	J	0.2	--			0.385 ± 0.075	J	0.028
SU09-03-Z2	10.5-12 ft	05/16/07	12.3 ± 1.9		0.2	--			1.68 ± 0.24		0.08
SU09-04-Z1	2-4 ft	05/15/07	7.5 ± 1.1	J	0.7	--			0.234 ± 0.065	J	0.075
SU09-04-Z2	13-15 ft	05/15/07	13.8 ± 1.8	J	0.4	--			1.00 ± 0.20	J	0.15
SU09-05-Z1	1-3 ft	05/15/07	10.7 ± 1.8		0.2	1.2 ± 1.3	UJ	1.0	1.00 ± 0.24		0.09
SU09-05-Z2	9-11 ft	05/15/07	11.3 ± 1.5	J	0.8	--			0.93 ± 0.12	J	0.09
SU09-06-Z1	2.5-3.5 ft	05/21/07	6.8 ± 1.1		0.7	--			0.400 ± 0.090		0.082
SU09-06-Z2	14-15.5 ft	05/21/07	4.1 ± 1.0		0.5	--			0.180 ± 0.075		0.081
SU09-06-Z3	17-18.5 ft	05/21/07	2.90 ± 0.84		0.80	--			0.270 ± 0.083		0.075
SU09-07-Z1	7-9 ft	05/15/07	6.7 ± 1.0	J	0.5	--			0.352 ± 0.095	J	0.089
SU09-07-Z2	14-15 ft	05/15/07	6.3 ± 1.3	J	0.4	1.19 ± 0.99	J	0.62	0.318 ± 0.099	J	0.040
SU09-08/D-Z1	5-6 ft	05/15/07	8.7 ± 1.4	J	0.2	--			0.89 ± 0.16	J	0.06
SU09-08/D-Z1A	10.5-12 ft	05/16/07	5.3 ± 1.0	J	0.3	--			0.188 ± 0.052	J	0.022
SU09-08/D-Z2	17-18.5 ft	05/15/07	3.89 ± 0.83	J	0.76	--			0.157 ± 0.074	J	0.086
SU09-08/D-Z3	26-27 ft	05/15/07	3.32 ± 0.91		0.99	--			0.22 ± 0.10		0.11
SU09-08/D-Z4	36.5-37 ft	05/15/07	3.21 ± 0.89		0.21	--			0.130 ± 0.056		0.031
SU09-08/D-Z5	46-47.5 ft	05/15/07	5.40 ± 0.99	J	0.74	--			0.94 ± 0.17	J	0.13
SU09-08/D-Z6	50-52 ft	05/15/07	0.54 ± 0.65	UJ	0.47	--			0.208 ± 0.091		0.060
SU09-09-Z1	4-5 ft	05/16/07	9.2 ± 1.4	J	0.2	0.74 ± 0.85	UJ	0.64	0.229 ± 0.070	J	0.034
SU09-09-Z2	12-13 ft	05/16/07	6.5 ± 1.2		0.1	--			0.313 ± 0.089		0.034
SU09-10-Z1	1-2 ft	05/17/07	7.8 ± 1.2	J	0.7	--			0.536 ± 0.096	J	0.088
SU09-10-Z2	14-15 ft	05/17/07	2.86 ± 0.77	J	0.60	--			0.135 ± 0.058	J	0.085
SU09-10-Z3	20-21 ft	05/17/07	5.11 ± 0.89	J	0.51	--			0.181 ± 0.063	J	0.072
SU09-10-Z4	28-29 ft	05/17/07	3.31 ± 0.88	J	0.41	--			0.223 ± 0.069	J	0.057
SU09-10-Z5	36-37 ft	05/17/07	2.41 ± 0.89	J	0.90	--			0.23 ± 0.10	J	0.10
SU09-10-Z6	44-45 ft	05/17/07	0.68 ± 0.75	UJ	0.55	--			0.42 ± 0.13		0.05
SU09-10-Z7	52-53.5 ft	05/17/07	0.88 ± 0.58		0.32	0.84 ± 0.88	UJ	0.59	0.278 ± 0.064		0.025

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead-210			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-11-Z1	2-3 ft	05/17/07	8.2 ± 1.2	J	0.8	--			0.346 ± 0.097	J	0.10
SU09-11-Z2	12-13 ft	05/17/07	5.7 ± 1.0	J	0.6	--			0.188 ± 0.075	J	0.086
SU09-12-Z1	1.5-2.5 ft	05/21/07	6.5 ± 1.3		0.7	--			0.61 ± 0.12		0.1
SU09-12-Z2	12-13 ft	05/21/07	2.38 ± 0.82		0.75	--			0.125 ± 0.053		0.064
SU09-13-Z1	4-5 ft	05/16/07	9.0 ± 1.4		0.1	--			0.85 ± 0.13		0.04
SU09-13-Z2	13-14.5 ft	05/16/07	5.3 ± 1.1	J	0.2	--			0.229 ± 0.090	J	0.039
SU09-14-Z1	3-5 ft	05/15/07	7.7 ± 1.1	J	0.5	--			0.330 ± 0.072	J	0.079
SU09-14-Z2	13-15 ft	05/15/07	5.3 ± 1.1		0.3	--			0.178 ± 0.079		0.039
SU13-01-Z1	6-7.5 ft	05/21/07	6.6 ± 1.1		0.8	--			0.61 ± 0.14		0.12
SU13-01-Z2	9-10.5 ft	05/21/07	6.21 ± 0.93	J	0.58	--			0.264 ± 0.080	J	0.093
SU13-02-Z1	6-7.5 ft	05/21/07	6.8 ± 1.3		0.7	--			0.214 ± 0.081		0.12
SU13-02-Z2	13-14.5 ft	05/21/07	4.64 ± 0.90	J	0.88	--			0.181 ± 0.066	J	0.084
SU13-03-Z1	2-3 ft	05/21/07	8.0 ± 1.3	J	0.8	--			0.40 ± 0.10	J	0.10
SU13-03-Z2	13-14 ft	05/21/07	3.70 ± 0.80	J	0.81	--			0.112 ± 0.055	J	0.092
SU13-04-Z1	6-7 ft	05/22/07	7.5 ± 1.4		0.6	--			0.302 ± 0.081		0.083
SU13-04-Z2	8.5-9.5 ft	05/22/07	7.9 ± 1.3		0.5	--			0.186 ± 0.071		0.081
SU13-05-Z1	2-3 ft	05/22/07	8.7 ± 1.3		0.3	--			0.360 ± 0.072		0.066
SU13-05-Z2	12-13.5 ft	05/22/07	6.1 ± 1.1		0.5	--			0.237 ± 0.068		0.071
SU13-06-Z1	4-5 ft	05/22/07	5.5 ± 1.1		0.4	--			0.50 ± 0.10		0.08
SU13-06-Z2	8-9 ft	05/22/07	4.9 ± 1.1		0.6	--			0.189 ± 0.078		0.083
SU13-08-Z1	4.5-5.5 ft	05/22/07	8.1 ± 1.2		0.7	--			0.57 ± 0.16		0.14
SU13-08-Z2	13-14 ft	05/22/07	3.42 ± 0.98		0.92	--			0.179 ± 0.068		0.066
SU13-09-Z1	5-6 ft	05/22/07	7.3 ± 1.1		0.6	--			0.456 ± 0.093		0.089
SU13-09-Z2	8-9 ft	05/22/07	5.9 ± 1.3		0.6	1.8 ± 1.4		1.8	0.150 ± 0.067		0.096
SU13-10-Z1	1.5-2.5 ft	05/22/07	7.5 ± 1.5		1.1	--			0.64 ± 0.12		0.09
SU13-10-Z2	12.5-13.5 f	05/22/07	5.8 ± 1.1		0.4	--			0.248 ± 0.086		0.083
SU13-11-Z1	0-8 ft	05/21/07	8.7 ± 1.2		0.5	--			0.64 ± 0.12		0.1
SU13-11-Z2	8-16 ft	05/21/07	3.60 ± 0.92		0.40	--			0.167 ± 0.071		0.075
SU13-12-Z1	0-8 ft	05/21/07	7.0 ± 1.1		0.7	--			0.54 ± 0.11		0.09
SU13-12-Z2	8-16 ft	05/21/07	4.41 ± 0.94		0.56	--			0.332 ± 0.097		0.084
SU13-13-Z1	0-8 ft	05/21/07	7.0 ± 1.1		0.5	--			0.325 ± 0.094		0.094
SU13-13-Z2	8-16 ft	05/21/07	6.9 ± 1.3		0.4	--			0.308 ± 0.086		0.075
SU13-14-Z1	0-8 ft	05/21/07	7.3 ± 1.2		1.0	--			0.80 ± 0.14		0.11
SU13-14-Z2	8-16 ft	05/21/07	2.32 ± 0.70		0.64	--			0.155 ± 0.055		0.059
SU13-15-Z1	0-8 ft	05/21/07	11.3 ± 1.9		0.7	--			0.78 ± 0.18		0.16
SU13-15-Z2	8-16 ft	05/21/07	6.4 ± 1.2		0.4	--			0.226 ± 0.069		0.066

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead-210			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU14-01-Z1	3-4 ft	05/23/07	10.6 ± 1.7		0.6	--			1.63 ± 0.24		0.15
SU14-01-Z2	13.5-14.5 f	05/23/07	4.19 ± 0.81	J	0.53	--			0.159 ± 0.052	J	0.069
SU14-02-Z1	1.5-2.5 ft	05/23/07	9.0 ± 1.5	J	0.4	--			0.55 ± 0.12	J	0.10
SU14-02-Z2	12-13 ft	05/23/07	6.9 ± 1.4	J	0.9	--			0.178 ± 0.067	J	0.079
SU14-04-Z1	5-7 ft	05/24/07	6.4 ± 1.3	J	0.6	--			0.35 ± 0.10	J	0.09
SU14-04-Z2	9-11 ft	05/24/07	3.97 ± 0.96	J	0.77	--			0.36 ± 0.10	J	0.1
SU14-05-Z1	4-6 ft	05/24/07	6.0 ± 1.3	J	0.5	--			0.43 ± 0.11	J	0.09
SU14-05-Z2	12-14 ft	05/24/07	5.9 ± 1.2	J	0.6	--			0.26 ± 0.10	J	0.11
SU14-05-Z3	17-18.5 ft	05/24/07	3.7 ± 1.0	J	0.8	--			0.136 ± 0.058	J	0.069
SU14-06-Z1	4-6 ft	05/24/07	5.6 ± 1.2	J	0.7	--			0.114 ± 0.070	J	0.11
SU14-06-Z2	12-14 ft	05/24/07	6.2 ± 1.1	J	0.5	--			0.137 ± 0.051	J	0.062
SU14-07-Z1	4-6 ft	05/23/07	8.3 ± 1.3	J	0.5	--			0.40 ± 0.10	J	0.09
SU14-07-Z2	13-15 ft	05/23/07	5.5 ± 1.0	J	0.8	--			0.194 ± 0.065	J	0.080
SU14-08-Z1	1.5-2.5 ft	05/24/07	7.6 ± 1.3	J	0.5	--			0.401 ± 0.099	J	0.093
SU14-08-Z2	8-10 ft	05/24/07	5.0 ± 1.0	J	0.6	--			0.40 ± 0.10	J	0.08
SU14-09-Z1	2-4 ft	05/23/07	8.3 ± 1.4	J	0.4	--			0.54 ± 0.10	J	0.09
SU14-09-Z2	12-14 ft	05/23/07	4.4 ± 1.1	J	0.6	--			0.154 ± 0.063	J	0.070
SU14-11-Z1	6-8 ft	05/23/07	8.4 ± 1.5	J	0.6	--			0.54 ± 0.13	J	0.12
SU14-11-Z2	13-15 ft	05/23/07	3.24 ± 0.82	J	0.66	--			0.220 ± 0.058	J	0.056
SU14-12-Z1	6-8 ft	05/23/07	5.9 ± 1.1	J	0.7	--			0.62 ± 0.13	J	0.1
SU14-12-Z2	13-15 ft	05/23/07	5.34 ± 0.94	J	0.54	--			0.165 ± 0.077	J	0.090
SU14-13-Z1	5-7 ft	05/22/07	5.9 ± 1.1		0.5	--			0.286 ± 0.070		0.068
SU14-13-Z2	13-15 ft	05/22/07	5.4 ± 1.0		0.3	--			0.229 ± 0.062		0.057
SU14-14-Z1	4-6 ft	05/22/07	5.1 ± 1.2		1	--			0.44 ± 0.13		0.13
SU14-14-Z2	8-10 ft	05/22/07	5.48 ± 0.99		0.30	--			0.170 ± 0.052		0.055
SU14-15-Z1	2-4 ft	05/22/07	8.0 ± 1.2		0.5	--			0.80 ± 0.13		0.1
SU14-15-Z2	10-12 ft	05/22/07	4.26 ± 0.97		0.38	--			0.173 ± 0.053		0.052
SU14-16-Z1	2-4 ft	05/22/07	8.8 ± 1.3		0.8	--			0.72 ± 0.12		0.11
SU14-16-Z2	10-12 ft	05/22/07	3.08 ± 0.83		0.69	--			--		
SU14-17-Z1	3-5 ft	05/22/07	6.1 ± 1.2		0.9	--			0.37 ± 0.11		0.10
SU14-17-Z2	8-10 ft	05/22/07	5.24 ± 0.91		0.52	--			0.190 ± 0.074		0.084
SU14-18-Z1	2-4 ft	05/22/07	10.0 ± 1.5		0.5	--			0.56 ± 0.11		0.1
SU14-18-Z2	13-15 ft	05/22/07	4.47 ± 0.89		0.76	--			0.231 ± 0.092		0.095
SU14-19-Z1	1-3 ft	05/23/07	7.8 ± 1.6		0.7	--			0.76 ± 0.13		0.11
SU14-19-Z2	14-16 ft	05/23/07	3.68 ± 0.87	J	0.64	--			0.145 ± 0.044	J	0.048
SU14-20-Z1	1-3 ft	05/23/07	8.3 ± 1.3		0.9	--			0.66 ± 0.14		0.13
SU14-20-Z2	8-10 ft	05/23/07	6.4 ± 1.2	J	0.4	--			0.277 ± 0.075	J	0.068

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-01-Z1	4-5.5 ft	05/23/07	0.315 ± 0.093	J	0.12	0.165 ± 0.051	J	0.052	1.50 ± 0.91		1.1
SU09-01-Z2	12-13.5 ft	05/23/07	0.132 ± 0.063	J	0.090	0.073 ± 0.038	J	0.044	--		
SU09-01-Z3	20-21.5 ft	05/23/07	0.218 ± 0.094	J	0.13	--			--		
SU09-02-Z1	4-5 ft	05/16/07	0.444 ± 0.090	J	0.050	0.142 ± 0.051	J	0.029	0.97 ± 0.47	J	0.48
SU09-02-Z2	12-13.5 ft	05/16/07	--			--			--		
SU09-03-Z1	4-5 ft	05/16/07	0.146 ± 0.081	J	0.053	0.065 ± 0.048	J	0.032	--		
SU09-03-Z2	10.5-12 ft	05/16/07	1.19 ± 0.20		0.08	0.56 ± 0.11		0.03	--		
SU09-04-Z1	2-4 ft	05/15/07	--			0.072 ± 0.040	J	0.064	--		
SU09-04-Z2	13-15 ft	05/15/07	0.97 ± 0.18	J	0.14	0.433 ± 0.088	J	0.056	--		
SU09-05-Z1	1-3 ft	05/15/07	0.72 ± 0.16		0.07	0.368 ± 0.085		0.017	3.1 ± 1.0		0.8
SU09-05-Z2	9-11 ft	05/15/07	0.92 ± 0.16	J	0.13	0.333 ± 0.070	J	0.057	1.39 ± 0.64	J	1.3
SU09-06-Z1	2.5-3.5 ft	05/21/07	0.191 ± 0.068		0.099	--			--		
SU09-06-Z2	14-15.5 ft	05/21/07	0.135 ± 0.081		0.12	--			--		
SU09-06-Z3	17-18.5 ft	05/21/07	0.129 ± 0.073		0.11	0.032 ± 0.033	UJ	0.054	--		
SU09-07-Z1	7-9 ft	05/15/07	0.195 ± 0.070	J	0.10	0.130 ± 0.044	J	0.041	0.21 ± 0.57	UJ	1.0
SU09-07-Z2	14-15 ft	05/15/07	0.171 ± 0.071	J	0.044	0.052 ± 0.042	J	0.029	--		
SU09-08/D-Z1	5-6 ft	05/15/07	0.50 ± 0.10	J	0.05	0.314 ± 0.063	J	0.007	--		
SU09-08/D-Z1A	10.5-12 ft	05/16/07	0.174 ± 0.058	J	0.023	0.067 ± 0.036	J	0.022	--		
SU09-08/D-Z2	17-18.5 ft	05/15/07	0.143 ± 0.065	J	0.11	--			1.20 ± 0.67	J	0.88
SU09-08/D-Z3	26-27 ft	05/15/07	0.175 ± 0.083		0.12	--			--		
SU09-08/D-Z4	36.5-37 ft	05/15/07	0.195 ± 0.087		0.054	--			--		
SU09-08/D-Z5	46-47.5 ft	05/15/07	0.43 ± 0.10	J	0.15	0.305 ± 0.056	J	0.033	--		
SU09-08/D-Z6	50-52 ft	05/15/07	0.085 ± 0.091	UJ	0.066	0.095 ± 0.053		0.029	--		
SU09-09-Z1	4-5 ft	05/16/07	0.246 ± 0.078	J	0.039	0.060 ± 0.046	J	0.030	--		
SU09-09-Z2	12-13 ft	05/16/07	0.150 ± 0.064		0.041	0.039 ± 0.038		0.027	--		
SU09-10-Z1	1-2 ft	05/17/07	0.412 ± 0.089	J	0.12	0.173 ± 0.052	J	0.056	2.41 ± 0.63	UJ	1.3
SU09-10-Z2	14-15 ft	05/17/07	--			--			--		
SU09-10-Z3	20-21 ft	05/17/07	--			--			--		
SU09-10-Z4	28-29 ft	05/17/07	--			--			--		
SU09-10-Z5	36-37 ft	05/17/07	--			0.098 ± 0.058	J	0.084	--		
SU09-10-Z6	44-45 ft	05/17/07	0.156 ± 0.087		0.055	0.133 ± 0.057		0.030	--		
SU09-10-Z7	52-53.5 ft	05/17/07	0.135 ± 0.062		0.039	0.065 ± 0.040		0.026	--		

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-11-Z1	2-3 ft	05/17/07	0.334 ± 0.089	J	0.087	--			3.12 ± 0.66	J	1.2
SU09-11-Z2	12-13 ft	05/17/07	0.204 ± 0.068	J	0.11	0.061 ± 0.035	J	0.045	--		
SU09-12-Z1	1.5-2.5 ft	05/21/07	0.38 ± 0.11		0.13	0.194 ± 0.060		0.040	4.05 ± 0.84		1.3
SU09-12-Z2	12-13 ft	05/21/07	--			--			--		
SU09-13-Z1	4-5 ft	05/16/07	0.58 ± 0.13		0.04	0.246 ± 0.062		0.018	1.89 ± 0.87		0.49
SU09-13-Z2	13-14.5 ft	05/16/07	0.121 ± 0.073	J	0.048	0.028 ± 0.030	UJ	0.020	0.75 ± 0.88	UJ	0.49
SU09-14-Z1	3-5 ft	05/15/07	0.53 ± 0.11	J	0.07	0.195 ± 0.049	J	0.039	--		
SU09-14-Z2	13-15 ft	05/15/07	0.245 ± 0.074		0.042	0.040 ± 0.044	UJ	0.032	--		
SU13-01-Z1	6-7.5 ft	05/21/07	0.28 ± 0.10		0.15	0.188 ± 0.062		0.063	4.50 ± 0.88		1.5
SU13-01-Z2	9-10.5 ft	05/21/07	0.281 ± 0.074	J	0.10	--			--		
SU13-02-Z1	6-7.5 ft	05/21/07	0.198 ± 0.084		0.14	--			--		
SU13-02-Z2	13-14.5 ft	05/21/07	0.156 ± 0.070	J	0.11	0.044 ± 0.036	UJ	0.064	--		
SU13-03-Z1	2-3 ft	05/21/07	0.467 ± 0.089	J	0.12	0.116 ± 0.045	J	0.059	--		
SU13-03-Z2	13-14 ft	05/21/07	0.184 ± 0.072	J	0.11	--			--		
SU13-04-Z1	6-7 ft	05/22/07	0.351 ± 0.089		0.13	0.088 ± 0.056		0.083	--		
SU13-04-Z2	8.5-9.5 ft	05/22/07	0.225 ± 0.081		0.11	--			--		
SU13-05-Z1	2-3 ft	05/22/07	0.270 ± 0.072		0.11	0.195 ± 0.060		0.047	1.71 ± 0.52		0.85
SU13-05-Z2	12-13.5 ft	05/22/07	0.197 ± 0.070		0.11	0.069 ± 0.045		0.065	--		
SU13-06-Z1	4-5 ft	05/22/07	0.331 ± 0.091		0.12	0.161 ± 0.056		0.062	--		
SU13-06-Z2	8-9 ft	05/22/07	0.211 ± 0.087		0.11	--			--		
SU13-08-Z1	4.5-5.5 ft	05/22/07	0.364 ± 0.084		0.13	0.238 ± 0.058		0.054	1.50 ± 0.52		1.1
SU13-08-Z2	13-14 ft	05/22/07	--			--			--		
SU13-09-Z1	5-6 ft	05/22/07	0.56 ± 0.12		0.11	0.271 ± 0.064		0.045	--		
SU13-09-Z2	8-9 ft	05/22/07	0.222 ± 0.085		0.12	--			--		
SU13-10-Z1	1.5-2.5 ft	05/22/07	0.64 ± 0.12		0.12	0.228 ± 0.065		0.049	2.14 ± 0.66		1.3
SU13-10-Z2	12.5-13.5 f	05/22/07	0.108 ± 0.069		0.10	--			--		
SU13-11-Z1	0-8 ft	05/21/07	0.51 ± 0.12		0.09	0.181 ± 0.054		0.049	--		
SU13-11-Z2	8-16 ft	05/21/07	0.134 ± 0.077		0.11	--			--		
SU13-12-Z1	0-8 ft	05/21/07	0.449 ± 0.093		0.11	0.165 ± 0.042		0.042	--		
SU13-12-Z2	8-16 ft	05/21/07	0.231 ± 0.078		0.11	0.056 ± 0.037		0.056	--		
SU13-13-Z1	0-8 ft	05/21/07	0.245 ± 0.074		0.10	0.125 ± 0.038		0.037	--		
SU13-13-Z2	8-16 ft	05/21/07	0.130 ± 0.068		0.12	--			--		
SU13-14-Z1	0-8 ft	05/21/07	0.49 ± 0.10		0.13	0.221 ± 0.060		0.055	2.5 ± 1.2		1.3
SU13-14-Z2	8-16 ft	05/21/07	--			--			--		
SU13-15-Z1	0-8 ft	05/21/07	0.73 ± 0.14		0.17	0.38 ± 0.10		0.07	--		
SU13-15-Z2	8-16 ft	05/21/07	0.170 ± 0.074		0.12	0.073 ± 0.039		0.049	--		

Table 3.2-4d Radiological Results for the Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU14-01-Z1	3-4 ft	05/23/07	0.69 ± 0.14		0.21	0.457 ± 0.098		0.059	--		
SU14-01-Z2	13.5-14.5 f	05/23/07	0.109 ± 0.051	J	0.094	0.058 ± 0.037	J	0.057	--		
SU14-02-Z1	1.5-2.5 ft	05/23/07	0.64 ± 0.15	J	0.12	0.214 ± 0.069	J	0.057	1.71 ± 0.76	J	1.4
SU14-02-Z2	12-13 ft	05/23/07	0.136 ± 0.082	J	0.12	--			--		
SU14-04-Z1	5-7 ft	05/24/07	0.256 ± 0.091	J	0.12	0.085 ± 0.047	J	0.066	--		
SU14-04-Z2	9-11 ft	05/24/07	0.225 ± 0.069	J	0.092	0.150 ± 0.042	J	0.021	--		
SU14-05-Z1	4-6 ft	05/24/07	0.32 ± 0.10	J	0.10	0.094 ± 0.049	J	0.064	--		
SU14-05-Z2	12-14 ft	05/24/07	0.166 ± 0.080	J	0.12	0.095 ± 0.054	J	0.077	--		
SU14-05-Z3	17-18.5 ft	05/24/07	0.123 ± 0.064	J	0.12	--			--		
SU14-06-Z1	4-6 ft	05/24/07	0.177 ± 0.074	J	0.13	0.113 ± 0.056	J	0.054	--		
SU14-06-Z2	12-14 ft	05/24/07	0.136 ± 0.072	J	0.11	--			--		
SU14-07-Z1	4-6 ft	05/23/07	0.39 ± 0.11	J	0.08	0.113 ± 0.047	J	0.057	--		
SU14-07-Z2	13-15 ft	05/23/07	0.188 ± 0.081	J	0.12	0.073 ± 0.037	J	0.052	--		
SU14-08-Z1	1.5-2.5 ft	05/24/07	0.287 ± 0.088	J	0.11	0.163 ± 0.044	J	0.021	1.22 ± 0.94	J	1.2
SU14-08-Z2	8-10 ft	05/24/07	0.177 ± 0.073	J	0.11	--			--		
SU14-09-Z1	2-4 ft	05/23/07	0.37 ± 0.11	J	0.15	0.287 ± 0.064	J	0.024	1.16 ± 0.56	J	1.0
SU14-09-Z2	12-14 ft	05/23/07	--			0.051 ± 0.034	J	0.045	--		
SU14-11-Z1	6-8 ft	05/23/07	0.42 ± 0.11	J	0.14	0.126 ± 0.059	J	0.081	--		
SU14-11-Z2	13-15 ft	05/23/07	--			--			--		
SU14-12-Z1	6-8 ft	05/23/07	0.267 ± 0.090	J	0.12	0.111 ± 0.050	J	0.068	--		
SU14-12-Z2	13-15 ft	05/23/07	0.148 ± 0.062	J	0.10	--			--		
SU14-13-Z1	5-7 ft	05/22/07	0.227 ± 0.076		0.099	0.110 ± 0.036		0.021	--		
SU14-13-Z2	13-15 ft	05/22/07	0.140 ± 0.059		0.091	0.051 ± 0.034	J	0.051	--		
SU14-14-Z1	4-6 ft	05/22/07	0.51 ± 0.11		0.13	0.213 ± 0.057		0.036	--		
SU14-14-Z2	8-10 ft	05/22/07	0.107 ± 0.055		0.078	--			--		
SU14-15-Z1	2-4 ft	05/22/07	0.529 ± 0.093		0.12	0.266 ± 0.082		0.062	--		
SU14-15-Z2	10-12 ft	05/22/07	0.155 ± 0.076		0.11	--			--		
SU14-16-Z1	2-4 ft	05/22/07	0.51 ± 0.11		0.14	0.268 ± 0.070		0.063	3.0 ± 1.4		1.5
SU14-16-Z2	10-12 ft	05/22/07	--			--			--		
SU14-17-Z1	3-5 ft	05/22/07	0.194 ± 0.075		0.11	0.139 ± 0.039		0.027	--		
SU14-17-Z2	8-10 ft	05/22/07	0.166 ± 0.070		0.098	--			--		
SU14-18-Z1	2-4 ft	05/22/07	0.57 ± 0.14		0.11	0.316 ± 0.064		0.022	--		
SU14-18-Z2	13-15 ft	05/22/07	0.116 ± 0.069		0.11	--			--		
SU14-19-Z1	1-3 ft	05/23/07	0.50 ± 0.13		0.19	0.227 ± 0.075		0.080	--		
SU14-19-Z2	14-16 ft	05/23/07	0.127 ± 0.052	J	0.065	--			--		
SU14-20-Z1	1-3 ft	05/23/07	0.61 ± 0.14		0.11	0.281 ± 0.066		0.051	--		
SU14-20-Z2	8-10 ft	05/23/07	0.34 ± 0.10	J	0.12	0.131 ± 0.046	J	0.043	--		

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-01-Z1	4-6 ft	05/29/07	0.111 ± 0.042		0.016	0.017 ± 0.020	UJ	0.012	0.183 ± 0.056		0.019
SU10-02-Z1	5.5-7 ft	06/07/07	0.55 ± 0.11		0.02	0.021 ± 0.020		0.020	0.54 ± 0.11		0.009
SU10-02-Z2	9-11 ft	06/07/07	0.62 ± 0.12		0.03	0.021 ± 0.020		0.011	0.62 ± 0.12		0.02
SU10-03-Z1	6-8 ft	06/08/07	0.253 ± 0.072		0.025	0.011 ± 0.019	UJ	0.029	0.266 ± 0.074		0.021
SU10-04-Z1	6-8 ft	05/25/07	0.79 ± 0.15		0.03	0.025 ± 0.027	UJ	0.032	0.87 ± 0.17		0.03
SU10-04-Z2	10-11.5 ft	05/25/07	0.117 ± 0.046		0.025	0.011 ± 0.017	UJ	0.024	0.156 ± 0.052		0.019
SU10-05-Z1	4-6 ft	05/25/07	0.134 ± 0.047		0.021	0.007 ± 0.014	UJ	0.023	0.107 ± 0.042		0.019
SU10-05-Z2	10-12 ft	05/25/07	0.58 ± 0.12		0.02	0.033 ± 0.027		0.013	0.50 ± 0.11		0.01
SU10-06-Z1	4-6 ft	05/29/07	0.249 ± 0.071		0.021	0.020 ± 0.022	UJ	0.013	0.192 ± 0.062		0.023
SU10-06-Z2	9-11 ft	05/29/07	0.337 ± 0.082		0.022	0.021 ± 0.020		0.020	0.353 ± 0.084		0.024
SU10-07-Z1	1-3 ft	05/29/07	0.46 ± 0.10		0.02	0.017 ± 0.020	UJ	0.025	0.46 ± 0.10		0.01
SU10-07-Z2	10-12 ft	05/29/07	0.396 ± 0.090		0.020	0.015 ± 0.018	UJ	0.023	0.375 ± 0.087		0.020
SU10-08-Z1	0-2 ft	05/29/07	3.41 ± 0.50		0.02	0.081 ± 0.041		0.022	1.91 ± 0.30		0.01
SU10-09-Z1	3-5 ft	05/30/07	0.47 ± 0.11		0.02	0.034 ± 0.028		0.013	0.55 ± 0.12		0.02
SU10-10-Z1	4-6 ft	05/31/07	0.316 ± 0.080		0.022	0.007 ± 0.014	U	0.024	0.275 ± 0.073		0.022
SU10-10-Z2	14-16 ft	05/31/07	0.135 ± 0.050		0.023	0.021 ± 0.024	UJ	0.029	0.191 ± 0.060		0.018
SU10-10-Z3	19-20 ft	05/31/07	0.218 ± 0.064		0.020	0.019 ± 0.021	UJ	0.013	0.181 ± 0.057		0.017
SU10-11-Z1	3-5 ft	06/08/07	0.293 ± 0.078		0.026	0.013 ± 0.017	UJ	0.022	0.347 ± 0.086		0.018
SU10-11-Z2	8-10 ft	06/08/07	0.431 ± 0.099		0.029	0.026 ± 0.024		0.025	0.433 ± 0.099		0.010
SU10-12-Z1	6-8 ft	05/30/07	0.99 ± 0.18		0.02	0.056 ± 0.034		0.022	0.94 ± 0.17		0.02
SU10-12-Z2	10-12 ft	05/30/07	0.89 ± 0.17		0.02	0.026 ± 0.026	U	0.030	0.87 ± 0.17		0.02
SU10-13-Z1	3-5 ft	05/30/07	0.89 ± 0.16		0.02	0.042 ± 0.030		0.013	0.75 ± 0.14		0.02
SU10-14-Z1	7-8 ft	06/04/07	0.305 ± 0.077		0.019	0.013 ± 0.018	UJ	0.012	0.323 ± 0.080		0.016
SU10-14-Z2	13-14 ft	06/04/07	0.264 ± 0.070		0.019	0.013 ± 0.018	UJ	0.012	0.225 ± 0.064		0.016
SU10-15-Z1	3-6 ft	06/08/07	1.33 ± 0.22		0.02	0.073 ± 0.039		0.012	1.31 ± 0.22		0.01
SU10-15-Z2	8-10 ft	06/08/07	0.257 ± 0.073		0.033	0.01 ± 0.017	UJ	0.013	0.248 ± 0.070		0.020
SU10-16-Z1	1-2 ft	06/04/07	1.80 ± 0.28		0.02	0.053 ± 0.031		0.019	1.46 ± 0.23		0.02
SU10-16-Z2	9-10 ft	06/04/07	0.408 ± 0.096		0.023	0.007 ± 0.015	U	0.025	0.402 ± 0.095		0.010
SU10-17-Z1	5-6 ft	06/04/07	0.329 ± 0.081		0.021	0.011 ± 0.017	UJ	0.024	0.314 ± 0.079		0.021
SU10-17-Z2	8-9 ft	06/04/07	0.322 ± 0.082		0.020	0.042 ± 0.030		0.022	0.339 ± 0.085		0.010
SU10-18-Z1	6-8 ft	05/31/07	0.221 ± 0.066		0.020	0.008 ± 0.014	UJ	0.022	0.226 ± 0.066		0.017
SU10-18-Z2	9-11 ft	05/31/07	0.404 ± 0.095		0.020	0.014 ± 0.019	UJ	0.013	0.358 ± 0.088		0.017
SU10-19-Z1	6-8 ft	06/08/07	0.164 ± 0.054		0.028	0.023 ± 0.023	U	0.026	0.184 ± 0.057		0.024
SU10-19-Z2	9-11 ft	06/08/07	0.69 ± 0.14		0.02	0.009 ± 0.016	UJ	0.013	0.65 ± 0.13		0.02
SU11-01-Z1	3-4 ft	06/04/07	0.73 ± 0.15		0.02	0.038 ± 0.030		0.027	0.74 ± 0.15		0.02
SU11-01-Z2	11-12 ft	06/04/07	0.254 ± 0.069		0.019	0.004 ± 0.013	UJ	0.012	0.374 ± 0.088		0.01

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-02-Z1	3-4 ft	06/04/07	0.290 ± 0.076		0.020	0.013 ± 0.017	UJ	0.021	0.171 ± 0.056		0.017
SU11-02-Z2	8-9 ft	06/04/07	0.363 ± 0.094		0.028	0.046 ± 0.035		0.033	0.314 ± 0.085		0.026
SU11-03-Z1	0-2 ft	06/07/07	0.93 ± 0.17		0.02	0.039 ± 0.028		0.012	0.92 ± 0.16		0.009
SU11-04-Z1	0-2 ft	06/06/07	0.91 ± 0.17		0.02	0.050 ± 0.034		0.013	0.77 ± 0.15		0.02
SU11-04-Z2	11-13 ft	06/06/07	0.220 ± 0.065		0.025	0.022 ± 0.021		0.021	0.183 ± 0.057		0.017
SU11-05/D-Z1	6-8 ft	06/06/07	0.181 ± 0.060		0.022	0.010 ± 0.018	U	0.014	0.233 ± 0.069		0.021
SU11-05/D-Z2	10-12 ft	06/06/07	0.286 ± 0.074		0.016	0.018 ± 0.020	UJ	0.012	0.338 ± 0.083		0.026
SU11-06-Z1	2-3 ft	06/04/07	0.70 ± 0.14		0.02	0.032 ± 0.026		0.022	0.73 ± 0.14		0.02
SU11-06-Z2	8-9 ft	06/04/07	3.20 ± 0.46		0.02	0.136 ± 0.052		0.023	2.87 ± 0.42		0.02
SU11-07-Z1	5-7 ft	05/30/07	0.287 ± 0.072		0.017	0.007 ± 0.012	UJ	0.019	0.303 ± 0.074		0.015
SU11-07-Z2	12-14 ft	05/30/07	0.179 ± 0.057		0.020	0.005 ± 0.013	UJ	0.012	0.176 ± 0.056		0.017
SU11-08-Z1	2-4 ft	05/30/07	1.20 ± 0.21		0.02	0.052 ± 0.033		0.022	1.21 ± 0.21		0.02
SU11-08-Z2	14-16 ft	05/30/07	0.361 ± 0.090		0.027	0.041 ± 0.030		0.026	0.313 ± 0.081		0.021
SU11-09-Z1	1.5-3.5 ft	06/06/07	2.40 ± 0.36		0.03	0.168 ± 0.060		0.027	2.15 ± 0.33		0.02
SU11-09-Z2	11-13 ft	06/06/07	0.127 ± 0.048		0.026	0.002 ± 0.011	U	0.025	0.138 ± 0.050		0.026
SU11-10-Z1	5-6.5 ft	06/05/07	0.208 ± 0.066		0.020	0.020 ± 0.022	UJ	0.025	0.288 ± 0.081		0.023
SU11-10-Z2	10-12 ft	06/05/07	0.253 ± 0.074		0.022	0.005 ± 0.015	UJ	0.014	0.230 ± 0.070		0.025
SU11-11-Z1	5-7 ft	06/06/07	0.201 ± 0.063		0.029	0.009 ± 0.016	UJ	0.013	0.195 ± 0.060		0.017
SU11-11-Z2	10-12 ft	06/06/07	0.194 ± 0.059		0.027	0.01 ± 0.017	UJ	0.025	0.169 ± 0.054		0.024
SU11-12-Z1	2-3.5 ft	06/05/07	1.77 ± 0.29		0.02	0.076 ± 0.041		0.026	1.81 ± 0.29		0.02
SU11-12-Z2	13.5-15 ft	06/05/07	0.198 ± 0.066		0.012	-0.001 ± 0.013	U	0.025	0.198 ± 0.066		0.012
SU11-13-Z1	3.5-5 ft	06/04/07	0.298 ± 0.080		0.025	0.009 ± 0.015	UJ	0.022	0.324 ± 0.084		0.027
SU11-13-Z2	13.5-15 ft	06/04/07	0.306 ± 0.074		0.015	0.008 ± 0.014	UJ	0.011	0.250 ± 0.065		0.017
SU11-13-Z3	16-17.5 ft	06/04/07	0.195 ± 0.059		0.016	0.011 ± 0.017	UJ	0.024	0.192 ± 0.058		0.01
SU11-13-Z4	28-29.5 ft	06/04/07	0.140 ± 0.056		0.028	0.021 ± 0.025	UJ	0.032	0.145 ± 0.057		0.028
SU11-13-Z5	38.5-40 ft	06/04/07	0.140 ± 0.047		0.018	0.0032 ± 0.009	U	0.019	0.175 ± 0.054		0.009
SU11-13-Z6	47.5-49 ft	06/04/07	0.091 ± 0.039		0.021	0.021 ± 0.021		0.020	0.119 ± 0.045		0.023
SU11-14-Z1	6-8 ft	06/01/07	0.339 ± 0.087	J	0.011	0.027 ± 0.027	U	0.030	0.371 ± 0.092	J	0.011
SU11-14-Z2	14.5-16 ft	06/04/07	0.261 ± 0.068		0.015	0.008 ± 0.015	UJ	0.011	0.247 ± 0.066		0.018
SU11-14-Z3	21-24 ft	06/04/07	0.135 ± 0.049		0.023	0.014 ± 0.018	UJ	0.012	0.126 ± 0.046		0.019
SU11-14-Z4	24-25.5 ft	06/04/07	0.105 ± 0.039		0.017	0.012 ± 0.016	UJ	0.011	0.104 ± 0.040		0.019
SU11-15-Z1	2-4 ft	06/01/07	0.72 ± 0.14	J	0.02	0.039 ± 0.030	U	0.013	0.68 ± 0.14	J	0.01
SU11-15-Z2	12-16 ft	06/01/07	0.162 ± 0.053	J	0.019	0.005 ± 0.013	U	0.012	0.177 ± 0.056	J	0.017
SU11-16-Z1	0-2 ft	05/31/07	1.56 ± 0.25		0.01	0.092 ± 0.045		0.028	1.37 ± 0.23		0.01
SU11-16-Z2	12-16 ft	05/31/07	0.281 ± 0.074		0.017	0.022 ± 0.021		0.021	0.198 ± 0.060		0.020
SU11-16-Z3	16-18 ft	05/31/07	0.328 ± 0.086		0.011	0.003 ± 0.013	U	0.028	0.294 ± 0.081		0.011
SU11-17-Z1	6-8 ft	06/05/07	0.178 ± 0.059		0.024	0.002 ± 0.012	U	0.027	0.258 ± 0.073		0.024

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-17-Z2	14-16 ft	06/05/07	0.182 ± 0.061		0.022	0.005 ± 0.015	UJ	0.014	0.167 ± 0.058		0.011
SU11-18-Z1	6-8 ft	06/05/07	0.285 ± 0.077		0.023	0.012 ± 0.018	UJ	0.026	0.312 ± 0.082		0.023
SU11-18-Z2	8-10 ft	06/05/07	0.42 ± 0.10		0.03	0.033 ± 0.029		0.027	0.403 ± 0.098		0.022
SU11-19-Z1	1-3 ft	05/31/07	0.97 ± 0.18		0.02	0.035 ± 0.028		0.024	1.05 ± 0.19		0.02
SU11-19-Z2	12-14 ft	05/31/07	0.150 ± 0.064		0.034	0.011 ± 0.023	U	0.038	0.145 ± 0.062		0.030
SU11-20-Z1	4-6 ft	05/31/07	0.196 ± 0.061		0.022	0.028 ± 0.025		0.013	0.215 ± 0.064		0.020
SU11-20-Z2	8-10 ft	05/31/07	0.67 ± 0.13		0.02	0.028 ± 0.025		0.013	0.65 ± 0.13		0.01
SU11-21-Z1	3-5 ft	06/05/07	0.298 ± 0.084		0.027	0.008 ± 0.018	U	0.030	0.305 ± 0.085		0.012
SU11-21-Z2	9-11 ft	06/05/07	0.386 ± 0.099		0.025	0.012 ± 0.020	UJ	0.016	0.294 ± 0.084		0.021
SU11-22-Z1	6-8 ft	06/07/07	0.199 ± 0.062		0.026	0.012 ± 0.018	UJ	0.025	0.221 ± 0.065		0.020
SU12-02-Z1	6-7 ft	05/31/07	3.03 ± 0.46		0.02	0.090 ± 0.045		0.014	3.09 ± 0.46		0.02
SU12-02-Z2	10-11 ft	05/31/07	0.162 ± 0.054		0.024	0.002 ± 0.011	U	0.023	0.189 ± 0.058		0.018
SU12-02-Z3	19-20 ft	05/31/07	0.129 ± 0.048		0.010	0.008 ± 0.014	UJ	0.021	0.136 ± 0.049		0.010
SU12-03/I-Z1	3-4 ft	05/31/07	1.47 ± 0.24		0.02	0.075 ± 0.039		0.012	1.00 ± 0.18		0.02
SU12-03/I-Z2	14-15 ft	05/31/07	20.2 ± 3.4		0.2	1.01 ± 0.48		0.14	14.2 ± 2.5		0.1
SU12-05-Z1	3-4 ft	05/30/07	38.2 ± 6.5		0.5	1.76 ± 0.91		0.28	29.3 ± 5.2		0.5
SU12-05-Z2	8-9 ft	05/30/07	2.39 ± 0.36		0.02	0.139 ± 0.053		0.012	1.17 ± 0.20		0.009
SU12-06-Z1	5-6 ft	05/30/07	0.319 ± 0.082		0.026	0.021 ± 0.022	UJ	0.025	0.291 ± 0.077		0.020
SU12-06-Z2	14-15 ft	05/30/07	0.196 ± 0.059		0.021	-0.002 ± 0.011	U	0.023	0.168 ± 0.054		0.020
SU12-06-Z3	17-18 ft	05/30/07	0.132 ± 0.049		0.021	0.009 ± 0.015	UJ	0.022	0.121 ± 0.047		0.011
SU12-09-Z1	6-7 ft	05/18/07	0.47 ± 0.11		0.01	0.027 ± 0.026	J	0.025	0.46 ± 0.11		0.02
SU12-09-Z2	9-11 ft	05/24/07	0.354 ± 0.087		0.023	0.026 ± 0.025		0.025	0.391 ± 0.093		0.023
SU12-10-Z1	2-3 ft	05/30/07	6.58 ± 0.92		0.02	0.335 ± 0.092		0.013	5.73 ± 0.81		0.02
SU12-10-Z2	13-14 ft	05/30/07	0.230 ± 0.067		0.020	0.018 ± 0.020	UJ	0.022	0.322 ± 0.082		0.017
SU12-10-Z3	17-19 ft	05/30/07	0.111 ± 0.044		0.025	-0.004 ± 0.013	U	0.029	0.087 ± 0.038		0.023
SU12-12I-Z1	1-3 ft	05/24/07	0.432 ± 0.096		0.021	0.051 ± 0.031		0.020	0.54 ± 0.11		0.02
SU12-13-Z1	5-7 ft	05/24/07	1.40 ± 0.23		0.02	0.128 ± 0.052		0.021	1.36 ± 0.23		0.01
SU12-13-Z2	10-12 ft	05/24/07	0.172 ± 0.054		0.021	0.012 ± 0.016	UJ	0.020	0.223 ± 0.063		0.022
SU12-14-Z1	7-8 ft	05/18/07	0.278 ± 0.078		0.019	0.020 ± 0.022	UJ	0.024	0.210 ± 0.067		0.029
SU12-15-Z1	0-8 ft	05/29/07	0.207 ± 0.061		0.019	0.004 ± 0.012	UJ	0.012	0.152 ± 0.051		0.01
SU12-15-Z2	8-16 ft	05/29/07	0.227 ± 0.065		0.021	0.017 ± 0.019	UJ	0.021	0.194 ± 0.059		0.021
SU12-16-Z1	0-8 ft	05/29/07	0.250 ± 0.069		0.019	0.027 ± 0.024		0.012	0.147 ± 0.051		0.021
SU12-16-Z2	8-12 ft	05/29/07	0.274 ± 0.075		0.025	0.01 ± 0.017	UJ	0.013	0.302 ± 0.080		0.021
SU12-18-Z1	0-8 ft	05/29/07	1.30 ± 0.23		0.02	0.080 ± 0.044		0.025	1.20 ± 0.22		0.02
SU12-18-Z2	8-12 ft	05/29/07	0.439 ± 0.099		0.010	0.007 ± 0.015	U	0.025	0.368 ± 0.088		0.010
SU12-19-Z1	7-8 ft	05/18/07	0.367 ± 0.094		0.027	0.013 ± 0.020	UJ	0.028	0.42 ± 0.10		0.02
SU12-19-Z2	13-14 ft	05/18/07	0.183 ± 0.058		0.021	-0.001 ± 0.010	U	0.021	0.135 ± 0.050	J	0.028
SU12-20-Z1	1-3 ft	05/18/07	4.10 ± 0.64		0.03	0.221 ± 0.083		0.018	2.86 ± 0.47		0.03
SU12-20-Z2	8-9.5 ft	05/18/07	2.57 ± 0.39		0.02	0.149 ± 0.057		0.025	1.96 ± 0.31		0.02
SU12-21-Z1	2-3.5 ft	05/18/07	14.9 ± 2.3		0.2	0.43 ± 0.30	J	0.24	10.3 ± 1.7		0.2
SU12-21-Z2	9-10.5 ft	05/18/07	1.25 ± 0.21		0.02	0.071 ± 0.037	J	0.020	0.64 ± 0.13		0.02

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-01-Z1	4-6 ft	05/29/07	0.177 ± 0.062		0.039	0.139 ± 0.050		0.020	0.174 ± 0.058		0.024
SU10-02-Z1	5.5-7 ft	06/07/07	0.55 ± 0.12		0.04	0.350 ± 0.089		0.023	0.54 ± 0.12		0.01
SU10-02-Z2	9-11 ft	06/07/07	0.51 ± 0.11		0.02	0.331 ± 0.084		0.019	0.59 ± 0.12		0.02
SU10-03-Z1	6-8 ft	06/08/07	0.271 ± 0.077		0.041	0.278 ± 0.075	J	0.020	0.248 ± 0.070		0.025
SU10-04-Z1	6-8 ft	05/25/07	0.97 ± 0.19		0.03	1.06 ± 0.21		0.03	1.03 ± 0.20		0.03
SU10-04-Z2	10-11.5 ft	05/25/07	0.115 ± 0.048		0.030	0.186 ± 0.061		0.021	0.117 ± 0.046		0.011
SU10-05-Z1	4-6 ft	05/25/07	0.138 ± 0.055		0.036	0.139 ± 0.052		0.021	0.129 ± 0.050		0.011
SU10-05-Z2	10-12 ft	05/25/07	0.43 ± 0.11		0.04	0.45 ± 0.11		0.02	0.49 ± 0.12		0.02
SU10-06-Z1	4-6 ft	05/29/07	0.353 ± 0.092		0.032	0.328 ± 0.087		0.018	0.338 ± 0.088		0.018
SU10-06-Z2	9-11 ft	05/29/07	0.381 ± 0.094		0.027	0.417 ± 0.099		0.017	0.423 ± 0.099		0.010
SU10-07-Z1	1-3 ft	05/29/07	0.74 ± 0.16		0.06	0.51 ± 0.12		0.03	0.65 ± 0.15		0.03
SU10-07-Z2	10-12 ft	05/29/07	0.46 ± 0.11		0.04	0.360 ± 0.092		0.018	0.387 ± 0.096		0.025
SU10-08-Z1	0-2 ft	05/29/07	1.49 ± 0.30		0.06	0.54 ± 0.14		0.03	1.29 ± 0.27		0.02
SU10-09-Z1	3-5 ft	05/30/07	0.88 ± 0.17		0.05	0.53 ± 0.12	J	0.03	0.81 ± 0.16		0.02
SU10-10-Z1	4-6 ft	05/31/07	0.368 ± 0.093		0.038	0.289 ± 0.077	J	0.020	0.409 ± 0.097		0.024
SU10-10-Z2	14-16 ft	05/31/07	0.210 ± 0.070		0.046	0.150 ± 0.053	J	0.021	0.156 ± 0.055		0.023
SU10-10-Z3	19-20 ft	05/31/07	0.155 ± 0.060		0.044	0.198 ± 0.063	J	0.018	0.127 ± 0.050		0.025
SU10-11-Z1	3-5 ft	06/08/07	0.385 ± 0.096		0.028	0.321 ± 0.085		0.023	0.48 ± 0.11		0.02
SU10-11-Z2	8-10 ft	06/08/07	0.50 ± 0.11		0.02	0.48 ± 0.11		0.02	0.50 ± 0.11		0.03
SU10-12-Z1	6-8 ft	05/30/07	1.19 ± 0.22		0.03	0.96 ± 0.18	J	0.02	1.12 ± 0.21		0.02
SU10-12-Z2	10-12 ft	05/30/07	1.18 ± 0.22		0.03	1.02 ± 0.20	J	0.02	1.10 ± 0.21		0.01
SU10-13-Z1	3-5 ft	05/30/07	0.73 ± 0.15		0.03	0.50 ± 0.12	J	0.02	0.75 ± 0.15		0.01
SU10-14-Z1	7-8 ft	06/04/07	0.47 ± 0.11		0.03	0.309 ± 0.080		0.017	0.44 ± 0.10		0.02
SU10-14-Z2	13-14 ft	06/04/07	0.325 ± 0.088		0.031	0.293 ± 0.082		0.022	0.248 ± 0.074		0.011
SU10-15-Z1	3-6 ft	06/08/07	0.59 ± 0.12		0.02	0.51 ± 0.11		0.02	0.55 ± 0.12		0.02
SU10-15-Z2	8-10 ft	06/08/07	0.384 ± 0.091		0.019	0.312 ± 0.079	J	0.016	0.288 ± 0.075		0.019
SU10-16-Z1	1-2 ft	06/04/07	1.01 ± 0.19		0.03	0.47 ± 0.11		0.02	1.02 ± 0.19		0.01
SU10-16-Z2	9-10 ft	06/04/07	0.386 ± 0.091		0.028	0.361 ± 0.087		0.020	0.305 ± 0.077		0.018
SU10-17-Z1	5-6 ft	06/04/07	0.71 ± 0.16		0.03	0.54 ± 0.13		0.03	0.53 ± 0.13		0.03
SU10-17-Z2	8-9 ft	06/04/07	0.57 ± 0.12		0.04	0.48 ± 0.11		0.02	0.56 ± 0.12		0.02
SU10-18-Z1	6-8 ft	05/31/07	0.270 ± 0.075		0.034	0.242 ± 0.068	J	0.016	0.278 ± 0.074		0.01
SU10-18-Z2	9-11 ft	05/31/07	0.51 ± 0.12		0.05	0.390 ± 0.097		0.025	0.52 ± 0.12		0.02
SU10-19-Z1	6-8 ft	06/08/07	0.192 ± 0.060		0.025	0.220 ± 0.065		0.027	0.165 ± 0.054		0.01
SU10-19-Z2	9-11 ft	06/08/07	0.65 ± 0.13		0.03	0.59 ± 0.12	J	0.02	0.71 ± 0.14		0.02
SU11-01-Z1	3-4 ft	06/04/07	0.88 ± 0.17		0.04	0.82 ± 0.16	J	0.02	0.82 ± 0.16		0.02
SU11-01-Z2	11-12 ft	06/04/07	0.359 ± 0.088		0.040	0.291 ± 0.074	J	0.018	0.380 ± 0.088		0.020

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-02-Z1	3-4 ft	06/04/07	0.44 ± 0.12		0.04	0.323 ± 0.095		0.027	0.40 ± 0.11		0.02
SU11-02-Z2	8-9 ft	06/04/07	0.68 ± 0.14		0.03	0.53 ± 0.12		0.02	0.62 ± 0.13		0.02
SU11-03-Z1	0-2 ft	06/07/07	1.20 ± 0.22		0.03	0.88 ± 0.17		0.03	1.11 ± 0.21		0.02
SU11-04-Z1	0-2 ft	06/06/07	0.82 ± 0.16		0.03	0.59 ± 0.13		0.02	0.76 ± 0.16		0.01
SU11-04-Z2	11-13 ft	06/06/07	0.191 ± 0.062		0.028	0.250 ± 0.072		0.018	0.175 ± 0.058		0.020
SU11-05/D-Z1	6-8 ft	06/06/07	0.40 ± 0.10		0.03	0.299 ± 0.086	J	0.029	0.378 ± 0.099		0.012
SU11-05/D-Z2	10-12 ft	06/06/07	0.358 ± 0.094		0.044	0.348 ± 0.090		0.032	0.274 ± 0.076		0.025
SU11-06-Z1	2-3 ft	06/04/07	1.16 ± 0.21		0.03	1.04 ± 0.19		0.02	1.14 ± 0.21		0.02
SU11-06-Z2	8-9 ft	06/04/07	0.65 ± 0.14		0.03	0.63 ± 0.13		0.02	0.63 ± 0.13		0.01
SU11-07-Z1	5-7 ft	05/30/07	0.47 ± 0.11		0.03	0.352 ± 0.090	J	0.025	0.45 ± 0.11		0.03
SU11-07-Z2	12-14 ft	05/30/07	0.217 ± 0.069		0.037	0.229 ± 0.069	J	0.018	0.179 ± 0.059		0.021
SU11-08-Z1	2-4 ft	05/30/07	1.36 ± 0.25		0.03	1.06 ± 0.21	J	0.02	1.38 ± 0.25		0.01
SU11-08-Z2	14-16 ft	05/30/07	0.203 ± 0.066		0.034	0.371 ± 0.092	J	0.021	0.209 ± 0.064		0.010
SU11-09-Z1	1.5-3.5 ft	06/06/07	0.98 ± 0.19		0.03	0.73 ± 0.15		0.02	1.01 ± 0.19		0.02
SU11-09-Z2	11-13 ft	06/06/07	0.233 ± 0.074		0.039	0.200 ± 0.066		0.028	0.151 ± 0.055		0.024
SU11-10-Z1	5-6.5 ft	06/05/07	0.54 ± 0.13		0.04	0.381 ± 0.098		0.020	0.53 ± 0.12		0.01
SU11-10-Z2	10-12 ft	06/05/07	0.207 ± 0.066		0.031	0.256 ± 0.073		0.021	0.202 ± 0.063		0.018
SU11-11-Z1	5-7 ft	06/06/07	0.284 ± 0.084		0.040	0.233 ± 0.073		0.026	0.263 ± 0.079		0.031
SU11-11-Z2	10-12 ft	06/06/07	0.232 ± 0.074		0.033	0.264 ± 0.078		0.023	0.215 ± 0.069		0.023
SU11-12-Z1	2-3.5 ft	06/05/07	1.10 ± 0.21		0.03	0.80 ± 0.16		0.02	0.96 ± 0.19		0.02
SU11-12-Z2	13.5-15 ft	06/05/07	0.221 ± 0.072		0.036	0.175 ± 0.062		0.026	0.188 ± 0.064		0.023
SU11-13-Z1	3.5-5 ft	06/04/07	0.43 ± 0.11		0.05	0.363 ± 0.093		0.026	0.41 ± 0.10		0.02
SU11-13-Z2	13.5-15 ft	06/04/07	0.49 ± 0.11		0.03	0.317 ± 0.081		0.019	0.46 ± 0.10		0.02
SU11-13-Z3	16-17.5 ft	06/04/07	0.211 ± 0.064		0.033	0.201 ± 0.060	J	0.01	0.184 ± 0.057		0.021
SU11-13-Z4	28-29.5 ft	06/04/07	0.181 ± 0.061		0.030	0.157 ± 0.055		0.023	0.118 ± 0.047		0.023
SU11-13-Z5	38.5-40 ft	06/04/07	0.49 ± 0.11		0.03	0.231 ± 0.067		0.017	0.45 ± 0.10		0.01
SU11-13-Z6	47.5-49 ft	06/04/07	0.148 ± 0.053		0.028	0.100 ± 0.042	J	0.022	0.088 ± 0.039		0.01
SU11-14-Z1	6-8 ft	06/01/07	0.43 ± 0.10		0.03	0.47 ± 0.11		0.02	0.45 ± 0.10		0.01
SU11-14-Z2	14.5-16 ft	06/04/07	0.304 ± 0.081		0.031	0.261 ± 0.073		0.022	0.373 ± 0.091		0.020
SU11-14-Z3	21-24 ft	06/04/07	0.097 ± 0.048		0.043	0.237 ± 0.070	J	0.018	0.128 ± 0.049		0.025
SU11-14-Z4	24-25.5 ft	06/04/07	0.161 ± 0.063		0.042	0.188 ± 0.064		0.020	0.140 ± 0.054		0.012
SU11-15-Z1	2-4 ft	06/01/07	0.91 ± 0.18		0.03	0.77 ± 0.16		0.02	0.85 ± 0.17		0.01
SU11-15-Z2	12-16 ft	06/01/07	0.195 ± 0.063		0.029	0.193 ± 0.061		0.017	0.151 ± 0.053		0.010
SU11-16-Z1	0-2 ft	05/31/07	0.84 ± 0.16		0.03	0.74 ± 0.15		0.02	0.79 ± 0.15		0.01
SU11-16-Z2	12-16 ft	05/31/07	0.273 ± 0.077		0.026	0.295 ± 0.081		0.021	0.246 ± 0.072		0.021
SU11-16-Z3	16-18 ft	05/31/07	0.370 ± 0.096		0.036	0.227 ± 0.070	J	0.024	0.285 ± 0.079		0.019
SU11-17-Z1	6-8 ft	06/05/07	0.321 ± 0.090		0.035	0.319 ± 0.089		0.023	0.314 ± 0.087		0.020

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-17-Z2	14-16 ft	06/05/07	0.170 ± 0.062		0.038	0.155 ± 0.056		0.011	0.099 ± 0.044		0.024
SU11-18-Z1	6-8 ft	06/05/07	0.55 ± 0.13		0.05	0.41 ± 0.11		0.03	0.46 ± 0.11		0.03
SU11-18-Z2	8-10 ft	06/05/07	0.54 ± 0.13		0.04	0.53 ± 0.13		0.02	0.55 ± 0.13		0.01
SU11-19-Z1	1-3 ft	05/31/07	0.96 ± 0.18		0.03	0.73 ± 0.15	J	0.02	0.81 ± 0.16		0.02
SU11-19-Z2	12-14 ft	05/31/07	0.147 ± 0.059		0.030	0.197 ± 0.068		0.025	0.150 ± 0.058		0.021
SU11-20-Z1	4-6 ft	05/31/07	0.392 ± 0.097		0.030	0.239 ± 0.071		0.023	0.374 ± 0.093		0.023
SU11-20-Z2	8-10 ft	05/31/07	0.76 ± 0.16		0.03	0.65 ± 0.14		0.02	0.76 ± 0.16		0.01
SU11-21-Z1	3-5 ft	06/05/07	0.40 ± 0.10		0.03	0.309 ± 0.087		0.024	0.364 ± 0.097		0.023
SU11-21-Z2	9-11 ft	06/05/07	0.280 ± 0.081		0.026	0.291 ± 0.084		0.030	0.230 ± 0.072		0.028
SU11-22-Z1	6-8 ft	06/07/07	0.241 ± 0.071		0.027	0.223 ± 0.066		0.020	0.240 ± 0.069		0.020
SU12-02-Z1	6-7 ft	05/31/07	0.345 ± 0.091		0.024	0.281 ± 0.080		0.028	0.359 ± 0.093		0.026
SU12-02-Z2	10-11 ft	05/31/07	0.177 ± 0.063		0.042	0.134 ± 0.049	J	0.018	0.184 ± 0.060		0.024
SU12-02-Z3	19-20 ft	05/31/07	0.134 ± 0.054		0.044	0.181 ± 0.058		0.026	0.172 ± 0.056		0.021
SU12-03/I-Z1	3-4 ft	05/31/07	0.98 ± 0.20		0.03	0.82 ± 0.18		0.03	0.90 ± 0.19		0.03
SU12-03/I-Z2	14-15 ft	05/31/07	0.48 ± 0.11		0.04	0.372 ± 0.092	J	0.020	0.44 ± 0.10		0.02
SU12-05-Z1	3-4 ft	05/30/07	0.69 ± 0.14		0.04	0.70 ± 0.14	J	0.01	0.77 ± 0.16		0.02
SU12-05-Z2	8-9 ft	05/30/07	0.51 ± 0.12		0.03	0.361 ± 0.092	J	0.018	0.42 ± 0.10		0.02
SU12-06-Z1	5-6 ft	05/30/07	0.342 ± 0.093		0.040	0.255 ± 0.075	J	0.019	0.297 ± 0.083		0.011
SU12-06-Z2	14-15 ft	05/30/07	0.161 ± 0.059		0.043	0.154 ± 0.053	J	0.023	0.140 ± 0.050		0.019
SU12-06-Z3	17-18 ft	05/30/07	0.097 ± 0.045		0.032	0.131 ± 0.050	J	0.021	0.107 ± 0.045		0.018
SU12-09-Z1	6-7 ft	05/18/07	--			--			0.74 ± 0.16		0.02
SU12-09-Z2	9-11 ft	05/24/07	0.264 ± 0.075		0.038	0.330 ± 0.084		0.020	0.282 ± 0.076		0.023
SU12-10-Z1	2-3 ft	05/30/07	0.71 ± 0.15		0.04	0.57 ± 0.13	J	0.02	0.72 ± 0.15		0.03
SU12-10-Z2	13-14 ft	05/30/07	0.38 ± 0.10		0.05	0.309 ± 0.084	J	0.022	0.219 ± 0.069		0.024
SU12-10-Z3	17-19 ft	05/30/07	0.092 ± 0.051		0.048	0.10 ± 0.045	UJ	0.020	0.083 ± 0.042		0.028
SU12-12I-Z1	1-3 ft	05/24/07	0.334 ± 0.089		0.044	0.296 ± 0.079		0.024	0.289 ± 0.078		0.020
SU12-13-Z1	5-7 ft	05/24/07	0.73 ± 0.16		0.05	0.55 ± 0.12		0.02	0.76 ± 0.16		0.02
SU12-13-Z2	10-12 ft	05/24/07	0.205 ± 0.067		0.042	0.246 ± 0.070		0.017	0.201 ± 0.063		0.024
SU12-14-Z1	7-8 ft	05/18/07	--			--			0.304 ± 0.082		0.021
SU12-15-Z1	0-8 ft	05/29/07	0.210 ± 0.072		0.037	0.199 ± 0.068		0.025	0.171 ± 0.062		0.021
SU12-15-Z2	8-16 ft	05/29/07	0.229 ± 0.075		0.041	0.282 ± 0.082		0.012	0.170 ± 0.060		0.025
SU12-16-Z1	0-8 ft	05/29/07	0.206 ± 0.066		0.032	0.268 ± 0.075		0.018	0.310 ± 0.082		0.011
SU12-16-Z2	8-12 ft	05/29/07	0.215 ± 0.070		0.035	0.280 ± 0.081		0.027	0.184 ± 0.062		0.022
SU12-18-Z1	0-8 ft	05/29/07	0.96 ± 0.20		0.04	0.69 ± 0.15		0.02	0.88 ± 0.18		0.02
SU12-18-Z2	8-12 ft	05/29/07	0.215 ± 0.070		0.037	0.351 ± 0.092		0.019	0.195 ± 0.064		0.019
SU12-19-Z1	7-8 ft	05/18/07	--			--			0.41 ± 0.10		0.03
SU12-19-Z2	13-14 ft	05/18/07	--			--			0.179 ± 0.061		0.019
SU12-20-Z1	1-3 ft	05/18/07	--			--			0.58 ± 0.13		0.02
SU12-20-Z2	8-9.5 ft	05/18/07	--			--			0.45 ± 0.12		0.03
SU12-21-Z1	2-3.5 ft	05/18/07	--			--			1.26 ± 0.23		0.02
SU12-21-Z2	9-10.5 ft	05/18/07	--			--			0.242 ± 0.076		0.029

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Radium-224			Bismuth-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-01-Z1	4-6 ft	05/29/07	0.124 ± 0.077	J	0.12	0.19 ± 0.13	UJ	0.20	--			--		
SU10-02-Z1	5.5-7 ft	06/07/07	0.32 ± 0.10	J	0.14	0.18 ± 0.15	UJ	0.24	--			--		
SU10-02-Z2	9-11 ft	06/07/07	0.280 ± 0.092	J	0.096	0.24 ± 0.13	UJ	0.26	--			--		
SU10-03-Z1	6-8 ft	06/08/07	0.24 ± 0.10	J	0.13	0.24 ± 0.18	UJ	0.27	--			--		
SU10-04-Z1	6-8 ft	05/25/07	1.01 ± 0.21		0.20	1.09 ± 0.25		0.28	--			--		
SU10-04-Z2	10-11.5 ft	05/25/07	0.032 ± 0.086	UJ	0.16	0.06 ± 0.17	UJ	0.30	--			--		
SU10-05-Z1	4-6 ft	05/25/07	0.28 ± 0.11	J	0.10	0.20 ± 0.19	UJ	0.31	--			--		
SU10-05-Z2	10-12 ft	05/25/07	0.60 ± 0.12	J	0.07	0.47 ± 0.14	J	0.23	--			--		
SU10-06-Z1	4-6 ft	05/29/07	0.17 ± 0.11	UJ	0.18	0.15 ± 0.15	UJ	0.25	--			--		
SU10-06-Z2	9-11 ft	05/29/07	0.280 ± 0.095	J	0.11	0.26 ± 0.12	J	0.21	--			--		
SU10-07-Z1	1-3 ft	05/29/07	0.52 ± 0.14	J	0.11	0.44 ± 0.16	J	0.29	--			--		
SU10-07-Z2	10-12 ft	05/29/07	0.22 ± 0.11	J	0.15	0.27 ± 0.13	J	0.27	--			--		
SU10-08-Z1	0-2 ft	05/29/07	0.51 ± 0.12	J	0.08	1.29 ± 0.22	J	0.08	1.36 ± 0.76	J	1.2	--		
SU10-09-Z1	3-5 ft	05/30/07	1.91 ± 0.35		0.15	65.7 ± 6.7	J	0.4	--			--		
SU10-10-Z1	4-6 ft	05/31/07	0.48 ± 0.12	J	0.08	0.34 ± 0.14	J	0.26	--			--		
SU10-10-Z2	14-16 ft	05/31/07	0.096 ± 0.084	UJ	0.13	0.06 ± 0.17	UJ	0.31	--			--		
SU10-10-Z3	19-20 ft	05/31/07	0.086 ± 0.076	UJ	0.13	0.11 ± 0.11	UJ	0.19	--			--		
SU10-11-Z1	3-5 ft	06/08/07	0.377 ± 0.100	J	0.067	0.27 ± 0.18	J	0.26	--			--		
SU10-11-Z2	8-10 ft	06/08/07	0.379 ± 0.086	J	0.049	0.33 ± 0.12	J	0.15	--			--		
SU10-12-Z1	6-8 ft	05/30/07	0.94 ± 0.20		0.19	0.81 ± 0.22		0.30	--			--		
SU10-12-Z2	10-12 ft	05/30/07	1.01 ± 0.20		0.12	1.47 ± 0.31		0.14	--			--		
SU10-13-Z1	3-5 ft	05/30/07	0.54 ± 0.13	J	0.12	0.58 ± 0.15	J	0.25	--			--		
SU10-14-Z1	7-8 ft	06/04/07	0.28 ± 0.10		0.14	0.25 ± 0.12		0.21	--			--		
SU10-14-Z2	13-14 ft	06/04/07	0.090 ± 0.090	U	0.15	0.16 ± 0.18	UJ	0.29	--			--		
SU10-15-Z1	3-6 ft	06/08/07	0.32 ± 0.11	J	0.12	0.44 ± 0.16	J	0.28	--			--		
SU10-15-Z2	8-10 ft	06/08/07	0.34 ± 0.11	J	0.13	0.29 ± 0.14	J	0.24	--			--		
SU10-16-Z1	1-2 ft	06/04/07	0.31 ± 0.13	J	0.18	0.57 ± 0.18	J	0.32	--			--		
SU10-16-Z2	9-10 ft	06/04/07	0.24 ± 0.11	J	0.13	0.17 ± 0.15	UJ	0.23	--			--		
SU10-17-Z1	5-6 ft	06/04/07	0.240 ± 0.093		0.13	0.32 ± 0.14		0.22	--			--		
SU10-17-Z2	8-9 ft	06/04/07	0.33 ± 0.12		0.14	0.34 ± 0.18	UJ	0.39	--			--		
SU10-18-Z1	6-8 ft	05/31/07	0.130 ± 0.091	UJ	0.15	0.13 ± 0.15	UJ	0.25	--			--		
SU10-18-Z2	9-11 ft	05/31/07	0.31 ± 0.11	J	0.14	0.34 ± 0.14	J	0.27	--			--		
SU10-19-Z1	6-8 ft	06/08/07	0.179 ± 0.078	J	0.11	0.12 ± 0.15	UJ	0.25	--			--		
SU10-19-Z2	9-11 ft	06/08/07	0.60 ± 0.13	J	0.14	0.57 ± 0.18	J	0.24	--			--		
SU11-01-Z1	3-4 ft	06/04/07	0.72 ± 0.16		0.12	0.79 ± 0.20		0.23	--			--		
SU11-01-Z2	11-12 ft	06/04/07	0.15 ± 0.10	U	0.15	0.23 ± 0.21	UJ	0.33	--			--		

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Radium-224			Bismuth-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-02-Z1	3-4 ft	06/04/07	0.254 ± 0.094		0.12	0.44 ± 0.14		0.23	--			--		
SU11-02-Z2	8-9 ft	06/04/07	0.40 ± 0.13		0.17	0.46 ± 0.19		0.25	--			--		
SU11-03-Z1	0-2 ft	06/07/07	1.08 ± 0.22		0.24	0.80 ± 0.28		0.35	--			--		
SU11-04-Z1	0-2 ft	06/06/07	0.72 ± 0.16	J	0.11	0.46 ± 0.20		0.39	--			--		
SU11-04-Z2	11-13 ft	06/06/07	0.22 ± 0.10	J	0.13	0.06 ± 0.16	UJ	0.30	--			--		
SU11-05/D-Z1	6-8 ft	06/06/07	0.38 ± 0.14		0.13	0.45 ± 0.18		0.29	--			--		
SU11-05/D-Z2	10-12 ft	06/06/07	0.139 ± 0.086	UJ	0.14	0.14 ± 0.13	UJ	0.21	--			--		
SU11-06-Z1	2-3 ft	06/04/07	0.89 ± 0.22		0.16	0.88 ± 0.31		0.55	--			--		
SU11-06-Z2	8-9 ft	06/04/07	0.92 ± 0.19		0.10	0.51 ± 0.21		0.38	--			--		
SU11-07-Z1	5-7 ft	05/30/07	0.23 ± 0.10		0.13	0.32 ± 0.15		0.28	--			--		
SU11-07-Z2	12-14 ft	05/30/07	0.144 ± 0.084	J	0.12	0.23 ± 0.16	UJ	0.23	--			--		
SU11-08-Z1	2-4 ft	05/30/07	1.03 ± 0.19		0.11	0.86 ± 0.26		0.42	2.2 ± 1.2		1.9	--		
SU11-08-Z2	14-16 ft	05/30/07	0.137 ± 0.076	J	0.10	0.07 ± 0.12	UJ	0.22	--			--		
SU11-09-Z1	1.5-3.5 ft	06/06/07	0.53 ± 0.19		0.24	0.77 ± 0.26		0.36	--			--		
SU11-09-Z2	11-13 ft	06/06/07	0.054 ± 0.069	UJ	0.12	0.16 ± 0.13	UJ	0.20	--			--		
SU11-10-Z1	5-6.5 ft	06/05/07	0.24 ± 0.10		0.15	0.34 ± 0.15		0.23	--			--		
SU11-10-Z2	10-12 ft	06/05/07	0.109 ± 0.099	UJ	0.16	0.16 ± 0.19	U	0.32	--			--		
SU11-11-Z1	5-7 ft	06/06/07	0.46 ± 0.11	J	0.07	-0.03 ± 0.95	UJ	0.42	--			--		
SU11-11-Z2	10-12 ft	06/06/07	0.120 ± 0.076	J	0.11	0.15 ± 0.13	UJ	0.21	--			--		
SU11-12-Z1	2-3.5 ft	06/05/07	1.24 ± 0.24		0.12	0.94 ± 0.29		0.54	--			--		
SU11-12-Z2	13.5-15 ft	06/05/07	0.182 ± 0.088		0.12	0.098 ± 0.074	UJ	0.24	--			--		
SU11-13-Z1	3.5-5 ft	06/04/07	0.44 ± 0.13	J	0.11	0.19 ± 0.20	U	0.33	--			--		
SU11-13-Z2	13.5-15 ft	06/04/07	0.24 ± 0.10	J	0.13	0.34 ± 0.15	J	0.20	--			--		
SU11-13-Z3	16-17.5 ft	06/04/07	0.107 ± 0.071	UJ	0.11	0.07 ± 0.13	UJ	0.22	--			--		
SU11-13-Z4	28-29.5 ft	06/04/07	0.072 ± 0.077	UJ	0.13	-0.03 ± 0.87	UJ	0.43	--			--		
SU11-13-Z5	38.5-40 ft	06/04/07	0.094 ± 0.074	UJ	0.12	0.05 ± 0.11	U	0.19	--			--		
SU11-13-Z6	47.5-49 ft	06/04/07	0.147 ± 0.085	J	0.12	0.11 ± 0.11	U	0.18	--			--		
SU11-14-Z1	6-8 ft	06/01/07	0.41 ± 0.12	J	0.09	0.30 ± 0.20	UJ	0.30	--			--		
SU11-14-Z2	14.5-16 ft	06/04/07	0.126 ± 0.081	UJ	0.13	0.202 ± 0.099	J	0.17	--			--		
SU11-14-Z3	21-24 ft	06/04/07	0.178 ± 0.065	J	0.058	0.09 ± 0.13	U	0.23	--			--		
SU11-14-Z4	24-25.5 ft	06/04/07	0.027 ± 0.080	UJ	0.15	0.09 ± 0.15	U	0.26	--			--		
SU11-15-Z1	2-4 ft	06/01/07	0.82 ± 0.20		0.16	0.80 ± 0.26		0.39	--			--		
SU11-15-Z2	12-16 ft	06/01/07	0.109 ± 0.070	UJ	0.11	0.03 ± 0.11	UJ	0.20	--			--		
SU11-16-Z1	0-2 ft	05/31/07	0.70 ± 0.16		0.19	0.61 ± 0.19		0.32	--			--		
SU11-16-Z2	12-16 ft	05/31/07	0.213 ± 0.094	J	0.14	0.16 ± 0.12	UJ	0.18	--			--		
SU11-16-Z3	16-18 ft	05/31/07	0.37 ± 0.10	J	0.08	0.18 ± 0.18	UJ	0.29	--			--		
SU11-17-Z1	6-8 ft	06/05/07	0.159 ± 0.088		0.14	0.17 ± 0.15	UJ	0.25	--			--		

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Radium-224			Bismuth-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-17-Z2	14-16 ft	06/05/07	0.179 ± 0.094		0.12	0.15 ± 0.17	UJ	0.28	--			--		
SU11-18-Z1	6-8 ft	06/05/07	0.24 ± 0.10	J	0.11	0.18 ± 0.14	UJ	0.22	--			0.88 ± 0.27	J	0.15
SU11-18-Z2	8-10 ft	06/05/07	0.53 ± 0.15		0.12	0.32 ± 0.19		0.25	--			--		
SU11-19-Z1	1-3 ft	05/31/07	0.82 ± 0.21		0.16	0.85 ± 0.26		0.30	--			--		
SU11-19-Z2	12-14 ft	05/31/07	0.069 ± 0.056	UJ	0.097	0.05 ± 0.10	UJ	0.18	--			--		
SU11-20-Z1	4-6 ft	05/31/07	0.172 ± 0.097	J	0.14	0.13 ± 0.14	UJ	0.24	--			--		
SU11-20-Z2	8-10 ft	05/31/07	0.50 ± 0.14	J	0.1	0.55 ± 0.17	J	0.26	--			--		
SU11-21-Z1	3-5 ft	06/05/07	0.24 ± 0.12		0.16	0.27 ± 0.20	UJ	0.31	--			--		
SU11-21-Z2	9-11 ft	06/05/07	0.145 ± 0.088	J	0.13	0.03 ± 0.13	UJ	0.24	--			--		
SU11-22-Z1	6-8 ft	06/07/07	0.217 ± 0.098	J	0.12	0.25 ± 0.16	J	0.22	--			--		
SU12-02-Z1	6-7 ft	05/31/07	0.20 ± 0.11	J	0.15	0.19 ± 0.18	UJ	0.28	--			--		
SU12-02-Z2	10-11 ft	05/31/07	0.103 ± 0.075	UJ	0.12	0.08 ± 0.11	U	0.20	--			--		
SU12-02-Z3	19-20 ft	05/31/07	0.103 ± 0.072	UJ	0.12	0.06 ± 0.11	UJ	0.20	--			--		
SU12-03/I-Z1	3-4 ft	05/31/07	0.48 ± 0.12	J	0.14	0.35 ± 0.14	J	0.26	--			--		
SU12-03/I-Z2	14-15 ft	05/31/07	0.23 ± 0.10	UJ	0.11	0.04 ± 0.14	UJ	0.26	--			--		
SU12-05-Z1	3-4 ft	05/30/07	0.26 ± 0.12	J	0.17	0.52 ± 0.24	J	0.32	--			--		
SU12-05-Z2	8-9 ft	05/30/07	0.249 ± 0.090	J	0.12	0.35 ± 0.12	J	0.23	--			--		
SU12-06-Z1	5-6 ft	05/30/07	0.117 ± 0.087	UJ	0.13	0.26 ± 0.16	J	0.22	--			--		
SU12-06-Z2	14-15 ft	05/30/07	0.097 ± 0.074	UJ	0.12	0.10 ± 0.13	UJ	0.22	--			--		
SU12-06-Z3	17-18 ft	05/30/07	0.141 ± 0.085	J	0.13	0.09 ± 0.12	UJ	0.21	--			--		
SU12-09-Z1	6-7 ft	05/18/07	0.57 ± 0.12		0.13	0.76 ± 0.17		0.08	--			--		
SU12-09-Z2	9-11 ft	05/24/07	0.324 ± 0.079		0.045	0.13 ± 0.12	UJ	0.19	--			--		
SU12-10-Z1	2-3 ft	05/30/07	0.46 ± 0.13	J	0.10	0.30 ± 0.14	J	0.26	--			--		
SU12-10-Z2	13-14 ft	05/30/07	0.196 ± 0.082	J	0.12	0.01 ± 0.11	UJ	0.22	--			--		
SU12-10-Z3	17-19 ft	05/30/07	0.160 ± 0.096	J	0.14	0.16 ± 0.18	UJ	0.29	--			--		
SU12-12I-Z1	1-3 ft	05/24/07	0.308 ± 0.091	J	0.072	0.22 ± 0.12	J	0.22	--			--		
SU12-13-Z1	5-7 ft	05/24/07	0.48 ± 0.13	J	0.17	0.69 ± 0.22	J	0.26	--			0.52 ± 0.34	J	0.49
SU12-13-Z2	10-12 ft	05/24/07	0.178 ± 0.091	J	0.13	0.03 ± 0.12	UJ	0.23	--			--		
SU12-14-Z1	7-8 ft	05/18/07	0.111 ± 0.075		0.11	0.20 ± 0.11		0.20	--			--		
SU12-15-Z1	0-8 ft	05/29/07	0.191 ± 0.087	J	0.13	0.11 ± 0.13	UJ	0.21	--			--		
SU12-15-Z2	8-16 ft	05/29/07	0.076 ± 0.086	UJ	0.15	-0.03 ± 0.50	UJ	0.26	--			--		
SU12-16-Z1	0-8 ft	05/29/07	0.241 ± 0.090	J	0.12	0.25 ± 0.12	J	0.23	--			--		
SU12-16-Z2	8-12 ft	05/29/07	0.31 ± 0.11	J	0.10	0.003 ± 0.16	UJ	0.31	--			--		
SU12-18-Z1	0-8 ft	05/29/07	0.58 ± 0.13	J	0.08	0.65 ± 0.22	J	0.32	--			--		
SU12-18-Z2	8-12 ft	05/29/07	0.25 ± 0.11	J	0.14	0.12 ± 0.14	UJ	0.24	--			--		
SU12-19-Z1	7-8 ft	05/18/07	0.21 ± 0.11		0.16	0.06 ± 0.16	U	0.30	--			--		
SU12-19-Z2	13-14 ft	05/18/07	0.078 ± 0.058	UJ	0.092	0.099 ± 0.082	UJ	0.19	--			--		
SU12-20-Z1	1-3 ft	05/18/07	0.31 ± 0.11		0.13	0.39 ± 0.14		0.27	--			--		
SU12-20-Z2	8-9.5 ft	05/18/07	0.31 ± 0.11		0.12	0.18 ± 0.16	UJ	0.25	--			--		
SU12-21-Z1	2-3.5 ft	05/18/07	0.86 ± 0.18		0.19	0.90 ± 0.23		0.32	--			0.72 ± 0.42		0.60
SU12-21-Z2	9-10.5 ft	05/18/07	0.37 ± 0.10		0.07	0.09 ± 0.14	U	0.25	--			--		

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead-210			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-01-Z1	4-6 ft	05/29/07	7.3 ± 1.1	J	0.6	1.5 ± 1.2	J	1.4	--			0.115 ± 0.063	J	0.10
SU10-02-Z1	5.5-7 ft	06/07/07	6.2 ± 1.0	J	0.7	--			--			0.35 ± 0.12	J	0.11
SU10-02-Z2	9-11 ft	06/07/07	6.3 ± 1.1	J	0.4	--			--			0.292 ± 0.080	J	0.10
SU10-03-Z1	6-8 ft	06/08/07	6.2 ± 1.2	J	0.6	--			--			0.242 ± 0.087	J	0.091
SU10-04-Z1	6-8 ft	05/25/07	11.3 ± 1.8		1.3	--			--			1.54 ± 0.21		0.15
SU10-04-Z2	10-11.5 ft	05/25/07	5.9 ± 1.2	J	0.4	--			--			0.173 ± 0.055	J	0.056
SU10-05-Z1	4-6 ft	05/25/07	6.4 ± 1.3	J	0.6	--			--			0.356 ± 0.091	J	0.080
SU10-05-Z2	10-12 ft	05/25/07	9.9 ± 1.4	J	0.3	--			--			0.57 ± 0.11	J	0.09
SU10-06-Z1	4-6 ft	05/29/07	6.7 ± 1.4	J	0.6	--			--			0.279 ± 0.082	J	0.088
SU10-06-Z2	9-11 ft	05/29/07	6.4 ± 1.1	J	0.4	--			--			0.46 ± 0.11	J	0.08
SU10-07-Z1	1-3 ft	05/29/07	8.1 ± 1.4	J	0.4	--			--			0.435 ± 0.086	J	0.072
SU10-07-Z2	10-12 ft	05/29/07	7.4 ± 1.4	J	0.6	--			--			0.52 ± 0.12	J	0.1
SU10-08-Z1	0-2 ft	05/29/07	7.3 ± 1.3	J	0.8	--			--			0.98 ± 0.12	J	0.09
SU10-09-Z1	3-5 ft	05/30/07	8.0 ± 1.2	J	0.6	--			--			0.377 ± 0.089	J	0.095
SU10-10-Z1	4-6 ft	05/31/07	5.4 ± 1.2	J	0.6	--			--			0.50 ± 0.11	J	0.09
SU10-10-Z2	14-16 ft	05/31/07	5.4 ± 1.2	J	0.6	--			--			0.198 ± 0.064	J	0.068
SU10-10-Z3	19-20 ft	05/31/07	5.40 ± 0.95	J	0.72	--			--			0.23 ± 0.11	J	0.11
SU10-11-Z1	3-5 ft	06/08/07	5.5 ± 1.2	J	0.8	--			--			0.349 ± 0.087	J	0.080
SU10-11-Z2	8-10 ft	06/08/07	6.8 ± 1.1	J	0.4	--			--			0.372 ± 0.075	J	0.070
SU10-12-Z1	6-8 ft	05/30/07	10.7 ± 1.8		0.8	--			--			1.35 ± 0.24		0.19
SU10-12-Z2	10-12 ft	05/30/07	15.0 ± 2.1		0.5	--			--			0.93 ± 0.17		0.15
SU10-13-Z1	3-5 ft	05/30/07	8.7 ± 1.3	J	0.8	--			--			0.533 ± 0.096	J	0.090
SU10-14-Z1	7-8 ft	06/04/07	7.7 ± 1.2		0.6	--			--			0.55 ± 0.11		0.10
SU10-14-Z2	13-14 ft	06/04/07	5.3 ± 1.2		0.5	--			--			0.199 ± 0.080		0.088
SU10-15-Z1	3-6 ft	06/08/07	7.8 ± 1.3	J	0.4	--			--			0.54 ± 0.12	J	0.11
SU10-15-Z2	8-10 ft	06/08/07	6.5 ± 1.0	J	0.7	--			--			0.43 ± 0.10	J	0.1
SU10-16-Z1	1-2 ft	06/04/07	6.8 ± 1.4	J	0.7	--			--			0.82 ± 0.15	J	0.12
SU10-16-Z2	9-10 ft	06/04/07	8.4 ± 1.4	J	0.8	--			--			0.334 ± 0.096	J	0.089
SU10-17-Z1	5-6 ft	06/04/07	5.9 ± 1.1		1	--			--			0.61 ± 0.13		0.11
SU10-17-Z2	8-9 ft	06/04/07	8.8 ± 1.6		0.6	--			--			0.46 ± 0.10		0.10
SU10-18-Z1	6-8 ft	05/31/07	8.0 ± 1.2	J	0.6	--			--			0.48 ± 0.12	J	0.11
SU10-18-Z2	9-11 ft	05/31/07	6.6 ± 1.3	J	0.5	--			--			0.315 ± 0.071	J	0.063
SU10-19-Z1	6-8 ft	06/08/07	6.1 ± 1.2	J	0.7	--			--			0.187 ± 0.070	J	0.096
SU10-19-Z2	9-11 ft	06/08/07	12.3 ± 1.5	J	0.5	--			--			1.06 ± 0.18	J	0.14
SU11-01-Z1	3-4 ft	06/04/07	7.8 ± 1.5		1.1	--			--			1.08 ± 0.17		0.13
SU11-01-Z2	11-12 ft	06/04/07	6.5 ± 1.3		0.4	--			--			0.313 ± 0.084		0.084

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead-210			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-02-Z1	3-4 ft	06/04/07	7.3 ± 1.3		0.5	--			--			0.55 ± 0.12		0.10
SU11-02-Z2	8-9 ft	06/04/07	9.7 ± 1.4		0.7	--			--			0.73 ± 0.15		0.13
SU11-03-Z1	0-2 ft	06/07/07	12.7 ± 1.9		1.2	4.3 ± 2.5		2.9	--			1.32 ± 0.19		0.16
SU11-04-Z1	0-2 ft	06/06/07	9.1 ± 1.6		0.7	--			--			0.63 ± 0.12		0.11
SU11-04-Z2	11-13 ft	06/06/07	4.6 ± 1.1	J	0.4	--			--			0.274 ± 0.090	J	0.091
SU11-05/D-Z1	6-8 ft	06/06/07	8.1 ± 1.5		0.6	2.0 ± 1.7		1.9	--			0.52 ± 0.11		0.10
SU11-05/D-Z2	10-12 ft	06/06/07	5.17 ± 0.94	J	0.74	--			--			0.192 ± 0.078	J	0.088
SU11-06-Z1	2-3 ft	06/04/07	12.3 ± 2.3		1.0	--			--			1.02 ± 0.21		0.19
SU11-06-Z2	8-9 ft	06/04/07	10.9 ± 2.0		0.6	--			--			0.72 ± 0.16		0.13
SU11-07-Z1	5-7 ft	05/30/07	5.3 ± 1.2		0.8	--			--			0.38 ± 0.13		0.12
SU11-07-Z2	12-14 ft	05/30/07	3.59 ± 0.95	J	0.52	--			--			0.242 ± 0.089	J	0.086
SU11-08-Z1	2-4 ft	05/30/07	12.7 ± 2.0		0.5	--			--			1.26 ± 0.16		0.11
SU11-08-Z2	14-16 ft	05/30/07	5.2 ± 1.1	J	0.7	--			--			0.127 ± 0.058	J	0.075
SU11-09-Z1	1.5-3.5 ft	06/06/07	7.1 ± 1.6		1.3	--			--			0.89 ± 0.18		0.17
SU11-09-Z2	11-13 ft	06/06/07	4.67 ± 0.91	J	0.59	-0.9 ± 39	UJ	2	--			0.31 ± 0.13	J	0.12
SU11-10-Z1	5-6.5 ft	06/05/07	5.3 ± 1.1		1.1	--			--			0.50 ± 0.11		0.11
SU11-10-Z2	10-12 ft	06/05/07	5.4 ± 1.2		0.5	--			--			0.197 ± 0.079		0.091
SU11-11-Z1	5-7 ft	06/06/07	5.3 ± 1.2	J	0.9	--			--			0.33 ± 0.10	J	0.1
SU11-11-Z2	10-12 ft	06/06/07	5.2 ± 1.0	J	0.4	--			--			0.260 ± 0.076	J	0.074
SU11-12-Z1	2-3.5 ft	06/05/07	8.0 ± 1.8		0.7	--			--			0.92 ± 0.24		0.22
SU11-12-Z2	13.5-15 ft	06/05/07	6.3 ± 1.2		0.5	--			--			0.30 ± 0.10		0.09
SU11-13-Z1	3.5-5 ft	06/04/07	6.9 ± 1.4		0.8	--			--			0.33 ± 0.10		0.10
SU11-13-Z2	13.5-15 ft	06/04/07	4.5 ± 1.1	J	0.4	--			--			0.34 ± 0.10	J	0.1
SU11-13-Z3	16-17.5 ft	06/04/07	4.2 ± 1.0	J	0.9	--			--			0.168 ± 0.058	J	0.060
SU11-13-Z4	28-29.5 ft	06/04/07	2.05 ± 0.76		0.70	--			--			0.166 ± 0.086		0.086
SU11-13-Z5	38.5-40 ft	06/04/07	2.48 ± 0.74		0.82	--			--			0.169 ± 0.070		0.086
SU11-13-Z6	47.5-49 ft	06/04/07	0.99 ± 0.60		0.80	--			--			0.120 ± 0.052		0.065
SU11-14-Z1	6-8 ft	06/01/07	5.5 ± 1.2	J	0.6	--			--			0.363 ± 0.089	J	0.087
SU11-14-Z2	14.5-16 ft	06/04/07	4.72 ± 0.91	J	0.59	--			--			0.241 ± 0.085	J	0.097
SU11-14-Z3	21-24 ft	06/04/07	4.7 ± 1.1		0.8	--			--			0.230 ± 0.081		0.076
SU11-14-Z4	24-25.5 ft	06/04/07	2.91 ± 0.81		0.41	--			--			--		
SU11-15-Z1	2-4 ft	06/01/07	10.5 ± 1.9	J	0.6	--			--			0.86 ± 0.16		0.14
SU11-15-Z2	12-16 ft	06/01/07	4.64 ± 0.84	J	0.51	--			--			0.256 ± 0.079	J	0.077
SU11-16-Z1	0-2 ft	05/31/07	5.4 ± 1.2		1.3	--			--			0.87 ± 0.13	J	0.12
SU11-16-Z2	12-16 ft	05/31/07	4.98 ± 0.92	J	0.64	--			--			0.278 ± 0.079	J	0.089
SU11-16-Z3	16-18 ft	05/31/07	6.0 ± 1.3	J	0.9	--			--			0.331 ± 0.093	J	0.088
SU11-17-Z1	6-8 ft	06/05/07	4.47 ± 0.98		0.97	--			--			0.379 ± 0.090		0.093

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead-210			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-17-Z2	14-16 ft	06/05/07	4.1 ± 1.1		1	--			--			0.217 ± 0.068		0.086
SU11-18-Z1	6-8 ft	06/05/07	7.6 ± 1.2	J	0.8	--			--			0.382 ± 0.085	J	0.087
SU11-18-Z2	8-10 ft	06/05/07	8.6 ± 1.6		0.7	--			--			0.41 ± 0.11		0.10
SU11-19-Z1	1-3 ft	05/31/07	7.7 ± 1.6		0.8	--			--			0.80 ± 0.16	J	0.14
SU11-19-Z2	12-14 ft	05/31/07	3.50 ± 0.80	J	0.72	--			--			--		
SU11-20-Z1	4-6 ft	05/31/07	6.8 ± 1.3	J	0.4	--			--			0.301 ± 0.075	J	0.071
SU11-20-Z2	8-10 ft	05/31/07	7.9 ± 1.4	J	0.6	--			--			0.63 ± 0.14	J	0.12
SU11-21-Z1	3-5 ft	06/05/07	7.4 ± 1.5		0.5	--			--			0.58 ± 0.15		0.12
SU11-21-Z2	9-11 ft	06/05/07	5.7 ± 1.2	J	0.7	--			--			0.180 ± 0.071	J	0.083
SU11-22-Z1	6-8 ft	06/07/07	3.83 ± 0.90	J	0.68	--			--			0.39 ± 0.12	J	0.10
SU12-02-Z1	6-7 ft	05/31/07	6.1 ± 1.2	J	0.6	--			--			0.339 ± 0.099	J	0.099
SU12-02-Z2	10-11 ft	05/31/07	6.9 ± 1.1		0.5	--			--			0.174 ± 0.060	J	0.075
SU12-02-Z3	19-20 ft	05/31/07	5.53 ± 0.95	J	0.71	--			--			0.170 ± 0.059	J	0.069
SU12-03/I-Z1	3-4 ft	05/31/07	10.8 ± 1.4	J	0.6	--			--			0.84 ± 0.15	J	0.12
SU12-03/I-Z2	14-15 ft	05/31/07	4.6 ± 1.1	J	0.8	--			--			0.232 ± 0.088	J	0.090
SU12-05-Z1	3-4 ft	05/30/07	5.7 ± 1.3	J	1	--			12.5 ± 7.0	J	9.0	0.51 ± 0.11	J	0.11
SU12-05-Z2	8-9 ft	05/30/07	5.83 ± 0.999	J	0.74	--			--			0.47 ± 0.10	J	0.10
SU12-06-Z1	5-6 ft	05/30/07	7.1 ± 1.2	J	0.4	--			--			0.417 ± 0.098	J	0.081
SU12-06-Z2	14-15 ft	05/30/07	4.51 ± 0.90	J	0.74	--			--			0.120 ± 0.063	J	0.10
SU12-06-Z3	17-18 ft	05/30/07	3.63 ± 0.96	J	0.67	--			--			0.196 ± 0.068	J	0.064
SU12-09-Z1	6-7 ft	05/18/07	8.0 ± 1.2		0.5	--			--			0.91 ± 0.15		0.11
SU12-09-Z2	9-11 ft	05/24/07	6.7 ± 1.1		0.3	--			--			0.285 ± 0.068		0.062
SU12-10-Z1	2-3 ft	05/30/07	7.0 ± 1.3	J	0.4	--			--			0.53 ± 0.10	J	0.09
SU12-10-Z2	13-14 ft	05/30/07	6.2 ± 1.0	J	0.7	--			--			0.25 ± 0.10	J	0.11
SU12-10-Z3	17-19 ft	05/30/07	6.2 ± 1.3	J	0.6	--			--			0.165 ± 0.076	J	0.087
SU12-12I-Z1	1-3 ft	05/24/07	5.1 ± 1.1	J	0.5	--			--			0.254 ± 0.080	J	0.074
SU12-13-Z1	5-7 ft	05/24/07	10 ± 1.4	J	1	--			--			0.70 ± 0.12	J	0.11
SU12-13-Z2	10-12 ft	05/24/07	3.91 ± 0.93	J	0.76	--			--			0.189 ± 0.076	J	0.082
SU12-14-Z1	7-8 ft	05/18/07	6.6 ± 1.2		0.5	--			--			0.46 ± 0.12		0.09
SU12-15-Z1	0-8 ft	05/29/07	6.6 ± 1.1	J	0.9	--			--			0.317 ± 0.096	J	0.096
SU12-15-Z2	8-16 ft	05/29/07	8.1 ± 1.4	J	0.4	--			--			0.151 ± 0.067	J	0.069
SU12-16-Z1	0-8 ft	05/29/07	6.9 ± 1.1	J	0.6	--			--			0.364 ± 0.091	J	0.092
SU12-16-Z2	8-12 ft	05/29/07	4.0 ± 1.0	J	0.8	--			--			0.229 ± 0.080	J	0.082
SU12-18-Z1	0-8 ft	05/29/07	10.2 ± 1.6	J	0.4	--			--			0.56 ± 0.11	J	0.1
SU12-18-Z2	8-12 ft	05/29/07	6.4 ± 1.3	J	0.6	--			--			0.247 ± 0.085	J	0.092
SU12-19-Z1	7-8 ft	05/18/07	6.3 ± 1.4		0.9	--			--			0.247 ± 0.072		0.072
SU12-19-Z2	13-14 ft	05/18/07	5.20 ± 0.88	J	0.24	--			--			0.117 ± 0.046	J	0.068
SU12-20-Z1	1-3 ft	05/18/07	7.8 ± 1.3		0.5	--			--			0.384 ± 0.096		0.096
SU12-20-Z2	8-9.5 ft	05/18/07	7.1 ± 1.3		0.8	--			--			0.47 ± 0.13		0.12
SU12-21-Z1	2-3.5 ft	05/18/07	14.7 ± 1.9		0.7	3.5 ± 2.4		2.7	--			1.33 ± 0.20		0.17
SU12-21-Z2	9-10.5 ft	05/18/07	6.4 ± 1.2		0.4	--			--			0.284 ± 0.076		0.067

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU10-01-Z1	4-6 ft	05/29/07	0.197 ± 0.068	J	0.11	--			--		
SU10-02-Z1	5.5-7 ft	06/07/07	0.248 ± 0.080	J	0.11	0.111 ± 0.044	J	0.062	1.36 ± 0.55	J	1.0
SU10-02-Z2	9-11 ft	06/07/07	0.283 ± 0.083	J	0.10	0.164 ± 0.044	J	0.028	--		
SU10-03-Z1	6-8 ft	06/08/07	0.288 ± 0.083	J	0.086	--			--		
SU10-04-Z1	6-8 ft	05/25/07	1.03 ± 0.18		0.18	0.445 ± 0.089		0.066	1.77 ± 0.84		1.7
SU10-04-Z2	10-11.5 ft	05/25/07	0.129 ± 0.060	J	0.10	--			--		
SU10-05-Z1	4-6 ft	05/25/07	0.196 ± 0.077	J	0.13	--			--		
SU10-05-Z2	10-12 ft	05/25/07	0.57 ± 0.10	J	0.10	0.234 ± 0.055	J	0.037	--		
SU10-06-Z1	4-6 ft	05/29/07	0.29 ± 0.11	J	0.15	0.084 ± 0.048	J	0.067	--		
SU10-06-Z2	9-11 ft	05/29/07	0.307 ± 0.093	J	0.11	0.092 ± 0.044	J	0.059	--		
SU10-07-Z1	1-3 ft	05/29/07	0.55 ± 0.11	J	0.11	0.180 ± 0.058	J	0.061	1.07 ± 0.49	J	1.0
SU10-07-Z2	10-12 ft	05/29/07	0.324 ± 0.092	J	0.13	0.175 ± 0.051	J	0.035	--		
SU10-08-Z1	0-2 ft	05/29/07	0.43 ± 0.10	J	0.09	0.397 ± 0.099	J	0.068	2.5 ± 1.1	J	1.3
SU10-09-Z1	3-5 ft	05/30/07	0.350 ± 0.079	J	0.11	0.112 ± 0.048	J	0.068	--		
SU10-10-Z1	4-6 ft	05/31/07	0.361 ± 0.095	J	0.12	0.227 ± 0.057	J	0.025	--		
SU10-10-Z2	14-16 ft	05/31/07	0.273 ± 0.093	J	0.088	--			--		
SU10-10-Z3	19-20 ft	05/31/07	0.145 ± 0.066	J	0.096	--			--		
SU10-11-Z1	3-5 ft	06/08/07	0.205 ± 0.075	J	0.13	0.103 ± 0.047	J	0.060	--		
SU10-11-Z2	8-10 ft	06/08/07	0.350 ± 0.084	J	0.077	0.186 ± 0.045	J	0.034	--		
SU10-12-Z1	6-8 ft	05/30/07	1.25 ± 0.19		0.15	0.427 ± 0.098		0.063	--		
SU10-12-Z2	10-12 ft	05/30/07	1.15 ± 0.20		0.13	0.48 ± 0.13		0.09	--		
SU10-13-Z1	3-5 ft	05/30/07	0.34 ± 0.10	J	0.13	0.246 ± 0.079	J	0.074	--		
SU10-14-Z1	7-8 ft	06/04/07	0.286 ± 0.092		0.14	0.139 ± 0.055		0.075	--		
SU10-14-Z2	13-14 ft	06/04/07	--			--			--		
SU10-15-Z1	3-6 ft	06/08/07	0.32 ± 0.11	J	0.14	0.182 ± 0.060	J	0.071	--		
SU10-15-Z2	8-10 ft	06/08/07	0.367 ± 0.083	J	0.12	0.230 ± 0.056	J	0.047	1.26 ± 0.76	J	1.0
SU10-16-Z1	1-2 ft	06/04/07	0.329 ± 0.096	J	0.13	0.206 ± 0.072	J	0.091	0.68 ± 0.54	UJ	1.5
SU10-16-Z2	9-10 ft	06/04/07	0.237 ± 0.073	J	0.10	0.074 ± 0.044	J	0.068	--		
SU10-17-Z1	5-6 ft	06/04/07	0.42 ± 0.12		0.12	0.165 ± 0.052		0.047	--		
SU10-17-Z2	8-9 ft	06/04/07	0.326 ± 0.097		0.14	0.127 ± 0.061		0.082	--		
SU10-18-Z1	6-8 ft	05/31/07	0.352 ± 0.094	J	0.11	0.161 ± 0.046	J	0.041	--		
SU10-18-Z2	9-11 ft	05/31/07	0.288 ± 0.093	J	0.11	0.141 ± 0.056	J	0.069	--		
SU10-19-Z1	6-8 ft	06/08/07	0.174 ± 0.074	J	0.098	--			--		
SU10-19-Z2	9-11 ft	06/08/07	0.71 ± 0.12	J	0.14	0.328 ± 0.076	J	0.060	--		
SU11-01-Z1	3-4 ft	06/04/07	0.89 ± 0.15		0.1	0.323 ± 0.075		0.058	--		
SU11-01-Z2	11-12 ft	06/04/07	0.218 ± 0.091		0.12	0.137 ± 0.058		0.052	--		

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-02-Z1	3-4 ft	06/04/07	0.333 ± 0.098		0.12	0.133 ± 0.055		0.077	--		
SU11-02-Z2	8-9 ft	06/04/07	0.74 ± 0.14		0.13	0.241 ± 0.057		0.045	--		
SU11-03-Z1	0-2 ft	06/07/07	1.27 ± 0.30		0.23	0.56 ± 0.12		0.09	--		
SU11-04-Z1	0-2 ft	06/06/07	0.74 ± 0.20		0.16	0.200 ± 0.067		0.074	--		
SU11-04-Z2	11-13 ft	06/06/07	0.187 ± 0.081	J	0.11	--			--		
SU11-05/D-Z1	6-8 ft	06/06/07	0.33 ± 0.11		0.13	0.158 ± 0.068	J	0.066	--		
SU11-05/D-Z2	10-12 ft	06/06/07	0.182 ± 0.071	J	0.098	--			--		
SU11-06-Z1	2-3 ft	06/04/07	1.01 ± 0.21		0.26	0.32 ± 0.11		0.12	--		
SU11-06-Z2	8-9 ft	06/04/07	0.60 ± 0.14		0.17	0.218 ± 0.077		0.085	3.5 ± 1.1	J	1.8
SU11-07-Z1	5-7 ft	05/30/07	0.35 ± 0.11		0.14	0.149 ± 0.051		0.035	--		
SU11-07-Z2	12-14 ft	05/30/07	0.137 ± 0.083	J	0.12	--			--		
SU11-08-Z1	2-4 ft	05/30/07	1.06 ± 0.21		0.15	0.444 ± 0.092		0.055	2.34 ± 0.83		1.7
SU11-08-Z2	14-16 ft	05/30/07	0.147 ± 0.064	J	0.10	--			--		
SU11-09-Z1	1.5-3.5 ft	06/06/07	0.78 ± 0.15		0.17	0.38 ± 0.11	J	0.08	--		
SU11-09-Z2	11-13 ft	06/06/07	0.148 ± 0.070	J	0.099	0.068 ± 0.043	J	0.067	--		
SU11-10-Z1	5-6.5 ft	06/05/07	0.33 ± 0.10		0.13	0.205 ± 0.059		0.059	--		
SU11-10-Z2	10-12 ft	06/05/07	0.157 ± 0.092		0.14	--			--		
SU11-11-Z1	5-7 ft	06/06/07	0.240 ± 0.088	J	0.11	0.171 ± 0.062	J	0.052	--		
SU11-11-Z2	10-12 ft	06/06/07	0.117 ± 0.069	J	0.10	--			--		
SU11-12-Z1	2-3.5 ft	06/05/07	1.16 ± 0.21		0.21	0.35 ± 0.11		0.10	--		
SU11-12-Z2	13.5-15 ft	06/05/07	0.143 ± 0.066		0.087	0.090 ± 0.038		0.045	--		
SU11-13-Z1	3.5-5 ft	06/04/07	0.25 ± 0.10		0.15	0.159 ± 0.051		0.039	--		
SU11-13-Z2	13.5-15 ft	06/04/07	0.212 ± 0.087	J	0.15	0.130 ± 0.048	J	0.055	--		
SU11-13-Z3	16-17.5 ft	06/04/07	0.128 ± 0.059	J	0.080	--			--		
SU11-13-Z4	28-29.5 ft	06/04/07	0.159 ± 0.067		0.11	--			--		
SU11-13-Z5	38.5-40 ft	06/04/07	0.139 ± 0.074		0.11	--			--		
SU11-13-Z6	47.5-49 ft	06/04/07	--			--			--		
SU11-14-Z1	6-8 ft	06/01/07	0.293 ± 0.095	J	0.16	--			--		
SU11-14-Z2	14.5-16 ft	06/04/07	0.218 ± 0.077	J	0.10	--			--		
SU11-14-Z3	21-24 ft	06/04/07	0.101 ± 0.051		0.084	0.028 ± 0.036	U	0.064	--		
SU11-14-Z4	24-25.5 ft	06/04/07	0.144 ± 0.081		0.12	--			--		
SU11-15-Z1	2-4 ft	06/01/07	0.68 ± 0.17		0.18	0.46 ± 0.12	J	0.07	--		
SU11-15-Z2	12-16 ft	06/01/07	0.121 ± 0.056	J	0.10	0.057 ± 0.030	J	0.037	--		
SU11-16-Z1	0-2 ft	05/31/07	0.79 ± 0.16		0.14	0.366 ± 0.083		0.070	1.92 ± 0.78		1.5
SU11-16-Z2	12-16 ft	05/31/07	0.250 ± 0.076	J	0.091	--			--		
SU11-16-Z3	16-18 ft	05/31/07	0.205 ± 0.089	J	0.13	0.091 ± 0.044	J	0.054	--		
SU11-17-Z1	6-8 ft	06/05/07	0.290 ± 0.097	J	0.13	0.097 ± 0.042		0.056	1.6 ± 1.0		1.2

Table 3.2-4e Radiological Results for the Interior of Building 70 (SU10, SU11, and SU12) Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-17-Z2	14-16 ft	06/05/07	0.171 ± 0.078	J	0.10	--			--		
SU11-18-Z1	6-8 ft	06/05/07	0.45 ± 0.10	J	0.09	0.134 ± 0.048	J	0.065	--		
SU11-18-Z2	8-10 ft	06/05/07	0.40 ± 0.12		0.17	0.190 ± 0.059		0.043	--		
SU11-19-Z1	1-3 ft	05/31/07	0.85 ± 0.19		0.17	0.319 ± 0.082		0.058	--		
SU11-19-Z2	12-14 ft	05/31/07	--			--			--		
SU11-20-Z1	4-6 ft	05/31/07	0.261 ± 0.076	J	0.12	0.111 ± 0.049	J	0.061	--		
SU11-20-Z2	8-10 ft	05/31/07	0.374 ± 0.097	J	0.13	0.150 ± 0.064	J	0.086	--		
SU11-21-Z1	3-5 ft	06/05/07	0.42 ± 0.12	J	0.15	--			--		
SU11-21-Z2	9-11 ft	06/05/07	0.226 ± 0.076	J	0.12	0.081 ± 0.034	J	0.032	--		
SU11-22-Z1	6-8 ft	06/07/07	0.268 ± 0.088	J	0.11	--			--		
SU12-02-Z1	6-7 ft	05/31/07	0.202 ± 0.077	J	0.12	--			2.22 ± 0.62	J	1.2
SU12-02-Z2	10-11 ft	05/31/07	0.195 ± 0.069		0.10	--			--		
SU12-02-Z3	19-20 ft	05/31/07	0.107 ± 0.067	UJ	0.11	--			--		
SU12-03/I-Z1	3-4 ft	05/31/07	0.57 ± 0.10	J	0.13	0.288 ± 0.069	J	0.052	--		
SU12-03/I-Z2	14-15 ft	05/31/07	0.152 ± 0.088	J	0.13	0.099 ± 0.055	J	0.077	5.4 ± 1.2	J	1.3
SU12-05-Z1	3-4 ft	05/30/07	0.38 ± 0.12	J	0.15	0.134 ± 0.071	J	0.10	12.5 ± 1.6	J	2.4
SU12-05-Z2	8-9 ft	05/30/07	0.394 ± 0.089	J	0.11	0.094 ± 0.043	J	0.063	1.48 ± 0.65	J	1.3
SU12-06-Z1	5-6 ft	05/30/07	0.194 ± 0.084	J	0.11	0.103 ± 0.046	J	0.060	--		
SU12-06-Z2	14-15 ft	05/30/07	0.189 ± 0.070	J	0.094	--			--		
SU12-06-Z3	17-18 ft	05/30/07	--			--			--		
SU12-09-Z1	6-7 ft	05/18/07	0.436 ± 0.098		0.12	0.179 ± 0.050		0.057	--		
SU12-09-Z2	9-11 ft	05/24/07	0.351 ± 0.086		0.089	0.054 ± 0.035		0.053	--		
SU12-10-Z1	2-3 ft	05/30/07	0.36 ± 0.10	J	0.16	0.301 ± 0.086	J	0.060	3.38 ± 0.87	J	1.4
SU12-10-Z2	13-14 ft	05/30/07	0.148 ± 0.078	J	0.12	0.076 ± 0.034	J	0.048	--		
SU12-10-Z3	17-19 ft	05/30/07	--			--			--		
SU12-12I-Z1	1-3 ft	05/24/07	0.221 ± 0.081	J	0.12	--			--		
SU12-13-Z1	5-7 ft	05/24/07	0.67 ± 0.13	J	0.14	0.242 ± 0.075	J	0.070	1.41 ± 0.70	J	1.3
SU12-13-Z2	10-12 ft	05/24/07	0.167 ± 0.071	J	0.12	--			--		
SU12-14-Z1	7-8 ft	05/18/07	0.268 ± 0.088		0.10	0.053 ± 0.042	UJ	0.066	--		
SU12-15-Z1	0-8 ft	05/29/07	0.257 ± 0.077	J	0.092	0.076 ± 0.043	J	0.065	--		
SU12-15-Z2	8-16 ft	05/29/07	0.133 ± 0.071	J	0.13	--			--		
SU12-16-Z1	0-8 ft	05/29/07	0.275 ± 0.086	J	0.11	0.155 ± 0.040	J	0.033	--		
SU12-16-Z2	8-12 ft	05/29/07	0.236 ± 0.076	J	0.12	0.081 ± 0.032	J	0.023	--		
SU12-18-Z1	0-8 ft	05/29/07	0.66 ± 0.16	J	0.11	0.181 ± 0.065	J	0.077	--		
SU12-18-Z2	8-12 ft	05/29/07	0.317 ± 0.094	J	0.13	0.076 ± 0.050	J	0.074	--		
SU12-19-Z1	7-8 ft	05/18/07	0.29 ± 0.11		0.14	0.076 ± 0.050		0.069	--		
SU12-19-Z2	13-14 ft	05/18/07	0.124 ± 0.052	J	0.075	--			--		
SU12-20-Z1	1-3 ft	05/18/07	0.36 ± 0.11		0.12	0.110 ± 0.054		0.074	2.18 ± 0.74		1.3
SU12-20-Z2	8-9.5 ft	05/18/07	0.306 ± 0.095		0.13	0.086 ± 0.052		0.078	--		
SU12-21-Z1	2-3.5 ft	05/18/07	0.75 ± 0.15		0.16	0.390 ± 0.091		0.073	7.2 ± 1.8		1.9
SU12-21-Z2	9-10.5 ft	05/18/07	0.208 ± 0.081		0.12	0.084 ± 0.046		0.061	--		

Table 3.2-4f Radiological Results for Concrete Core Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Concrete Core Locations											
A301-Z1[15]	1-3 ft	05/18/07	5.16 ± 0.74		0.03	0.198 ± 0.069		0.013	1.31 ± 0.23		0.03
D8-02	0-0.34 ft	05/16/07	114 ± 17		2	12.0 ± 4.1		1.8	354 ± 46		1
F6-02	0-0.25 ft	05/16/07	217 ± 29		1	13.5 ± 4.1		0.7	273 ± 35		0.9
F601-Z1[15]	1-2 ft	05/17/07	65 ± 12		1	6.1 ± 3.1		1.7	194 ± 27		2
F601-Z2[15]	6-7.5 ft	05/17/07	0.380 ± 0.091		0.024	0.017 ± 0.020	UJ	0.025	0.69 ± 0.14		0.01

Table 3.2-4f Radiological Results for Concrete Core Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Concrete Core Locations											
A301-Z1[15]	1-3 ft	05/18/07	0.75 ± 0.15		0.04	0.48 ± 0.11		0.03	0.75 ± 0.15		0.03
D8-02	0-0.34 ft	05/16/07	0.289 ± 0.082		0.023	0.71 ± 0.15		0.03	0.301 ± 0.084		0.019
F6-02	0-0.25 ft	05/16/07	0.278 ± 0.076		0.027	0.392 ± 0.094		0.022	0.290 ± 0.077		0.023
F601-Z1[15]	1-2 ft	05/17/07	0.69 ± 0.15		0.05	0.68 ± 0.15		0.03	0.78 ± 0.16		0.02
F601-Z2[15]	6-7.5 ft	05/17/07	0.255 ± 0.074		0.039	0.297 ± 0.077		0.019	0.224 ± 0.066		0.024

Table 3.2-4f Radiological Results for Concrete Core Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[11]			Radium-228[12]			Bismuth-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Concrete Core Locations											
A301-Z1[15]	1-3 ft	05/18/07	0.22 ± 0.11		0.15	0.25 ± 0.14	UJ	0.29	--		
D8-02	0-0.34 ft	05/16/07	0.30 ± 0.15		0.30	0.24 ± 0.28	UJ	0.45	--		
F6-02	0-0.25 ft	05/16/07	0.18 ± 0.23		0.18	0.15 ± 0.27	UJ	0.21	1.9 ± 1.1		0.6
F601-Z1[15]	1-2 ft	05/17/07	0.77 ± 0.19		0.13	0.57 ± 0.21		0.41	--		
F601-Z2[15]	6-7.5 ft	05/17/07	0.40 ± 0.11	J	0.08	0.26 ± 0.19	UJ	0.29	--		

Table 3.2-4f Radiological Results for Concrete Core Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Concrete Core Locations											
A301-Z1[15]	1-3 ft	05/18/07	6.7 ± 1.3		0.6	--			0.57 ± 0.14		0.12
D8-02	0-0.34 ft	05/16/07	5.2 ± 1.3		1.1	374 ± 36		7	0.30 ± 0.14		0.21
F6-02	0-0.25 ft	05/16/07	4.0 ± 1.1		0.2	403 ± 41		2	0.67 ± 0.36		0.17
F601-Z1[15]	1-2 ft	05/17/07	8.0 ± 1.6		0.5	157 ± 23		15	0.70 ± 0.20		0.19
F601-Z2[15]	6-7.5 ft	05/17/07	8.0 ± 1.5	J	0.6	--			0.33 ± 0.10	J	0.1

Table 3.2-4f Radiological Results for Concrete Core Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Concrete Core Locations											
A301-Z1[15]	1-3 ft	05/18/07	0.44 ± 0.14		0.12	0.194 ± 0.057		0.045	--		
D8-02	0-0.34 ft	05/16/07	--			--			253 ± 20		14
F6-02	0-0.25 ft	05/16/07	--			0.20 ± 0.11		0.07	271 ± 21		4
F601-Z1[15]	1-2 ft	05/17/07	0.51 ± 0.16		0.23	--			103 ± 8.3		5.0
F601-Z2[15]	6-7.5 ft	05/17/07	0.249 ± 0.090	J	0.15	0.084 ± 0.054	J	0.080	--		

Table 3.2-4g Radiological Results for Leach Pool/Drain/Drywell/Sump Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238			Thorium-228		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR R1/R2-Z1	6-8 ft	06/07/07	0.274 ± 0.072		0.016	0.009 ± 0.015	UJ	0.012	0.276 ± 0.072		0.019	0.56 ± 0.13		0.03
DR-C-Z1	2-4 ft	06/01/07	0.51 ± 0.12	J	0.03	0.01 ± 0.017	UJ	0.013	0.47 ± 0.11	J	0.02	0.82 ± 0.16		0.02
DR-C-Z2	9-11 ft	06/01/07	0.423 ± 0.099	J	0.021	0.013 ± 0.018	UJ	0.022	0.364 ± 0.090	J	0.018	0.44 ± 0.10		0.03
DR-C-Z3	18-20 ft	06/01/07	0.105 ± 0.046	J	0.028	0.010 ± 0.020	UJ	0.032	0.171 ± 0.059	J	0.026	0.192 ± 0.064		0.024
DR-D-Z1	5-7 ft	06/01/07	0.205 ± 0.062	J	0.025	0.020 ± 0.021	UJ	0.024	0.243 ± 0.067	J	0.019	0.305 ± 0.084		0.046
DR-E-Z1	0-2 ft	06/01/07	0.338 ± 0.082	J	0.021	0.015 ± 0.019	UJ	0.023	0.310 ± 0.078	J	0.019	0.58 ± 0.13		0.03
DR-E-Z2	12-16 ft	06/01/07	0.205 ± 0.063	J	0.023	0.005 ± 0.014	UJ	0.013	0.175 ± 0.057	J	0.020	0.173 ± 0.061		0.039
DR-F-Z1	0-2 ft	06/06/07	0.41 ± 0.10		0.03	0.033 ± 0.029		0.015	0.41 ± 0.10		0.01	0.53 ± 0.12		0.04
DR-F-Z2	11-13 ft	06/06/07	0.236 ± 0.066		0.019	0.021 ± 0.020		0.020	0.202 ± 0.060		0.01	0.136 ± 0.072		0.068
DR-G-Z1	3.5-5 ft	06/05/07	0.328 ± 0.080		0.019	0.031 ± 0.025		0.012	0.379 ± 0.088		0.01	0.66 ± 0.13		0.03
DR-G-Z2	13.5-15 ft	06/05/07	0.222 ± 0.071		0.012	0.018 ± 0.025	U	0.033	0.226 ± 0.072		0.012	0.183 ± 0.068		0.041
DRH-A1-Z1	2-3 ft	06/06/07	36.9 ± 5.6		0.4	1.94 ± 0.79		0.19	36.0 ± 5.5		0.2	2.04 ± 0.35		0.04
DRH-A1-Z2	15-16 ft	06/06/07	0.227 ± 0.064		0.019	0.018 ± 0.020	UJ	0.012	0.189 ± 0.058		0.01	0.307 ± 0.082		0.023
DRH-A2-Z1	3-4 ft	06/06/07	18.0 ± 2.8		0.2	1.15 ± 0.49		0.24	18.5 ± 2.9		0.2	0.66 ± 0.14		0.03
DRH-A2-Z2	14-15 ft	06/05/07	11.4 ± 1.6		0.03	0.61 ± 0.14		0.01	10.9 ± 1.5		0.01	0.56 ± 0.12		0.04
DRH-B-Z1	4-5 ft	06/06/07	1.35 ± 0.22		0.03	0.064 ± 0.037		0.027	1.24 ± 0.21		0.02	0.45 ± 0.11		0.02
DRH-B-Z2	9-10 ft	06/06/07	0.55 ± 0.12		0.02	0.029 ± 0.026		0.013	0.53 ± 0.11		0.02	0.87 ± 0.17		0.02
DR-H-Z1	7-8 ft	06/01/07	3.51 ± 0.52	J	0.02	0.200 ± 0.070		0.027	2.86 ± 0.43	J	0.01	0.66 ± 0.14		0.03
DR-H-Z2	10-11 ft	06/01/07	0.118 ± 0.044	J	0.019	-0.003 ± 0.012	U	0.026	0.166 ± 0.054	J	0.021	0.140 ± 0.053		0.035
DR-I-Z1	1-2 ft	06/01/07	6.50 ± 0.91	J	0.02	0.276 ± 0.082	UJ	0.022	5.85 ± 0.82	J	0.02	0.394 ± 0.099		0.040
DR-I-Z2	10-11 ft	06/01/07	0.239 ± 0.066	J	0.019	0.013 ± 0.018	UJ	0.012	0.216 ± 0.062	J	0.01	0.264 ± 0.077		0.038
DR-I-Z3	18-19 ft	06/01/07	0.379 ± 0.089	J	0.021	0.026 ± 0.022		0.020	0.218 ± 0.063	J	0.021	0.163 ± 0.059		0.043
DR-J-Z1	3-4 ft	05/31/07	10.8 ± 2.0		0.3	0.53 ± 0.34		0.13	15.5 ± 2.6		0.2	0.43 ± 0.10		0.03
DR-J-Z2	15-16 ft	05/31/07	21.8 ± 3.6		0.2	1.56 ± 0.61		0.23	21.7 ± 3.6		0.3	0.49 ± 0.11		0.04
DR-K-Z1	7-8 ft	05/31/07	1.42 ± 0.23		0.02	0.062 ± 0.035		0.012	1.08 ± 0.19		0.02	0.391 ± 0.098		0.031
DR-K-Z2	15-16 ft	05/31/07	133 ± 24		2	6.2 ± 3.9		1.4	28.5 ± 8.0		2.5	0.50 ± 0.11		0.04
DR-K-Z3	19-20 ft	05/31/07	11.4 ± 2.0		0.3	0.64 ± 0.37		0.12	1.36 ± 0.49		0.1	0.124 ± 0.051		0.038
DR-L-Z1	5-6 ft	05/31/07	1.86 ± 0.31		0.02	0.082 ± 0.042		0.013	0.353 ± 0.089		0.021	0.292 ± 0.082		0.038
DR-L-Z2	12-13 ft	05/31/07	0.182 ± 0.062		0.023	-0.001 ± 0.012	U	0.024	0.167 ± 0.059		0.012	0.180 ± 0.063		0.043
DR-M-Z1	5-6 ft	06/01/07	0.459 ± 0.099	J	0.018	0.012 ± 0.015	UJ	0.019	0.354 ± 0.083	J	0.015	0.409 ± 0.096		0.027
DR-M-Z2	9-10 ft	06/01/07	0.282 ± 0.076	J	0.022	0.001 ± 0.013	U	0.028	0.215 ± 0.064	J	0.017	0.40 ± 0.10		0.03

Table 3.2-4g Radiological Results for Leach Pool/Drain/Drywell/Sump Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238			Thorium-228		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-N-Z1	2-3.5 ft	06/04/07	0.81 ± 0.16		0.02	0.050 ± 0.034		0.013	0.72 ± 0.14		0.02	0.74 ± 0.15		0.03
DR-N-Z2	8-9.5 ft	06/04/07	0.46 ± 0.11		0.02	0.020 ± 0.023	UJ	0.014	0.404 ± 0.097		0.024	0.54 ± 0.13		0.05
DR-O-Z1	2-3.5 ft	06/04/07	1.75 ± 0.29		0.02	0.138 ± 0.058		0.014	1.74 ± 0.29		0.01	0.64 ± 0.14		0.03
DR-O-Z2	12-13.5 ft	06/04/07	0.220 ± 0.069		0.028	-0.003 ± 0.012	U	0.027	0.224 ± 0.069		0.028	0.224 ± 0.070		0.034
DR-O-Z3	16-17.5 ft	06/04/07	0.151 ± 0.051		0.01	0.007 ± 0.014	U	0.024	0.176 ± 0.056		0.01	0.263 ± 0.078		0.045
DR-P-Z1	3.5-5 ft	06/06/07	0.55 ± 0.12		0.02	0.024 ± 0.024		0.023	0.62 ± 0.13		0.03	0.74 ± 0.15		0.04
DR-P-Z2	11.5-13 ft	06/06/07	0.321 ± 0.084		0.029	-0.001 ± 0.011	U	0.023	0.266 ± 0.074		0.011	0.264 ± 0.077		0.026
DR-U-Z1	5-6 ft	06/01/07	11.9 ± 1.6	J	0.02	0.61 ± 0.14		0.01	4.32 ± 0.63	J	0.02	0.59 ± 0.13		0.03
DR-U-Z2	15-16 ft	06/01/07	0.217 ± 0.062	J	0.021	0.011 ± 0.016	UJ	0.023	0.171 ± 0.054	J	0.020	0.239 ± 0.071		0.025
DR-V-Z1	3-4 ft	06/05/07	11.5 ± 1.7		0.04	0.59 ± 0.15		0.04	11.1 ± 1.6		0.04	1.08 ± 0.21		0.02
DR-V-Z2	9-10 ft	06/05/07	0.374 ± 0.089		0.019	0.018 ± 0.020	UJ	0.012	0.427 ± 0.097		0.021	0.278 ± 0.079		0.029
DRY-B-Z1	7-8 ft	06/05/07	1.92 ± 0.38		0.05	0.146 ± 0.080		0.050	1.15 ± 0.26		0.05	0.191 ± 0.067		0.042
DRY-B-Z2	15-16 ft	06/05/07	0.97 ± 0.18		0.03	0.047 ± 0.034		0.014	0.65 ± 0.14		0.02	0.204 ± 0.065		0.024
DRY-D-Z1	6-7 ft	06/05/07	0.271 ± 0.070		0.016	0.009 ± 0.015	UJ	0.012	0.269 ± 0.070		0.018	0.371 ± 0.097		0.034
DRY-D-Z2	15-16 ft	06/05/07	0.171 ± 0.059		0.027	0.010 ± 0.018	UJ	0.014	0.169 ± 0.058		0.022	0.242 ± 0.073		0.032
DRY-D-Z3	23-24 ft	06/05/07	0.211 ± 0.065		0.025	0.01 ± 0.017	UJ	0.013	0.182 ± 0.059		0.021	0.177 ± 0.066		0.047
DRY-D-Z4	29-30 ft	06/05/07	0.160 ± 0.057		0.028	0.013 ± 0.019	UJ	0.027	0.162 ± 0.057		0.031	0.179 ± 0.060		0.028
DRY-E-Z1	1-3 ft	06/04/07	3.01 ± 0.44		0.01	0.209 ± 0.069		0.027	6.29 ± 0.87		0.01	0.388 ± 0.095		0.040
DRY-E-Z2	10-11 ft	06/04/07	0.147 ± 0.055		0.031	-0.003 ± 0.012	U	0.027	0.176 ± 0.059		0.022	0.150 ± 0.056		0.036
DRYH-A-Z1	4-5 ft	06/05/07	8.3 ± 1.1		0.03	0.43 ± 0.11		0.02	7.7 ± 1.1		0.02	0.70 ± 0.15		0.03
DRYH-A-Z2	14-15 ft	06/05/07	1.89 ± 0.30		0.02	0.123 ± 0.051		0.012	1.57 ± 0.25		0.01	0.40 ± 0.10		0.02
DRYH-C-Z1	1-2 ft	05/23/07	0.62 ± 0.12		0.02	0.018 ± 0.021	UJ	0.012	0.359 ± 0.086		0.01	0.44 ± 0.11		0.04
DRYH-C-Z2	8-10 ft	05/23/07	0.48 ± 0.12		0.03	0.028 ± 0.027		0.027	0.354 ± 0.096		0.028	0.271 ± 0.097		0.066
DRYH-F-Z1	0-2 ft	06/06/07	0.90 ± 0.17		0.02	0.067 ± 0.038		0.013	0.87 ± 0.16		0.02	0.66 ± 0.15		0.03
DRYH-F-Z2	13.5-15 ft	06/06/07	0.124 ± 0.047		0.024	0.001 ± 0.012	U	0.027	0.103 ± 0.042		0.020	0.228 ± 0.072		0.041
LPH-B-Z1	5-6 ft	06/05/07	1.66 ± 0.26		0.03	0.104 ± 0.046		0.023	1.20 ± 0.20		0.02	0.54 ± 0.12		0.03
LPH-B-Z2	11-12 ft	06/05/07	0.232 ± 0.090		0.033	0.014 ± 0.029	U	0.048	0.215 ± 0.087		0.039	0.156 ± 0.056		0.029
SMP-1-Z1	0-2 ft	06/07/07	0.46 ± 0.10		0.02	0.014 ± 0.019	UJ	0.013	0.53 ± 0.11		0.01	0.53 ± 0.12		0.04
SMP-1-Z2	8-10 ft	06/07/07	0.275 ± 0.074		0.029	0.006 ± 0.015	U	0.027	0.251 ± 0.070		0.025	0.296 ± 0.081		0.028

Table 3.2-4g Radiological Results for Leach Pool/Drain/Drywell/Sump Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-230			Thorium-232			Radium-226[11]			Radium-228[12]		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR R1/R2-Z1	6-8 ft	06/07/07	0.316 ± 0.086		0.019	0.42 ± 0.10		0.02	0.207 ± 0.097	J	0.14	0.18 ± 0.12	J	0.17
DR-C-Z1	2-4 ft	06/01/07	0.60 ± 0.13		0.02	0.75 ± 0.15		0.02	0.44 ± 0.16		0.18	0.55 ± 0.18		0.34
DR-C-Z2	9-11 ft	06/01/07	0.43 ± 0.10	J	0.02	0.43 ± 0.10		0.02	0.286 ± 0.095	J	0.11	0.24 ± 0.11	J	0.22
DR-C-Z3	18-20 ft	06/01/07	0.144 ± 0.055		0.028	0.145 ± 0.054		0.026	0.103 ± 0.072	UJ	0.11	0.076 ± 0.095	UJ	0.16
DR-D-Z1	5-7 ft	06/01/07	0.249 ± 0.072		0.027	0.296 ± 0.079		0.022	0.144 ± 0.081	J	0.13	0.22 ± 0.15	UJ	0.24
DR-E-Z1	0-2 ft	06/01/07	0.352 ± 0.090	J	0.025	0.53 ± 0.12		0.03	0.278 ± 0.095	J	0.11	0.29 ± 0.14	J	0.20
DR-E-Z2	12-16 ft	06/01/07	0.144 ± 0.052		0.020	0.143 ± 0.052		0.023	0.097 ± 0.071	UJ	0.12	-0.01 ± 0.34	UJ	0.21
DR-F-Z1	0-2 ft	06/06/07	0.42 ± 0.10	J	0.02	0.53 ± 0.12		0.03	0.43 ± 0.12	J	0.09	0.27 ± 0.18	UJ	0.27
DR-F-Z2	11-13 ft	06/06/07	0.169 ± 0.068		0.030	0.161 ± 0.067		0.034	0.16 ± 0.10	J	0.15	0.13 ± 0.15	UJ	0.24
DR-G-Z1	3.5-5 ft	06/05/07	0.313 ± 0.080		0.016	0.62 ± 0.13		0.02	0.282 ± 0.099		0.11	0.35 ± 0.15		0.28
DR-G-Z2	13.5-15 ft	06/05/07	0.279 ± 0.083		0.021	0.208 ± 0.070		0.021	0.083 ± 0.075	UJ	0.13	0.07 ± 0.11	U	0.20
DRH-A1-Z1	2-3 ft	06/06/07	0.69 ± 0.15		0.02	2.25 ± 0.37		0.01	0.32 ± 0.12	J	0.15	1.10 ± 0.22	J	0.27
DRH-A1-Z2	15-16 ft	06/06/07	0.265 ± 0.075		0.021	0.339 ± 0.087		0.018	0.161 ± 0.091	J	0.14	0.13 ± 0.14	UJ	0.22
DRH-A2-Z1	3-4 ft	06/06/07	0.42 ± 0.10		0.02	0.66 ± 0.14		0.02	0.285 ± 0.095	J	0.085	0.36 ± 0.15	J	0.28
DRH-A2-Z2	14-15 ft	06/05/07	0.406 ± 0.098		0.023	0.53 ± 0.12		0.03	0.30 ± 0.11		0.10	0.40 ± 0.16		0.29
DRH-B-Z1	4-5 ft	06/06/07	0.50 ± 0.11		0.02	0.50 ± 0.11		0.02	0.34 ± 0.12	J	0.10	0.24 ± 0.13	UJ	0.26
DRH-B-Z2	9-10 ft	06/06/07	0.67 ± 0.14		0.02	0.85 ± 0.16		0.02	0.46 ± 0.12	J	0.14	0.44 ± 0.14		0.26
DR-H-Z1	7-8 ft	06/01/07	0.50 ± 0.12		0.02	0.55 ± 0.12		0.02	0.25 ± 0.12	J	0.17	0.32 ± 0.16	J	0.30
DR-H-Z2	10-11 ft	06/01/07	0.141 ± 0.050		0.010	0.145 ± 0.051		0.022	0.10 ± 0.078	UJ	0.12	-0.03 ± 0.11	UJ	0.13
DR-I-Z1	1-2 ft	06/01/07	0.264 ± 0.075	J	0.021	0.296 ± 0.080		0.025	1.91 ± 0.35		0.15	65.7 ± 6.7	J	0.4
DR-I-Z2	10-11 ft	06/01/07	0.195 ± 0.062		0.018	0.238 ± 0.070		0.011	0.148 ± 0.071	J	0.089	0.14 ± 0.13	UJ	0.21
DR-I-Z3	18-19 ft	06/01/07	0.156 ± 0.053		0.023	0.154 ± 0.052		0.019	0.060 ± 0.067	UJ	0.12	0.065 ± 0.076	UJ	0.13
DR-J-Z1	3-4 ft	05/31/07	0.407 ± 0.096		0.020	0.409 ± 0.097		0.017	0.29 ± 0.11	J	0.11	0.21 ± 0.15	UJ	0.32
DR-J-Z2	15-16 ft	05/31/07	0.379 ± 0.094		0.011	0.51 ± 0.12		0.02	0.428 ± 0.094	J	0.044	0.30 ± 0.12	J	0.17
DR-K-Z1	7-8 ft	05/31/07	0.405 ± 0.099		0.018	0.51 ± 0.12		0.01	0.121 ± 0.095	UJ	0.15	0.10 ± 0.17	UJ	0.29
DR-K-Z2	15-16 ft	05/31/07	0.52 ± 0.12		0.02	0.63 ± 0.13		0.01	0.38 ± 0.11	J	0.14	0.32 ± 0.14	J	0.23
DR-K-Z3	19-20 ft	05/31/07	0.152 ± 0.052	J	0.019	0.142 ± 0.051		0.023	0.117 ± 0.080	UJ	0.12	0.07 ± 0.15	UJ	0.27
DR-L-Z1	5-6 ft	05/31/07	0.391 ± 0.096		0.018	0.308 ± 0.082		0.011	0.250 ± 0.093	J	0.13	0.21 ± 0.14	UJ	0.22
DR-L-Z2	12-13 ft	05/31/07	0.206 ± 0.063		0.023	0.159 ± 0.054		0.019	0.111 ± 0.092	UJ	0.15	0.06 ± 0.16	UJ	0.29
DR-M-Z1	5-6 ft	06/01/07	0.382 ± 0.091		0.019	0.339 ± 0.084		0.01	0.354 ± 0.098	J	0.073	0.11 ± 0.17	UJ	0.30
DR-M-Z2	9-10 ft	06/01/07	0.247 ± 0.074		0.025	0.366 ± 0.095		0.024	0.213 ± 0.095	J	0.13	0.19 ± 0.14	UJ	0.20

Table 3.2-4g Radiological Results for Leach Pool/Drain/Drywell/Sump Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-230			Thorium-232			Radium-226[11]			Radium-228[12]		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-N-Z1	2-3.5 ft	06/04/07	0.63 ± 0.13		0.02	0.65 ± 0.13		0.02	0.67 ± 0.16		0.12	0.56 ± 0.17		0.24
DR-N-Z2	8-9.5 ft	06/04/07	0.44 ± 0.11	J	0.02	0.51 ± 0.12		0.03	0.30 ± 0.12		0.14	0.49 ± 0.21		0.29
DR-O-Z1	2-3.5 ft	06/04/07	0.49 ± 0.11		0.02	0.55 ± 0.12		0.02	0.47 ± 0.15	J	0.13	0.29 ± 0.18	UJ	0.37
DR-O-Z2	12-13.5 ft	06/04/07	0.220 ± 0.067		0.023	0.237 ± 0.069		0.018	0.143 ± 0.089	J	0.13	0.11 ± 0.14	UJ	0.23
DR-O-Z3	16-17.5 ft	06/04/07	0.267 ± 0.075		0.024	0.192 ± 0.061		0.020	0.198 ± 0.093	J	0.10	0.08 ± 0.14	UJ	0.26
DR-P-Z1	3.5-5 ft	06/06/07	0.62 ± 0.13		0.03	0.83 ± 0.16		0.02	0.39 ± 0.11	J	0.14	0.45 ± 0.14	J	0.24
DR-P-Z2	11.5-13 ft	06/06/07	0.232 ± 0.071		0.024	0.187 ± 0.062		0.022	0.104 ± 0.079	UJ	0.13	0.156 ± 0.097	UJ	0.19
DR-U-Z1	5-6 ft	06/01/07	0.51 ± 0.12		0.02	0.51 ± 0.12		0.03	0.433 ± 0.090	J	0.043	0.26 ± 0.13	J	0.20
DR-U-Z2	15-16 ft	06/01/07	0.307 ± 0.082		0.021	0.190 ± 0.061		0.018	0.137 ± 0.084	J	0.13	0.17 ± 0.11	J	0.16
DR-V-Z1	3-4 ft	06/05/07	0.78 ± 0.16		0.02	1.01 ± 0.20		0.02	0.67 ± 0.16		0.19	0.77 ± 0.22		0.27
DR-V-Z2	9-10 ft	06/05/07	0.40 ± 0.10		0.03	0.263 ± 0.075		0.011	0.28 ± 0.13		0.17	0.27 ± 0.18		0.26
DRY-B-Z1	7-8 ft	06/05/07	0.229 ± 0.070		0.026	0.261 ± 0.075		0.011	0.16 ± 0.11	UJ	0.17	0.16 ± 0.11	UJ	0.28
DRY-B-Z2	15-16 ft	06/05/07	0.177 ± 0.060		0.024	0.217 ± 0.067		0.018	0.089 ± 0.084	UJ	0.14	0.09 ± 0.12	U	0.21
DRY-D-Z1	6-7 ft	06/05/07	0.314 ± 0.086		0.027	0.43 ± 0.11		0.02	0.50 ± 0.11		0.06	0.29 ± 0.13		0.25
DRY-D-Z2	15-16 ft	06/05/07	0.274 ± 0.077		0.018	0.228 ± 0.069		0.018	0.133 ± 0.073		0.13	0.066 ± 0.050	UJ	0.38
DRY-D-Z3	23-24 ft	06/05/07	0.187 ± 0.064		0.033	0.170 ± 0.060		0.026	0.226 ± 0.083	J	0.075	0.06 ± 0.15	UJ	0.28
DRY-D-Z4	29-30 ft	06/05/07	0.205 ± 0.064		0.023	0.176 ± 0.059		0.011	0.23 ± 0.11		0.15	0.14 ± 0.18	U	0.31
DRY-E-Z1	1-3 ft	06/04/07	0.293 ± 0.077	J	0.016	0.332 ± 0.084		0.023	0.25 ± 0.10		0.15	0.13 ± 0.14	UJ	0.22
DRY-E-Z2	10-11 ft	06/04/07	0.174 ± 0.057		0.017	0.132 ± 0.049		0.010	0.045 ± 0.069	UJ	0.12	0.07 ± 0.14	UJ	0.26
DRYH-A-Z1	4-5 ft	06/05/07	0.45 ± 0.11		0.02	0.61 ± 0.13		0.02	0.271 ± 0.087		0.075	0.41 ± 0.15		0.28
DRYH-A-Z2	14-15 ft	06/05/07	0.275 ± 0.082	J	0.021	0.329 ± 0.091		0.021	0.136 ± 0.098	UJ	0.15	0.22 ± 0.19	UJ	0.29
DRYH-C-Z1	1-2 ft	05/23/07	0.40 ± 0.10	J	0.02	0.383 ± 0.099		0.012	0.27 ± 0.10	J	0.09	0.24 ± 0.17	UJ	0.25
DRYH-C-Z2	8-10 ft	05/23/07	0.237 ± 0.083		0.036	0.199 ± 0.075		0.030	0.236 ± 0.067	J	0.045	0.06 ± 0.13	UJ	0.24
DRYH-F-Z1	0-2 ft	06/06/07	0.62 ± 0.14		0.03	0.68 ± 0.15		0.02	0.61 ± 0.15		0.10	0.45 ± 0.20		0.36
DRYH-F-Z2	13.5-15 ft	06/06/07	0.210 ± 0.065		0.023	0.166 ± 0.057		0.023	0.065 ± 0.075	UJ	0.13	0.16 ± 0.18	UJ	0.29
LPH-B-Z1	5-6 ft	06/05/07	0.41 ± 0.10		0.02	0.49 ± 0.11		0.02	0.32 ± 0.13		0.18	0.33 ± 0.15		0.27
LPH-B-Z2	11-12 ft	06/05/07	0.216 ± 0.066		0.021	0.159 ± 0.055		0.021	0.129 ± 0.085		0.12	0.12 ± 0.16	UJ	0.26
SMP-1-Z1	0-2 ft	06/07/07	0.44 ± 0.10		0.03	0.56 ± 0.12		0.02	0.59 ± 0.16	J	0.14	0.47 ± 0.15	J	0.20
SMP-1-Z2	8-10 ft	06/07/07	0.230 ± 0.068		0.021	0.321 ± 0.084		0.023	0.41 ± 0.11	J	0.09	0.27 ± 0.13	J	0.22

Table 3.2-4g Radiological Results for Leach Pool/Drain/Drywell/Sump Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Cesium-137			Potassium-40			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR R1/R2-Z1	6-8 ft	06/07/07	--			6.6 ± 1.1	J	0.8	--			0.51 ± 0.13	J	0.11
DR-C-Z1	2-4 ft	06/01/07	--			6.2 ± 1.4	J	0.8	--			0.68 ± 0.13		0.11
DR-C-Z2	9-11 ft	06/01/07	--			6.9 ± 1.1	J	0.3	--			0.429 ± 0.083	J	0.066
DR-C-Z3	18-20 ft	06/01/07	--			2.60 ± 0.76	J	0.65	--			0.135 ± 0.049	J	0.053
DR-D-Z1	5-7 ft	06/01/07	--			6.4 ± 1.1	J	0.7	--			0.286 ± 0.070	J	0.077
DR-E-Z1	0-2 ft	06/01/07	--			3.00 ± 0.75	J	0.35	--			0.56 ± 0.10	J	0.08
DR-E-Z2	12-16 ft	06/01/07	--			5.01 ± 0.88	J	0.51	--			0.151 ± 0.066	J	0.078
DR-F-Z1	0-2 ft	06/06/07	--			6.4 ± 1.3	J	0.9	--			0.43 ± 0.12	J	0.11
DR-F-Z2	11-13 ft	06/06/07	--			3.89 ± 0.96	J	0.42	--			0.22 ± 0.10	J	0.1
DR-G-Z1	3.5-5 ft	06/05/07	--			6.3 ± 1.2		0.8	--			0.54 ± 0.13		0.10
DR-G-Z2	13.5-15 ft	06/05/07	--			4.68 ± 0.95		0.83	--			0.276 ± 0.099		0.10
DRH-A1-Z1	2-3 ft	06/06/07	--			4.8 ± 1.1	J	1.1	24.9 ± 8.8	J	11	1.31 ± 0.15	J	0.11
DRH-A1-Z2	15-16 ft	06/06/07	--			4.93 ± 0.98		0.78	--			0.237 ± 0.068		0.082
DRH-A2-Z1	3-4 ft	06/06/07	--			4.4 ± 1.1	J	1.0	14.4 ± 7.2	J	9.2	0.42 ± 0.12	J	0.11
DRH-A2-Z2	14-15 ft	06/05/07	--			6.3 ± 1.3		0.9	--			0.63 ± 0.12		0.1
DRH-B-Z1	4-5 ft	06/06/07	--			4.2 ± 1.1	J	0.8	--			0.38 ± 0.10	J	0.09
DRH-B-Z2	9-10 ft	06/06/07	--			9.8 ± 1.4		0.8	--			0.93 ± 0.15		0.11
DR-H-Z1	7-8 ft	06/01/07	--			10.7 ± 1.6	J	0.4	--			0.48 ± 0.12	J	0.11
DR-H-Z2	10-11 ft	06/01/07	--			2.97 ± 0.91	J	0.85	--			--		
DR-I-Z1	1-2 ft	06/01/07	--			4.94 ± 0.91	J	0.76	--			0.245 ± 0.092	J	0.097
DR-I-Z2	10-11 ft	06/01/07	--			5.8 ± 1.0	J	0.4	--			0.242 ± 0.082	J	0.078
DR-I-Z3	18-19 ft	06/01/07	--			1.59 ± 0.56	J	0.68	--			0.100 ± 0.045	J	0.065
DR-J-Z1	3-4 ft	05/31/07	--			4.4 ± 1.2	J	1.0	--			0.326 ± 0.086	J	0.088
DR-J-Z2	15-16 ft	05/31/07	--			6.0 ± 1.0	J	0.3	--			0.409 ± 0.095	J	0.085
DR-K-Z1	7-8 ft	05/31/07	--			6.1 ± 1.3	J	0.6	--			0.318 ± 0.091	J	0.086
DR-K-Z2	15-16 ft	05/31/07	0.144 ± 0.039	J	0.019	4.52 ± 0.96	J	0.98	11.2 ± 5.7	J	7.6	0.49 ± 0.11	J	0.11
DR-K-Z3	19-20 ft	05/31/07	--			2.34 ± 0.75	J	0.74	--			--		
DR-L-Z1	5-6 ft	05/31/07	--			8.1 ± 1.2	J	0.5	--			0.37 ± 0.10	J	0.10
DR-L-Z2	12-13 ft	05/31/07	--			6.4 ± 1.2	J	0.4	--			--		
DR-M-Z1	5-6 ft	06/01/07	--			5.3 ± 1.2	J	0.8	--			0.39 ± 0.14	J	0.12
DR-M-Z2	9-10 ft	06/01/07	--			9.5 ± 1.4	J	0.4	--			0.490 ± 0.099	J	0.074

Table 3.2-4g Radiological Results for Leach Pool/Drain/Drywell/Sump Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Cesium-137			Potassium-40			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-N-Z1	2-3.5 ft	06/04/07	--			8.8 ± 1.5		0.6	--			0.99 ± 0.17		0.11
DR-N-Z2	8-9.5 ft	06/04/07	--			8.4 ± 1.5		0.4	--			0.53 ± 0.13		0.12
DR-O-Z1	2-3.5 ft	06/04/07	--			7.7 ± 1.5		0.5	--			0.56 ± 0.12		0.10
DR-O-Z2	12-13.5 ft	06/04/07	--			5.5 ± 1.1	J	0.4	--			0.144 ± 0.058	J	0.067
DR-O-Z3	16-17.5 ft	06/04/07	--			4.6 ± 1.0	J	0.5	--			--		
DR-P-Z1	3.5-5 ft	06/06/07	--			8.0 ± 1.2	J	0.7	--			0.62 ± 0.11	J	0.09
DR-P-Z2	11.5-13 ft	06/06/07	--			4.64 ± 0.93	J	0.82	--			0.242 ± 0.078	J	0.087
DR-U-Z1	5-6 ft	06/01/07	--			7.0 ± 1.1	J	0.3	--			0.364 ± 0.073	J	0.070
DR-U-Z2	15-16 ft	06/01/07	--			5.4 ± 1.1	J	0.5	--			0.142 ± 0.062	J	0.072
DR-V-Z1	3-4 ft	06/05/07	--			8.6 ± 1.4		1	--			0.94 ± 0.16		0.14
DR-V-Z2	9-10 ft	06/05/07	--			9.2 ± 1.6		0.5	--			0.43 ± 0.10		0.09
DRY-B-Z1	7-8 ft	06/05/07	--			5.9 ± 1.3		0.9	--			0.286 ± 0.074		0.073
DRY-B-Z2	15-16 ft	06/05/07	--			4.3 ± 1.2		1.0	--			0.134 ± 0.071		0.11
DRY-D-Z1	6-7 ft	06/05/07	--			8.2 ± 1.4		0.5	--			0.56 ± 0.12		0.1
DRY-D-Z2	15-16 ft	06/05/07	--			3.30 ± 0.93		0.84	--			0.266 ± 0.093		0.083
DRY-D-Z3	23-24 ft	06/05/07	--			4.1 ± 1.0	J	0.6	--			0.135 ± 0.064	J	0.094
DRY-D-Z4	29-30 ft	06/05/07	--			5.6 ± 1.3		0.5	--			0.273 ± 0.097		0.10
DRY-E-Z1	1-3 ft	06/04/07	--			6.3 ± 1.1		0.9	--			0.36 ± 0.11		0.11
DRY-E-Z2	10-11 ft	06/04/07	--			4.5 ± 1.1	J	0.7	--			0.133 ± 0.066	J	0.075
DRYH-A-Z1	4-5 ft	06/05/07	--			6.3 ± 1.2		0.7	--			0.56 ± 0.13		0.10
DRYH-A-Z2	14-15 ft	06/05/07	--			8.7 ± 1.4		0.5	--			0.38 ± 0.13		0.12
DRYH-C-Z1	1-2 ft	05/23/07	--			6.5 ± 1.4	J	1.1	--			0.288 ± 0.077	J	0.078
DRYH-C-Z2	8-10 ft	05/23/07	--			9.8 ± 1.4	J	0.3	--			0.195 ± 0.067	J	0.066
DRYH-F-Z1	0-2 ft	06/06/07	--			--			--			--		
DRYH-F-Z2	13.5-15 ft	06/06/07	--			6.1 ± 1.3	J	0.4	--			0.184 ± 0.071	J	0.076
LPH-B-Z1	5-6 ft	06/05/07	--			8.4 ± 1.3		1	--			0.54 ± 0.10		0.10
LPH-B-Z2	11-12 ft	06/05/07	--			5.5 ± 1.1		0.5	--			0.154 ± 0.066		0.077
SMP-1-Z1	0-2 ft	06/07/07	--			5.4 ± 1.0	J	0.8	--			0.56 ± 0.13	J	0.12
SMP-1-Z2	8-10 ft	06/07/07	--			5.6 ± 1.1	J	0.7	--			0.46 ± 0.12	J	0.10

Table 3.2-4g Radiological Results for Leach Pool/Drain/Drywell/Sump Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR R1/R2-Z1	6-8 ft	06/07/07	0.297 ± 0.082	J	0.097	0.096 ± 0.043	J	0.061	--		
DR-C-Z1	2-4 ft	06/01/07	0.44 ± 0.13		0.18	0.297 ± 0.071	J	0.040	--		
DR-C-Z2	9-11 ft	06/01/07	0.256 ± 0.075	J	0.099	0.078 ± 0.041	J	0.059	--		
DR-C-Z3	18-20 ft	06/01/07	0.176 ± 0.076	J	0.10	--			--		
DR-D-Z1	5-7 ft	06/01/07	0.250 ± 0.076	J	0.12	0.090 ± 0.045	J	0.068	--		
DR-E-Z1	0-2 ft	06/01/07	0.317 ± 0.093	J	0.11	0.161 ± 0.044	J	0.028	--		
DR-E-Z2	12-16 ft	06/01/07	0.119 ± 0.055	J	0.092	--			--		
DR-F-Z1	0-2 ft	06/06/07	0.398 ± 0.099	J	0.15	0.177 ± 0.054	J	0.043	--		
DR-F-Z2	11-13 ft	06/06/07	0.130 ± 0.065	J	0.12	--			--		
DR-G-Z1	3.5-5 ft	06/05/07	0.276 ± 0.096		0.13	0.143 ± 0.055		0.068	--		
DR-G-Z2	13.5-15 ft	06/05/07	0.176 ± 0.077		0.11	--			--		
DRH-A1-Z1	2-3 ft	06/06/07	0.45 ± 0.16	J	0.14	0.406 ± 0.086	J	0.060	24.6 ± 3.4	J	4.9
DRH-A1-Z2	15-16 ft	06/06/07	0.173 ± 0.068		0.11	0.061 ± 0.039		0.060	--		
DRH-A2-Z1	3-4 ft	06/06/07	0.219 ± 0.091	J	0.14	0.217 ± 0.069	J	0.058	11.9 ± 1.5	J	1.8
DRH-A2-Z2	14-15 ft	06/05/07	--			0.120 ± 0.053		0.073	--		
DRH-B-Z1	4-5 ft	06/06/07	0.265 ± 0.088	J	0.13	0.099 ± 0.048	J	0.069	1.32 ± 0.90	J	1.1
DRH-B-Z2	9-10 ft	06/06/07	0.67 ± 0.16		0.13	0.253 ± 0.068		0.065	--		
DR-H-Z1	7-8 ft	06/01/07	0.36 ± 0.11	J	0.13	0.093 ± 0.049	J	0.065	1.69 ± 0.61	J	1.1
DR-H-Z2	10-11 ft	06/01/07	--			--			--		
DR-I-Z1	1-2 ft	06/01/07	0.217 ± 0.078	J	0.11	0.121 ± 0.044	J	0.048	3.48 ± 0.71	J	1.2
DR-I-Z2	10-11 ft	06/01/07	0.128 ± 0.064	J	0.089	0.021 ± 0.027	J	0.048	--		
DR-I-Z3	18-19 ft	06/01/07	0.120 ± 0.053	J	0.089	0.074 ± 0.027	J	0.031	--		
DR-J-Z1	3-4 ft	05/31/07	0.281 ± 0.096	J	0.12	0.069 ± 0.043	J	0.062	8.8 ± 1.4	J	1.8
DR-J-Z2	15-16 ft	05/31/07	0.322 ± 0.076	J	0.091	0.139 ± 0.050	J	0.044	7.31 ± 0.92	J	1.3
DR-K-Z1	7-8 ft	05/31/07	0.270 ± 0.082	J	0.12	0.156 ± 0.048	J	0.035	--		
DR-K-Z2	15-16 ft	05/31/07	0.34 ± 0.10	J	0.15	0.176 ± 0.057	J	0.060	9.5 ± 1.2	J	1.9
DR-K-Z3	19-20 ft	05/31/07	--			--			--		
DR-L-Z1	5-6 ft	05/31/07	0.316 ± 0.081	J	0.12	0.142 ± 0.042	J	0.038	--		
DR-L-Z2	12-13 ft	05/31/07	--			--			--		
DR-M-Z1	5-6 ft	06/01/07	0.171 ± 0.073	J	0.12	--			--		
DR-M-Z2	9-10 ft	06/01/07	0.245 ± 0.084	J	0.10	--			--		

Table 3.2-4g Radiological Results for Leach Pool/Drain/Drywell/Sump Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-N-Z1	2-3.5 ft	06/04/07	0.56 ± 0.12		0.14	0.235 ± 0.060		0.049	1.7 ± 1.0	J	1.2
DR-N-Z2	8-9.5 ft	06/04/07	0.46 ± 0.13		0.14	0.138 ± 0.061		0.079	--		
DR-O-Z1	2-3.5 ft	06/04/07	0.44 ± 0.14		0.17	0.112 ± 0.067		0.10	--		
DR-O-Z2	12-13.5 ft	06/04/07	0.165 ± 0.083	J	0.12	--			--		
DR-O-Z3	16-17.5 ft	06/04/07	0.186 ± 0.073	J	0.12	--			--		
DR-P-Z1	3.5-5 ft	06/06/07	0.46 ± 0.11	J	0.12	0.232 ± 0.076	J	0.069	--		
DR-P-Z2	11.5-13 ft	06/06/07	0.208 ± 0.073	J	0.094	0.058 ± 0.037	J	0.057	--		
DR-U-Z1	5-6 ft	06/01/07	0.436 ± 0.093	J	0.086	0.153 ± 0.039	J	0.024	2.27 ± 0.54	J	0.96
DR-U-Z2	15-16 ft	06/01/07	0.184 ± 0.068	J	0.11	--			--		
DR-V-Z1	3-4 ft	06/05/07	--			0.344 ± 0.090		0.081	--		
DR-V-Z2	9-10 ft	06/05/07	--			0.143 ± 0.049		0.038	--		
DRY-B-Z1	7-8 ft	06/05/07	--			0.129 ± 0.045		0.037	--		
DRY-B-Z2	15-16 ft	06/05/07	--			--			--		
DRY-D-Z1	6-7 ft	06/05/07	0.287 ± 0.088		0.12	0.093 ± 0.051		0.077	--		
DRY-D-Z2	15-16 ft	06/05/07	--			--			--		
DRY-D-Z3	23-24 ft	06/05/07	0.156 ± 0.087	J	0.13	--			--		
DRY-D-Z4	29-30 ft	06/05/07	0.218 ± 0.079		0.12	--			--		
DRY-E-Z1	1-3 ft	06/04/07	0.225 ± 0.073		0.12	0.197 ± 0.059		0.048	4.46 ± 0.74	J	1.1
DRY-E-Z2	10-11 ft	06/04/07	--			--			--		
DRYH-A-Z1	4-5 ft	06/05/07	--			0.123 ± 0.055		0.077	--		
DRYH-A-Z2	14-15 ft	06/05/07	--			0.095 ± 0.049		0.068	--		
DRYH-C-Z1	1-2 ft	05/23/07	0.312 ± 0.085	J	0.11	--			--		
DRYH-C-Z2	8-10 ft	05/23/07	0.134 ± 0.059	J	0.081	0.076 ± 0.035	J	0.035	--		
DRYH-F-Z1	0-2 ft	06/06/07	--			--			--		
DRYH-F-Z2	13.5-15 ft	06/06/07	--			--			--		
LPH-B-Z1	5-6 ft	06/05/07	--			0.222 ± 0.054		0.052	--		
LPH-B-Z2	11-12 ft	06/05/07	--			--			--		
SMP-1-Z1	0-2 ft	06/07/07	0.51 ± 0.11	J	0.13	0.207 ± 0.062	J	0.063	1.4 ± 1.2	J	1.4
SMP-1-Z2	8-10 ft	06/07/07	0.38 ± 0.10	J	0.12	0.098 ± 0.049	J	0.069	--		

Table 3.2-4h Radiological Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Anomaly Sites [13]											
EM-15B-SO-01	2 ft	06/13/07	66 ± 10		0.4	2.6 ± 1.1		0.3	52.1 ± 8.5		0.2
EM-15B-SO-02	7 ft	06/13/07	5.33 ± 0.76		0.03	0.310 ± 0.089		0.013	5.15 ± 0.73		0.02
EM-21-SO-01	4 ft	06/12/07	88 ± 13	J	0.8	4.4 ± 1.7		0.4	95 ± 14		0.5
EM-21-SO-02	8 ft	06/12/07	0.264 ± 0.071		0.017	0.009 ± 0.016	UJ	0.012	0.237 ± 0.067		0.019
EM-26-SO-01	4 ft	06/11/07	1.08 ± 0.19		0.02	0.061 ± 0.036		0.028	0.85 ± 0.15		0.02
EM-29A-SO-01	3 ft	06/11/07	0.382 ± 0.090		0.023	0.009 ± 0.016	UJ	0.012	0.409 ± 0.094		0.019
EM-29A-SO-02	7 ft	06/11/07	13.6 ± 2.2		0.3	0.81 ± 0.40		0.23	13.4 ± 2.2		0.09
EM-2-SO-01	4 ft	06/14/07	3.47 ± 0.50		0.02	0.225 ± 0.070		0.023	2.70 ± 0.40		0.02
EM-3-SO-01	8 ft	06/14/07	0.432 ± 0.095		0.016	0.034 ± 0.026		0.012	0.334 ± 0.081		0.025
EM-3-SO-02	2 ft	06/14/07	1900 ± 270		4	104 ± 25		5	1920 ± 270		5
EM-5-SO-01	2 ft	06/14/07	2.76 ± 0.41		0.03	0.155 ± 0.059		0.013	2.43 ± 0.37		0.02
EM-5-SO-02	4 ft	06/14/07	0.326 ± 0.080		0.024	0.017 ± 0.021	UJ	0.028	0.281 ± 0.073		0.022
GPR-F[14]	2 ft	06/19/07	450 ± 140		40	11 ± 32	UJ	30	1450 ± 280		50
GPR-F-SO-01	2 ft	06/12/07	41.2 ± 6.3	J	0.3	2.17 ± 0.95		0.24	94 ± 13		0.4
GPR-F-SO-02	4 ft	06/12/07	1.44 ± 0.25		0.03	0.064 ± 0.039		0.014	1.33 ± 0.23		0.01

Table 3.2-4h Radiological Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232			Radium-226[11]		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Anomaly Sites [13]														
EM-15B-SO-01	2 ft	06/13/07	9.8 ± 1.9		0.3	2.32 ± 0.70		0.24	9.5 ± 1.8		0.1	0.30 ± 0.17	J	0.25
EM-15B-SO-02	7 ft	06/13/07	0.73 ± 0.15		0.02	0.52 ± 0.12	J	0.02	0.61 ± 0.13		0.03	0.239 ± 0.097	J	0.14
EM-21-SO-01	4 ft	06/12/07	2.34 ± 0.39		0.03	1.23 ± 0.23		0.02	2.43 ± 0.40		0.01	0.83 ± 0.24		0.21
EM-21-SO-02	8 ft	06/12/07	0.338 ± 0.087		0.028	0.286 ± 0.078		0.025	0.282 ± 0.077		0.020	0.246 ± 0.098		0.12
EM-26-SO-01	4 ft	06/11/07	0.46 ± 0.10		0.03	0.423 ± 0.098		0.021	0.409 ± 0.096		0.01	0.259 ± 0.099	J	0.12
EM-29A-SO-01	3 ft	06/11/07	0.50 ± 0.11		0.04	0.399 ± 0.095		0.029	0.328 ± 0.083		0.023	0.254 ± 0.095	J	0.12
EM-29A-SO-02	7 ft	06/11/07	0.56 ± 0.12		0.03	0.44 ± 0.11		0.02	0.56 ± 0.12		0.02	0.234 ± 0.099	J	0.15
EM-2-SO-01	4 ft	06/14/07	0.43 ± 0.10		0.02	0.391 ± 0.096		0.023	0.382 ± 0.094		0.020	0.50 ± 0.12	J	0.08
EM-3-SO-01	8 ft	06/14/07	0.46 ± 0.12		0.03	0.48 ± 0.12		0.03	0.46 ± 0.11		0.01	0.29 ± 0.12	J	0.13
EM-3-SO-02	2 ft	06/14/07	114 ± 21		4	23.6 ± 6.9		2.8	129 ± 23		2	1.27 ± 0.70	J	1.1
EM-5-SO-01	2 ft	06/14/07	0.79 ± 0.19		0.04	0.77 ± 0.18		0.03	0.74 ± 0.18		0.04	0.50 ± 0.15	J	0.17
EM-5-SO-02	4 ft	06/14/07	0.66 ± 0.15		0.03	0.38 ± 0.10		0.03	0.66 ± 0.15		0.02	0.65 ± 0.14	J	0.07
GPR-F[14]	2 ft	06/19/07	4.3 ± 5.2	UJ	6.9	11.9 ± 7.1	J	5.0	0.0 ± 0.0	U	2.6	1.91 ± 0.35		0.15
GPR-F-SO-01	2 ft	06/12/07	0.73 ± 0.15		0.04	0.78 ± 0.16		0.03	0.58 ± 0.12		0.02	0.44 ± 0.14		0.13
GPR-F-SO-02	4 ft	06/12/07	0.61 ± 0.13		0.04	0.46 ± 0.11		0.02	0.56 ± 0.12		0.02	0.137 ± 0.083	J	0.12

Table 3.2-4h Radiological Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Radium-228[12]			Radium-224			Bismuth-212			Potassium-40		
		Conc. Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Anomaly Sites[13]														
EM-15B-SO-01	2 ft	06/13/07	5.02 ± 0.58	J	0.15	6.1 ± 2.2	J	3.4	5.31 ± 0.96	J	0.55	5.7 ± 1.2	J	1.1
EM-15B-SO-02	7 ft	06/13/07	0.37 ± 0.12	J	0.22	--			--			6.7 ± 1.0	J	0.5
EM-21-SO-01	4 ft	06/12/07	1.56 ± 0.31		0.30	--			2.22 ± 0.86		0.68	8.3 ± 1.5		1.3
EM-21-SO-02	8 ft	06/12/07	0.14 ± 0.13	UJ	0.21	--			--			8.1 ± 1.3		0.5
EM-26-SO-01	4 ft	06/11/07	0.39 ± 0.16	J	0.25	--			--			6.3 ± 1.2	J	0.9
EM-29A-SO-01	3 ft	06/11/07	0.21 ± 0.11	UJ	0.22	--			--			4.37 ± 0.92	J	0.33
EM-29A-SO-02	7 ft	06/11/07	0.28 ± 0.12	J	0.22	--			--			5.71 ± 0.97	J	0.68
EM-2-SO-01	4 ft	06/14/07	0.53 ± 0.16	J	0.15	--			--			6.0 ± 1.2	J	0.9
EM-3-SO-01	8 ft	06/14/07	0.28 ± 0.12	J	0.24	--			--			6.8 ± 1.2	J	0.4
EM-3-SO-02	2 ft	06/14/07	98.8 ± 6.0	J	1.2	103 ± 9.5	J	10	65.5 ± 5.6	J	3.5	13.6 ± 3.0	J	2.4
EM-5-SO-01	2 ft	06/14/07	0.49 ± 0.19		0.33	--			--			10.1 ± 1.7		0.6
EM-5-SO-02	4 ft	06/14/07	0.30 ± 0.16	UJ	0.35	--			--			11.0 ± 1.7		0.6
GPR-F[14]	2 ft	06/19/07	65.7 ± 6.7	J	0.4	--			--			--		
GPR-F-SO-01	2 ft	06/12/07	0.31 ± 0.20		0.30	--			--			5.6 ± 1.3		1.0
GPR-F-SO-02	4 ft	06/12/07	0.26 ± 0.14	UJ	0.29	--			--			7.1 ± 1.2	J	0.4

Table 3.2-4h Radiological Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-210			Protactinium-234m			Lead-212		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Anomaly Sites [13]											
EM-15B-SO-01	2 ft	06/13/07	--			23 ± 10	J	14	5.56 ± 0.42	J	0.17
EM-15B-SO-02	7 ft	06/13/07	--			--			0.71 ± 0.14	J	0.11
EM-21-SO-01	4 ft	06/12/07	--			75 ± 14		12	2.01 ± 0.32		0.25
EM-21-SO-02	8 ft	06/12/07	--			--			0.204 ± 0.072		0.099
EM-26-SO-01	4 ft	06/11/07	--			--			0.47 ± 0.11	J	0.1
EM-29A-SO-01	3 ft	06/11/07	--			--			0.391 ± 0.080	J	0.071
EM-29A-SO-02	7 ft	06/11/07	--			--			0.42 ± 0.12	J	0.11
EM-2-SO-01	4 ft	06/14/07	--			--			0.52 ± 0.12	J	0.10
EM-3-SO-01	8 ft	06/14/07	--			--			0.45 ± 0.12	J	0.11
EM-3-SO-02	2 ft	06/14/07	--			2130 ± 150	J	40	103 ± 6.3	J	0.8
EM-5-SO-01	2 ft	06/14/07	--			--			0.83 ± 0.14		0.12
EM-5-SO-02	4 ft	06/14/07	2.6 ± 1.8		2.0	--			0.535 ± 0.099		0.082
GPR-F[14]	2 ft	06/19/07	--			--			--		
GPR-F-SO-01	2 ft	06/12/07	--			95 ± 16		4	0.42 ± 0.13		0.13
GPR-F-SO-02	4 ft	06/12/07	--			--			0.51 ± 0.10	J	0.08

Table 3.2-4h Radiological Results for the Test Trench Soil Samples, RI Phase IIa, Sylvania Corning FUSRAP Site

		Analyte:	Lead-214			Thallium-208			Thorium-234		
		Conc. Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth (BGS)	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
Anomaly Sites [13]											
EM-15B-SO-01	2 ft	06/13/07	0.38 ± 0.16	J	0.27	1.82 ± 0.20	J	0.1	27.1 ± 3.0	J	7.1
EM-15B-SO-02	7 ft	06/13/07	0.301 ± 0.085	J	0.10	0.192 ± 0.056	J	0.049	2.77 ± 0.65	J	1.0
EM-21-SO-01	4 ft	06/12/07	0.83 ± 0.17		0.23	0.64 ± 0.12	J	0.09	42.2 ± 3.7	J	3.3
EM-21-SO-02	8 ft	06/12/07	0.230 ± 0.079		0.10	--			--		
EM-26-SO-01	4 ft	06/11/07	0.261 ± 0.084	J	0.12	0.212 ± 0.056	J	0.039	--		
EM-29A-SO-01	3 ft	06/11/07	0.378 ± 0.094	J	0.073	0.150 ± 0.049	J	0.040	1.28 ± 0.55	J	0.84
EM-29A-SO-02	7 ft	06/11/07	0.306 ± 0.093	J	0.12	0.184 ± 0.055	J	0.051	5.13 ± 0.81	J	1.4
EM-2-SO-01	4 ft	06/14/07	0.53 ± 0.10	J	0.11	0.205 ± 0.057	J	0.051	2.04 ± 0.62	J	1.1
EM-3-SO-01	8 ft	06/14/07	0.46 ± 0.10	J	0.07	0.128 ± 0.041	J	0.030	--		
EM-3-SO-02	2 ft	06/14/07	--			35.0 ± 2.3	J	0.6	1020 ± 78	J	19
EM-5-SO-01	2 ft	06/14/07	0.67 ± 0.16		0.18	0.248 ± 0.090		0.12	--		
EM-5-SO-02	4 ft	06/14/07	0.52 ± 0.12		0.13	0.247 ± 0.075		0.062	--		
GPR-F[14]	2 ft	06/19/07	--			--			--		
GPR-F-SO-01	2 ft	06/12/07	0.45 ± 0.13		0.16	0.205 ± 0.083	J	0.076	50.4 ± 5.8	J	3.9
GPR-F-SO-02	4 ft	06/12/07	0.311 ± 0.084	J	0.11	0.105 ± 0.036	J	0.029	1.49 ± 0.76	J	0.96

Key for Tables 3.2-1 through 3.2-4

Key:

-- = No Data Reported
J = Estimated
J+ = Estimated Biased High
J- = Estimated Biased Low
U = Not Detected
UJ = Not Detected/Estimated
UR = Lab Non Detect Rejected by Validator
mg/kg = milligram per kilogram
mg/kg = microgram per kilogram
pCi/g = picocuries per gram
Qual = Qualifier
MDC = Minimum Detectable Concentration
BGS = Below Ground Surface

Alpha Spectroscopy

Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R

Gamma Spectroscopy

All other Radionucleides- DOE-GA-01-R

(1) = 100-10-931-Z2 was resampled for VOCs on 09/15/2007
(2) = SU10-977-Z1 was resampled for VOCs on 09/18/2007
(3) = Sample was not analyzed for VOCs
(4) = 100-10-Z1 and 100-10-Z2 were resampled for VOCs on 6/15/2007
(5) = SU08-07-Z1 and SU08-07-Z2 were resampled for VOCs on 6/14/2007
(6) = SU08-08-Z1, SU08-08-Z2, SU08-12-Z1, and SU08-12-Z2 were resampled for VOCs on 6/15/2007
(7) = SU09-02-Z1,SU09-03-Z2, and SU09-13-Z2 were resampled for VOCs on 6/12/2007
(8) = SU14-12-Z2 was resampled for VOCs on 6/1/2007
(9) = SU10-03-Z1 was resampled for VOCs on 06/18/2007
(10) = SU10-11-Z1, SU10-11-Z2, SU10-15-Z1, SU10-15-Z2, SU10-19-Z1, and SU10-19-Z2 were resampled for VOCs on 06/14/2007
(11) = Radium-226 was identified and quantified using the Bismuth-214 peak.
(12) = Radium-228 was identified and quantified using the Actinium-228 Peak.
(13)=Phase I Geophysical Anomalies
(14)=Piece of Slag, Uranium, Thorium, and Radium analyzed by alpha spectroscopy DOE-A-01-R
(15) = Soil Samples taken from Concrete Core Locations

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	FB-01 10/16/2007	FB-02 10/17/2007	FB-02a 10/19/2007	FB-03 10/22/2007	FB-04 10/23/2007
Nickel by 6010B (µg/L)					
Nickel	--	--	--	--	--
VOCs by 8260B (µg/L)					
1,1,1-Trichloroethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	5.0 UJ	--	--
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,1-Dichloroethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,1-Dichloroethene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	**3.1 J**	5.0 U	5.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	1.0 U	2.0 U	10 UJ	--	--
1,2-Dibromoethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	**1.5 J**	5.0 U	5.0 U
1,2-Dichloroethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,2-Dichloropropane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
1,4-Dioxane[1]	80 U	--	--	400 U	400 U
2-Butanone	5.0 U	5.0 UJ	25 UJ	20 U	20 U
2-Hexanone	5.0 U	5.0 UJ	25 UJ	20 U	20 U
4-Methyl-2-Pentanone	5.0 U	5.0 UJ	25 UJ	20 U	20 U
Acetone	2.0 U	**6.6 J**	**6.0 J**	20 U	20 U
Benzene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Bromochloromethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Bromodichloromethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Bromoform	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Bromomethane	2.0 U	2.0 UJ	64 UJ	10 U	10 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	FB-01 10/16/2007	FB-02 10/17/2007	FB-02a 10/19/2007	FB-03 10/22/2007	FB-04 10/23/2007
Carbon disulfide	1.0 U	2.3 U	5.0 UJ	5.0 U	5.0 U
Carbon tetrachloride	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Chlorobenzene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Chloroethane	2.0 U	2.0 U	10 UJ	10 U	10 U
Chloroform	**1.9**	1.0 U	5.0 UJ	5.0 U	5.0 U
Chloromethane	2.0 U	2.0 U	10 UJ	**0.50 J**	10 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Cyclohexane	1.0 U	**0.059 J**	5.0 UJ	--	--
Dibromochloromethane	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	10 UJ	10 U	10 U
Ethylbenzene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Isopropylbenzene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Methyl acetate	5.0 U	**0.44 J**	25 UJ	10 U	10 U
Methyl tert-butyl ether	2.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Methylcyclohexane	4.0 U	4.0 U	20 UJ	--	--
Methylene chloride	1.0 U	2.0 U	**0.58 J**	7.5 U	7.5 U
m-Xylene & p-Xylene	2.0 U	1.0 U	**1.9 J**	5.0 U	5.0 U
o-Xylene	1.0 U	1.0 U	**0.61 J**	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	**0.71 J**	5.0 U	5.0 U
Tetrachloroethene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Toluene	1.0 U	1.0 U	5.0 UJ	5.0 UJ	5.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Trichloroethene	1.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U
Trichlorofluoromethane	1.0 U	2.0 U	**2.6 J**	5.0 U	5.0 U
Vinyl chloride	2.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	FB-05 10/24/2007
Nickel by 6010B (µg/L)	
Nickel	--
VOCs by 8260B (µg/L)	
1,1,1-Trichloroethane	5.0 U
1,1,2,2-Tetrachloroethane	--
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U
1,1,2-Trichloroethane	5.0 U
1,1-Dichloroethane	5.0 U
1,1-Dichloroethene	5.0 U
1,2,3-Trichlorobenzene	5.0 U
1,2,4-Trichlorobenzene	5.0 U
1,2-Dibromo-3-chloropropane	--
1,2-Dibromoethane	5.0 U
1,2-Dichlorobenzene	5.0 U
1,2-Dichloroethane	5.0 U
1,2-Dichloropropane	5.0 U
1,3-Dichlorobenzene	5.0 U
1,4-Dichlorobenzene	5.0 U
1,4-Dioxane[1]	--
2-Butanone	20 U
2-Hexanone	20 U
4-Methyl-2-Pentanone	20 U
Acetone	20 U
Benzene	5.0 U
Bromochloromethane	5.0 U
Bromodichloromethane	5.0 U
Bromoform	5.0 U
Bromomethane	10 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	FB-05 10/24/2007
Carbon disulfide	5.0 U
Carbon tetrachloride	5.0 U
Chlorobenzene	5.0 U
Chloroethane	10 U
Chloroform	5.0 U
Chloromethane	10 U
cis-1,2-Dichloroethene	5.0 U
cis-1,3-Dichloropropene	5.0 U
Cyclohexane	--
Dibromochloromethane	5.0 U
Dichlorodifluoromethane	10 U
Ethylbenzene	5.0 U
Isopropylbenzene	5.0 U
Methyl acetate	--
Methyl tert-butyl ether	5.0 U
Methylcyclohexane	--
Methylene chloride	7.5 U
m-Xylene & p-Xylene	5.0 U
o-Xylene	5.0 U
Styrene	5.0 U
Tetrachloroethene	5.0 U
Toluene	**0.16 J**
trans-1,2-Dichloroethene	5.0 U
trans-1,3-Dichloropropene	5.0 U
Trichloroethene	5.0 U
Trichlorofluoromethane	5.0 U
Vinyl chloride	5.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	FB-06 10/25/2007	FB-07 10/26/2007	FB-07a 10/29/2007	FB-08 10/30/2007	FB-09 11/01/2007	RB-01 10/18/2007
Nickel by 6010B (µg/L)						
Nickel	--	--	--	--	--	40 U
VOCs by 8260B (µg/L)						
1,1,1-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5.0 U	--	--	--	--	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,1,2-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,1-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,1-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,2,3-Trichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane	10 U	--	--	--	--	1.0 U
1,2-Dibromoethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,2-Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,2-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,2-Dichloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,3-Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,4-Dichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,4-Dioxane[1]	--	--	--	--	--	80 U
2-Butanone	25 U	20 U	20 U	20 U	20 U	5.0 U
2-Hexanone	25 U	20 U	20 U	20 U	20 U	5.0 U
4-Methyl-2-Pentanone	25 U	20 U	20 U	20 U	20 U	5.0 U
Acetone	50 UJ	20 U	20 U	20 U	20 U	4.2 U
Benzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Bromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Bromodichloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Bromoform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Bromomethane	10 UJ	10 U	10 U	10 U	10 U	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	FB-06 10/25/2007	FB-07 10/26/2007	FB-07a 10/29/2007	FB-08 10/30/2007	FB-09 11/01/2007	RB-01 10/18/2007
Carbon disulfide	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Carbon tetrachloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Chlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	2.0 U
Chloroform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Chloromethane	10 UJ	10 U	10 U	10 U	10 U	2.0 U
cis-1,2-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
cis-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Cyclohexane	5.0 U	--	--	--	--	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	2.0 U
Ethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Isopropylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Methyl acetate	25 U	--	--	--	--	5.0 U
Methyl tert-butyl ether	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 U
Methylcyclohexane	20 U	--	--	--	--	4.0 U
Methylene chloride	10 UJ	7.5 U	7.5 U	7.5 U	7.5 U	1.0 U
m-Xylene & p-Xylene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 U
o-Xylene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Styrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Tetrachloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Toluene	5.0 U	**0.45 J**	**0.26 J**	**0.31 J**	5.0 U	**1.6**
trans-1,2-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
trans-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Trichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Trichlorofluoromethane	10 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Vinyl chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	RB-02 10/17/2007	RB-03 10/18/2007	RB-04 10/22/2007	RB-05 10/22/2007	RB-06 10/23/2007	RB-07 10/24/2007
Nickel by 6010B (µg/L)						
Nickel	40 U	40 U	40 U	40 U	40 U	40 U
VOCs by 8260B (µg/L)						
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	**18 J**	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	**59 J**	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	**0.91 J**	1.0 U
1,2,3-Trichlorobenzene	1.0 UJ	1.0 U	1.0 U	1.0 U	**30 J**	1.0 U
1,2,4-Trichlorobenzene	1.0 UJ	1.0 U	1.0 U	1.0 U	**260 J-**	1.0 UJ
1,2-Dibromo-3-chloropropane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	100 UJ	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	**690 J-**	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	**54 J**	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	**52 J**	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	**1100 J-**	1.0 U
1,4-Dioxane[1]	--	80 U	80 U	80 U	80 UJ	80 UJ
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
Acetone	10 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	**250000**	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	**1.2 J**	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	RB-02 10/17/2007	RB-03 10/18/2007	RB-04 10/22/2007	RB-05 10/22/2007	RB-06 10/23/2007	RB-07 10/24/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	**160000**	1.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	**0.62 J**	2.0 U
Chloroform	**2.2**	**2.4**	**2.5**	**1.4**	**59000**	**2.6**
Chloromethane	2.0 U	**0.27 J**	2.0 U	2.0 U	**0.63 J**	**0.37 J**
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Methyl acetate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Methyl tert-butyl ether	1.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
Methylcyclohexane	4.0 U	4.0 U	4.0 U	4.0 U	**9.0 J**	4.0 U
Methylene chloride	2.0 UJ	**0.18 J**	1.0 U	1.0 UJ	**1.9 J**	1.0 UJ
m-Xylene & p-Xylene	1.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	**1.0 J**	1.0 U
Styrene	**0.045 J**	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	**79 J**	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	**20 J**	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	100 UJ	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	**5.5 J**	1.0 U
Trichlorofluoromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Vinyl chloride	1.0 U	2.0 U	2.0 U	2.0 U	**0.51 J**	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	RB-08 10/25/2007	RB-09 10/26/2007	RB-10 10/30/2007	RB-11 10/30/2007	RB-12 11/05/2007	RB-13 11/05/2007
Nickel by 6010B (µg/L)						
Nickel	**10.8 J**	40 U	**4.7 J**	40.0 U	40 U	40 U
VOCs by 8260B (µg/L)						
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	2.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane[1]	--	80 U	80 UJ	80 UJ	80 U	80 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	10 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	RB-08 10/25/2007	RB-09 10/26/2007	RB-10 10/30/2007	RB-11 10/30/2007	RB-12 11/05/2007	RB-13 11/05/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	**1.3**	**2.4**	**1.7**	**1.3**	**0.97 J**	**0.69 J**
Chloromethane	**0.14 J**	2.0 U	2.0 U	2.0 U	**0.46 J**	2.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U
Methyl tert-butyl ether	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylcyclohexane	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Methylene chloride	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Xylene & p-Xylene	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	**0.17 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.50 J**
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	RB-14 11/06/2007	RB-15 11/07/2007	RB-16 11/08/2007	RB-17 11/09/2007	RB-18 11/12/2007	RB-19 11/14/2007
Nickel by 6010B (µg/L)						
Nickel	40 U	**5.6 J**	40 U	40 U	40 U	40 U
VOCs by 8260B (µg/L)						
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane[1]	80 U	80 U	80 U	80 UJ	80 UJ	80 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	RB-14 11/06/2007	RB-15 11/07/2007	RB-16 11/08/2007	RB-17 11/09/2007	RB-18 11/12/2007	RB-19 11/14/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	**1.0**	**0.97 J**	**0.91 J**	**0.99 J**	**0.94 J**	**0.88 J**
Chloromethane	2.0 U	2.0 UJ	**0.46 J**	**0.13 J**	2.0 U	2.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Methyl tert-butyl ether	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
Methylcyclohexane	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Methylene chloride	**0.15 J**	1.0 UJ	1.0 UJ	**0.13 J**	1.0 U	1.0 UJ
m-Xylene & p-Xylene	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	RB-20 11/14/2007	TB-01 10/17/2007	TB-02 10/18/2007	TB-03 10/22/2007	TB-04 10/23/2007	TB-05 10/24/2007
Nickel by 6010B (µg/L)						
Nickel	40 U	--	--	--	--	--
VOCs by 8260B (µg/L)						
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dibromo-3-chloropropane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane[1]	80 U	--	80 U	80 U	80 U	80 UJ
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	2.0 U	**10 J**	2.0 U	**9.0**	2.0 U	2.0 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3-3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	RB-20 11/14/2007	TB-01 10/17/2007	TB-02 10/18/2007	TB-03 10/22/2007	TB-04 10/23/2007	TB-05 10/24/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	**0.90 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Methyl tert-butyl ether	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylcyclohexane	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Methylene chloride	1.0 UJ	2.0 U	1.0 U	**1.7**	1.0 U	1.0 U
m-Xylene & p-Xylene	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	**0.12 J**	1.0 U	1.0 UJ	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3-3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	TB-06 10/25/2007	TB-07 10/26/2007	TB-08 10/30/2007	TB-09 11/05/2007	TB-10 11/06/2007	TB-11 11/07/2007
Nickel by 6010B (µg/L)						
Nickel	--	--	--	--	--	--
VOCs by 8260B (µg/L)						
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane[1]	--	80 U	80 UJ	80 U	80 U	80 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	**3.5 J**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ

Table 3-3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	TB-06 10/25/2007	TB-07 10/26/2007	TB-08 10/30/2007	TB-09 11/05/2007	TB-10 11/06/2007	TB-11 11/07/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylcyclohexane	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Methylene chloride	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**
m-Xylene & p-Xylene	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	TB-12 11/08/2007	TB-13 11/09/2007	TB-14 11/12/2007	TB-15 11/14/2007
Nickel by 6010B (µg/L)				
Nickel	--	--	--	--
VOCs by 8260B (µg/L)				
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane[1]	80 U	80 UJ	80 UJ	80 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	**0.45 J**	2.0 U	2.0 U	2.0 U

Table 3.3-1a Summary of Complete Results for Nickel and VOC Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	TB-12 11/08/2007	TB-13 11/09/2007	TB-14 11/12/2007	TB-15 11/14/2007
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 UJ	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	5.0 U	5.0 U	5.0 U	5.0 UJ
Methyl tert-butyl ether	2.0 U	2.0 U	2.0 UJ	2.0 U
Methylcyclohexane	4.0 U	4.0 U	4.0 U	4.0 U
Methylene chloride	**0.17 J**	1.0 U	1.0 U	**0.13 J**
m-Xylene & p-Xylene	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2.0 U	2.0 U	2.0 U	2.0 U

Key for Table 3.3-1a

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

	Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
	Units:	pCi/L			pCi/L			pCi/L		
Sample ID	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
RB-01	10/18/2007	-0.007 ± 0.034	U	0.073	0.009 ± 0.042	U	0.091	0.007 ± 0.034	U	0.073
RB-02	10/17/2007	-0.004 ± 0.048	U	0.11	0.0 ± 0.0	U	0.05	0.008 ± 0.039	U	0.085
RB-03	10/18/2007	0.004 ± 0.040	U	0.088	0.014 ± 0.042	U	0.085	0.015 ± 0.042	UJ	0.040
RB-04	10/22/2007	0.051 ± 0.091	UJ	0.14	0.0 ± 0.0	U	0.06	0.043 ± 0.080	UJ	0.12
RB-05	10/22/2007	-0.014 ± 0.041	U	0.093	-0.005 ± 0.041	U	0.082	0.0 ± 0.0	U	0.04
RB-06	10/23/2007	0.080 ± 0.097	UJ	0.12	-0.007 ± 0.064	U	0.13	0.040 ± 0.094	U	0.16
RB-07	10/24/2007	0.20 ± 0.16		0.13	0.04 ± 0.10	UJ	0.1	0.17 ± 0.15		0.13
RB-08	10/25/2007	0.034 ± 0.072	U	0.12	-0.007 ± 0.064	U	0.13	0.034 ± 0.072	U	0.12
RB-09	10/26/2007	0.046 ± 0.060	UJ	0.076	0.0 ± 0.0	U	0.06	0.067 ± 0.075	J	0.045
RB-10	10/30/2007	0.020 ± 0.049	UJ	0.078	0.0 ± 0.0	U	0.03	0.005 ± 0.037	U	0.071
RB-11	10/30/2007	0.008 ± 0.022	UJ	0.021	-0.005 ± 0.024	U	0.052	0.002 ± 0.021	U	0.046
RB-12	11/05/2007	-0.0008 ± 0.040	U	0.082	-0.005 ± 0.029	U	0.064	0.020 ± 0.034	UJ	0.027
RB-13	11/05/2007	2.08 ± 0.38		0.09	0.084 ± 0.070		0.074	0.30 ± 0.12		0.06
RB-14	11/06/2007	0.091 ± 0.069		0.076	-0.005 ± 0.027	U	0.059	0.005 ± 0.022	U	0.048
RB-15	11/07/2007	0.51 ± 0.16		0.07	0.019 ± 0.037	U	0.063	0.131 ± 0.075		0.050
RB-16	11/08/2007	-0.0005 ± 0.023	U	0.047	0.0 ± 0.0	U	0.02	0.003 ± 0.013	U	0.029
RB-17	11/09/2007	0.015 ± 0.031	UJ	0.050	-0.007 ± 0.022	U	0.051	0.024 ± 0.032	UJ	0.046
RB-18	11/12/2007	0.190 ± 0.096		0.076	0.002 ± 0.033	U	0.077	0.047 ± 0.053	UJ	0.069
RB-19	11/14/2007	0.060 ± 0.053	J	0.027	0.020 ± 0.039	U	0.065	0.002 ± 0.027	U	0.062
RB-20	11/14/2007	0.010 ± 0.050	U	0.093	0.008 ± 0.033	U	0.072	0.057 ± 0.058	UJ	0.070

Table 3.3-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

	Analyte:	Thorium-228			Thorium-230			Thorium-232		
	Units:	pCi/L			pCi/L			pCi/L		
Sample ID	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
RB-01	10/18/2007	-0.04 ± 0.13	U	0.25	0.20 ± 0.15	J	0.12	-0.006 ± 0.052	U	0.11
RB-02	10/17/2007	-0.002 ± 0.055	U	0.10	0.035 ± 0.041	UJ	0.051	0.002 ± 0.026	U	0.061
RB-03	10/18/2007	-0.02 ± 0.10	U	0.20	0.054 ± 0.071	U	0.089	0.0 ± 0.0	U	0.1
RB-04	10/22/2007	0.017 ± 0.077	U	0.14	0.16 ± 0.11		0.09	0.026 ± 0.054	U	0.091
RB-05	10/22/2007	-0.11 ± 0.20	U	0.42	0.21 ± 0.14	J	0.14	-0.057 ± 0.085	U	0.23
RB-06	10/23/2007	0.32 ± 0.23	U	0.32	0.08 ± 0.13	U	0.23	0.021 ± 0.073	U	0.15
RB-07	10/24/2007	0.028 ± 0.066	UJ	0.10	0.055 ± 0.050	J	0.051	0.011 ± 0.033	U	0.061
RB-08	10/25/2007	-0.016 ± 0.073	U	0.17	0.0884 ± 0.099	J	0.060	-0.011 ± 0.054	U	0.12
RB-09	10/26/2007	0.052 ± 0.083	UJ	0.12	0.115 ± 0.096	J	0.094	0.028 ± 0.048	UJ	0.072
RB-10	10/30/2007	0.024 ± 0.045	UJ	0.068	0.014 ± 0.030	U	0.050	-0.002 ± 0.021	U	0.043
RB-11	10/30/2007	0.031 ± 0.046	UJ	0.064	0.038 ± 0.038	U	0.043	0.005 ± 0.016	U	0.033
RB-12	11/05/2007	0.0 ± 0.0	U	0.08	0.069 ± 0.046	J	0.019	0.023 ± 0.029	UJ	0.041
RB-13	11/05/2007	0.057 ± 0.056	UJ	0.076	0.086 ± 0.059	J	0.067	0.016 ± 0.025	UJ	0.040
RB-14	11/06/2007	0.023 ± 0.039	UJ	0.063	0.062 ± 0.055	UJ	0.073	-0.013 ± 0.023	U	0.056
RB-15	11/07/2007	0.045 ± 0.061	UJ	0.091	0.30 ± 0.10		0.06	0.138 ± 0.069		0.045
RB-16	11/08/2007	-0.008 ± 0.062	UJ	0.11	0.059 ± 0.055	UJ	0.073	0.009 ± 0.026	UJ	0.025
RB-17	11/09/2007	0.116 ± 0.083		0.11	0.080 ± 0.082	UJ	0.13	-0.009 ± 0.040	U	0.095
RB-18	11/12/2007	0.014 ± 0.079	UJ	0.13	0.136 ± 0.072	J	0.063	0.021 ± 0.034	UJ	0.055
RB-19	11/14/2007	-0.041 ± 0.075	U	0.14	0.072 ± 0.051	J	0.046	0.015 ± 0.027	UJ	0.021
RB-20	11/14/2007	0.015 ± 0.060	U	0.10	0.052 ± 0.044	J	0.050	0.003 ± 0.017	U	0.040

Table 3.3-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte:		Radium-226[1]				Radium-228[2]				Actinium-228			
Units:		pCi/L				pCi/L				pCi/L			
Sample ID	Sample Date	Result		Qual	MDC	Result		Qual	MDC	Result		Qual	MDC
RB-01	10/18/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-02	10/17/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-03	10/18/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-04	10/22/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-05	10/22/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-06	10/23/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-07	10/24/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-08	10/25/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-09	10/26/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-10	10/30/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-11	10/30/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-12	11/05/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-13	11/05/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-14	11/06/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-15	11/07/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-16	11/08/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-17	11/09/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-18	11/12/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-19	11/14/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--
RB-20	11/14/2007	--	± --	--	--	--	± --	--	--	--	± --	--	--

Table 3.3-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte:		Bismuth-212			Bismuth-214			Cesium-137		
Units:		pCi/L			pCi/L			pCi/L		
Sample ID	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
RB-01	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-02	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-03	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-04	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-05	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-06	10/23/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-07	10/24/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-08	10/25/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-09	10/26/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-10	10/30/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-11	10/30/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-12	11/05/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-13	11/05/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-14	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-15	11/07/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-16	11/08/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-17	11/09/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-18	11/12/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-19	11/14/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-20	11/14/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

	Analyte:	Potassium-40			Lead 210			Protactinium-234m		
	Units:	pCi/L			pCi/L			pCi/L		
Sample ID	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
RB-01	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-02	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-03	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-04	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-05	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-06	10/23/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-07	10/24/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-08	10/25/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-09	10/26/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-10	10/30/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-11	10/30/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-12	11/05/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-13	11/05/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-14	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-15	11/07/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-16	11/08/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-17	11/09/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-18	11/12/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-19	11/14/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
RB-20	11/14/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte:		Lead-212				Lead-214			
Units:		pCi/L				pCi/L			
Sample ID	Sample Date	Result	Qual	MDC		Result	Qual	MDC	
RB-01	10/18/2007	-- ± --	--	--		-- ± --	--	--	
RB-02	10/17/2007	-- ± --	--	--		-- ± --	--	--	
RB-03	10/18/2007	-- ± --	--	--		-- ± --	--	--	
RB-04	10/22/2007	-- ± --	--	--		-- ± --	--	--	
RB-05	10/22/2007	-- ± --	--	--		-- ± --	--	--	
RB-06	10/23/2007	-- ± --	--	--		-- ± --	--	--	
RB-07	10/24/2007	-- ± --	--	--		-- ± --	--	--	
RB-08	10/25/2007	-- ± --	--	--		-- ± --	--	--	
RB-09	10/26/2007	-- ± --	--	--		-- ± --	--	--	
RB-10	10/30/2007	-- ± --	--	--		-- ± --	--	--	
RB-11	10/30/2007	-- ± --	--	--		-- ± --	--	--	
RB-12	11/05/2007	-- ± --	--	--		-- ± --	--	--	
RB-13	11/05/2007	-- ± --	--	--		-- ± --	--	--	
RB-14	11/06/2007	-- ± --	--	--		-- ± --	--	--	
RB-15	11/07/2007	-- ± --	--	--		-- ± --	--	--	
RB-16	11/08/2007	-- ± --	--	--		-- ± --	--	--	
RB-17	11/09/2007	-- ± --	--	--		-- ± --	--	--	
RB-18	11/12/2007	-- ± --	--	--		-- ± --	--	--	
RB-19	11/14/2007	-- ± --	--	--		-- ± --	--	--	
RB-20	11/14/2007	-- ± --	--	--		-- ± --	--	--	

Table 3.3-1b Summary of Complete Results for Radiological Field Blank Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte:		Thallium-208				Thorium-234			
Units:		pCi/L				pCi/L			
Sample ID	Sample Date	Result	Qual	MDC		Result	Qual	MDC	
RB-01	10/18/2007	-- ± --	--	--		-- ± --	--	--	
RB-02	10/17/2007	-- ± --	--	--		-- ± --	--	--	
RB-03	10/18/2007	-- ± --	--	--		-- ± --	--	--	
RB-04	10/22/2007	-- ± --	--	--		-- ± --	--	--	
RB-05	10/22/2007	-- ± --	--	--		-- ± --	--	--	
RB-06	10/23/2007	-- ± --	--	--		-- ± --	--	--	
RB-07	10/24/2007	-- ± --	--	--		-- ± --	--	--	
RB-08	10/25/2007	-- ± --	--	--		-- ± --	--	--	
RB-09	10/26/2007	-- ± --	--	--		-- ± --	--	--	
RB-10	10/30/2007	-- ± --	--	--		-- ± --	--	--	
RB-11	10/30/2007	-- ± --	--	--		-- ± --	--	--	
RB-12	11/05/2007	-- ± --	--	--		-- ± --	--	--	
RB-13	11/05/2007	-- ± --	--	--		-- ± --	--	--	
RB-14	11/06/2007	-- ± --	--	--		-- ± --	--	--	
RB-15	11/07/2007	-- ± --	--	--		-- ± --	--	--	
RB-16	11/08/2007	-- ± --	--	--		-- ± --	--	--	
RB-17	11/09/2007	-- ± --	--	--		-- ± --	--	--	
RB-18	11/12/2007	-- ± --	--	--		-- ± --	--	--	
RB-19	11/14/2007	-- ± --	--	--		-- ± --	--	--	
RB-20	11/14/2007	-- ± --	--	--		-- ± --	--	--	

Key forTable 3.3-1b

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	100-11-Z3 10/30/2007	100-11-991 10/30/2007	100-06/D-Z5 11/08/2007	100-996-Z1 11/08/2007	140-07/D-Z8 11/06/2007
Nickel by 6010B (mg/kg)					
Nickel	**41.3**	**2.4 J**	**1.8 J**	**2.4 J**	**1.2 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,1,2,2-Tetrachloroethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	15 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,1,2-Trichloroethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,1-Dichloroethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,1-Dichloroethene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,2,3-Trichlorobenzene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,2,4-Trichlorobenzene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,2-Dibromo-3-chloropropane	15 U	10 UJ	10 U	10 UJ	10 UJ
1,2-Dibromoethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,2-Dichlorobenzene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,2-Dichloroethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,2-Dichloropropane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,3-Dichlorobenzene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,4-Dichlorobenzene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
1,4-Dioxane[1]	--	410 UJ	410 U	410 UJ	410 UJ
2-Butanone	31 UJ	20 UJ	20 U	20 UJ	20 UJ
2-Hexanone	31 U	20 UJ	20 U	20 UJ	20 UJ
4-Methyl-2-Pentanone	31 U	20 UJ	20 U	20 UJ	20 UJ
Acetone	**24 J**	**10 J**	**7.6 J**	20 UJ	20 UJ
Benzene	**0.41 J**	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Bromochloromethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Bromodichloromethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Bromoform	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Bromomethane	15 U	10 UJ	10 U	10 UJ	10 UJ

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	100-11-Z3 10/30/2007	100-11-991 10/30/2007	100-06/D-Z5 11/08/2007	100-996-Z1 11/08/2007	140-07/D-Z8 11/06/2007
Carbon disulfide	7.7 UJ	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Carbon tetrachloride	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Chlorobenzene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Chloroethane	15 U	10 UJ	10 U	10 UJ	10 UJ
Chloroform	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Chloromethane	15 U	10 UJ	10 U	10 UJ	10 UJ
cis-1,2-Dichloroethene	**0.66 J**	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
cis-1,3-Dichloropropene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Cyclohexane	7.7 U	10 UJ	10 U	10 UJ	10 UJ
Dibromochloromethane	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Dichlorodifluoromethane	15 U	10 UJ	10 U	10 UJ	10 UJ
Ethylbenzene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Isopropylbenzene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Methyl acetate	7.7 U	10 UJ	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Methylcyclohexane	7.7 U	10 UJ	10 U	10 UJ	10 UJ
Methylene chloride	**6.6 J**	**3.8 J**	**4.8 J**	10 UJ	**2.8 J**
m-Xylene & p-Xylene	15 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
o-Xylene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Styrene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Tetrachloroethene	**300**	**1.4 J**	**1.1 J**	5.1 UJ	5.1 UJ
Toluene	7.7 UJ	5.1 UJ	5.1 UJ	5.1 UJ	**0.50 J**
trans-1,2-Dichloroethene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
trans-1,3-Dichloropropene	7.7 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Trichloroethene	**17**	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Trichlorofluoromethane	**0.68 J**	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ
Vinyl chloride	15 U	5.1 UJ	5.1 U	5.1 UJ	5.1 UJ

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	140-994-Z1 11/06/2007
Nickel by 6010B (mg/kg)	
Nickel	4 U
VOCs by 8260B (µg/kg)	
1,1,1-Trichloroethane	5.1 UJ
1,1,2,2-Tetrachloroethane	5.1 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 UJ
1,1,2-Trichloroethane	5.1 UJ
1,1-Dichloroethane	5.1 UJ
1,1-Dichloroethene	5.1 UJ
1,2,3-Trichlorobenzene	5.1 UJ
1,2,4-Trichlorobenzene	5.1 UJ
1,2-Dibromo-3-chloropropane	10 UJ
1,2-Dibromoethane	5.1 UJ
1,2-Dichlorobenzene	5.1 UJ
1,2-Dichloroethane	5.1 UJ
1,2-Dichloropropane	5.1 UJ
1,3-Dichlorobenzene	5.1 UJ
1,4-Dichlorobenzene	5.1 UJ
1,4-Dioxane[1]	410 UJ
2-Butanone	20 UJ
2-Hexanone	20 UJ
4-Methyl-2-Pentanone	20 UJ
Acetone	20 UJ
Benzene	5.1 UJ
Bromochloromethane	5.1 UJ
Bromodichloromethane	5.1 UJ
Bromoform	5.1 UJ
Bromomethane	10 UJ

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	140-994-Z1 11/06/2007
Carbon disulfide	5.1 UJ
Carbon tetrachloride	5.1 UJ
Chlorobenzene	5.1 UJ
Chloroethane	10 UJ
Chloroform	5.1 UJ
Chloromethane	10 UJ
cis-1,2-Dichloroethene	5.1 UJ
cis-1,3-Dichloropropene	5.1 UJ
Cyclohexane	10 UJ
Dibromochloromethane	5.1 UJ
Dichlorodifluoromethane	10 UJ
Ethylbenzene	5.1 UJ
Isopropylbenzene	5.1 UJ
Methyl acetate	10 UJ
Methyl tert-butyl ether	5.1 UJ
Methylcyclohexane	10 UJ
Methylene chloride	**2.6 J**
m-Xylene & p-Xylene	5.1 UJ
o-Xylene	5.1 UJ
Styrene	5.1 UJ
Tetrachloroethene	5.1 UJ
Toluene	**0.56 J**
trans-1,2-Dichloroethene	5.1 UJ
trans-1,3-Dichloropropene	5.1 UJ
Trichloroethene	5.1 UJ
Trichlorofluoromethane	5.1 UJ
Vinyl chloride	5.1 UJ

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	C10-02-983 10/22/2007	C10-02-Z4 10/22/2007	C3-01-989 10/26/2007	C3-01-Z4 10/26/2007	C7-01-Z4 10/17/2007	C7-981-Z1 10/17/2007
Nickel by 6010B (mg/kg)						
Nickel	**3.7 J**	**3.3 J**	**1.6 J**	**1.8 J**	**2.4 J**	**2.5 J**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.8 U	6.0 U	5.1 U	5.2 U	10 U	10 U
1,1,2-Trichloroethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,1-Dichloroethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,1-Dichloroethene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	12 U	12 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,2-Dichloroethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,2-Dichloropropane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
1,4-Dioxane[1]	460 U	480 U	410 U	410 U	--	--
2-Butanone	23 U	24 U	21 U	21 U	21 UJ	20 UJ
2-Hexanone	23 U	24 U	21 U	21 U	21 UJ	20 UJ
4-Methyl-2-Pentanone	23 U	24 U	21 U	21 U	21 UJ	20 UJ
Acetone	23 U	24 U	21 U	21 U	41 UJ	41 UJ
Benzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Bromochloromethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Bromodichloromethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Bromoform	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Bromomethane	12 U	12 U	10 U	10 U	10 UJ	10 UJ

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	C10-02-983 10/22/2007	C10-02-Z4 10/22/2007	C3-01-989 10/26/2007	C3-01-Z4 10/26/2007	C7-01-Z4 10/17/2007	C7-981-Z1 10/17/2007
Carbon disulfide	5.8 U	6.0 U	5.1 U	5.2 U	5.1 UJ	5.1 UJ
Carbon tetrachloride	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Chlorobenzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Chloroethane	12 U	12 U	10 U	10 U	10 U	10 U
Chloroform	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Chloromethane	12 U	12 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Cyclohexane	12 U	12 U	10 U	10 U	5.1 U	5.1 U
Dibromochloromethane	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Dichlorodifluoromethane	12 U	12 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Isopropylbenzene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Methyl acetate	12 U	12 U	10 U	10 U	5.1 U	5.1 U
Methyl tert-butyl ether	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Methylcyclohexane	12 U	12 U	10 U	10 U	5.1 U	5.1 U
Methylene chloride	**6.4 J**	12 U	10 UJ	10 UJ	5.1 U	5.1 U
m-Xylene & p-Xylene	5.8 U	6.0 U	5.1 U	5.2 U	10 U	10 U
o-Xylene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Styrene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	**0.47 J**
Tetrachloroethene	**1.1 J**	**1.7 J**	5.1 U	5.2 U	**0.99 J**	**1.8 J**
Toluene	5.8 U	6.0 U	5.1 UJ	5.2 UJ	**0.32 J**	**0.55 J**
trans-1,2-Dichloroethene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Trichloroethene	5.8 U	6.0 U	5.1 U	5.2 U	5.1 U	5.1 U
Trichlorofluoromethane	5.8 U	6.0 U	5.1 U	5.2 U	**0.29 J**	**0.35 J**
Vinyl chloride	5.8 U	6.0 U	5.1 U	5.2 U	10 U	10 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	C9-03/D-987 10/24/2007	C9-03/D-Z8 10/24/2007	DR-K-993 11/05/2007	DR-K-Z4 11/05/2007	EM-13-SO-01 11/13/2007	EM-13-SO-998 11/13/2007
Nickel by 6010B (mg/kg)						
Nickel	**1.9 J**	**2.2 J**	**2.4 J**	**1.9 J**	**231 J-**	**250 J-**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,1,2,2-Tetrachloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2 U	5.2 U	5.2 U	5.2 U	11 U	11 U
1,1,2-Trichloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,1-Dichloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,1-Dichloroethene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,2,3-Trichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,2,4-Trichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	11 U	11 U
1,2-Dibromoethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,2-Dichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,2-Dichloroethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,2-Dichloropropane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,3-Dichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,4-Dichlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
1,4-Dioxane[1]	420 U	420 U	410 U	410 U	--	--
2-Butanone	21 U	21 U	21 U	21 U	**12 J**	**12 J**
2-Hexanone	21 U	21 U	21 U	21 U	23 U	22 U
4-Methyl-2-Pentanone	21 U	21 U	21 U	21 U	23 U	22 U
Acetone	21 U	**7.1 J**	21 U	21 U	**84**	**55**
Benzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Bromochloromethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Bromodichloromethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Bromoform	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Bromomethane	10 U	10 U	10 U	10 U	11 UJ	11 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	C9-03/D-987 10/24/2007	C9-03/D-Z8 10/24/2007	DR-K-993 11/05/2007	DR-K-Z4 11/05/2007	EM-13-SO-01 11/13/2007	EM-13-SO-998 11/13/2007
Carbon disulfide	5.2 U	5.2 U	5.2 UJ	5.2 UJ	5.7 UJ	5.6 UJ
Carbon tetrachloride	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Chlorobenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Chloroethane	10 U	10 U	10 U	10 U	11 U	11 U
Chloroform	5.2 U	5.2 U	5.2 U	5.2 U	**0.92 J**	5.6 U
Chloromethane	10 U	10 U	10 U	10 U	11 U	11 U
cis-1,2-Dichloroethene	5.2 U	5.2 U	5.2 U	5.2 U	**0.57 J**	**0.88 J**
cis-1,3-Dichloropropene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Cyclohexane	10 U	10 U	10 U	10 U	5.7 U	5.6 U
Dibromochloromethane	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Dichlorodifluoromethane	10 U	10 U	10 UJ	10 UJ	11 U	11 U
Ethylbenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Isopropylbenzene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Methyl acetate	10 U	10 U	10 U	10 U	5.7 U	5.6 U
Methyl tert-butyl ether	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Methylcyclohexane	10 U	10 U	10 U	10 U	5.7 U	5.6 U
Methylene chloride	10 U	10 U	10 U	10 U	**17**	5.6 UJ
m-Xylene & p-Xylene	5.2 U	5.2 U	5.2 U	5.2 U	11 U	11 U
o-Xylene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Styrene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Tetrachloroethene	5.2 U	5.2 U	5.2 U	5.2 U	**36**	**20**
Toluene	5.2 U	5.2 U	**0.89 J**	**0.47 J**	5.7 UJ	5.6 UJ
trans-1,2-Dichloroethene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
trans-1,3-Dichloropropene	5.2 U	5.2 U	5.2 U	5.2 U	5.7 U	5.6 U
Trichloroethene	5.2 U	5.2 U	5.2 U	5.2 U	**2.0 J**	**1.8 J**
Trichlorofluoromethane	5.2 U	5.2 U	5.2 U	5.2 U	**0.61 J**	**0.37 J**
Vinyl chloride	5.2 U	5.2 U	5.2 UJ	5.2 UJ	11 U	11 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	EM-8-1000 11/14/2007	EM-8-SO-01 11/14/2007	LPH-C/D-Z2 10/18/2007	LPH-C/D-Z2-982 10/18/2007	SU08-02/D-Z5 10/22/2007	SU08-11/D-Z1 10/23/2007
Nickel by 6010B (mg/kg)						
Nickel	**56.3**	**72.2**	**6.7**	**6.6**	**1.9 J**	**3.8 J**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.4 UJ	5.4 UJ	11 U	11 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,1-Dichloroethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,1-Dichloroethene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	11 UJ	11 UJ	11 U	11 U	10 U	10 U
1,2-Dibromoethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,2-Dichlorobenzene	**0.19 J**	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,2-Dichloroethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,2-Dichloropropane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
1,4-Dioxane[1]	430 UJ	430 UJ	--	--	410 U	410 U
2-Butanone	22 UJ	22 UJ	**1.9 J**	**0.94 J**	21 U	21 U
2-Hexanone	22 UJ	22 UJ	22 UJ	22 UJ	21 U	21 U
4-Methyl-2-Pentanone	22 UJ	22 UJ	22 UJ	22 UJ	21 U	21 U
Acetone	22 UJ	22 UJ	44 UJ	43 UJ	21 U	21 U
Benzene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Bromochloromethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Bromodichloromethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Bromoform	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Bromomethane	11 UJ	11 UJ	11 U	11 U	10 U	10 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	EM-8-1000 11/14/2007	EM-8-SO-01 11/14/2007	LPH-C/D-Z2 10/18/2007	LPH-C/D-Z2-982 10/18/2007	SU08-02/D-Z5 10/22/2007	SU08-11/D-Z1 10/23/2007
Carbon disulfide	5.4 UJ	5.4 UJ	5.5 UJ	5.4 UJ	5.1 U	5.1 U
Carbon tetrachloride	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Chlorobenzene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Chloroethane	11 UJ	11 UJ	11 U	11 U	10 U	10 U
Chloroform	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Chloromethane	11 UJ	11 UJ	11 U	11 U	10 U	10 U
cis-1,2-Dichloroethene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Cyclohexane	11 UJ	11 UJ	5.5 U	5.4 U	10 U	10 U
Dibromochloromethane	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Dichlorodifluoromethane	11 UJ	11 UJ	11 U	11 U	10 U	10 U
Ethylbenzene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Isopropylbenzene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Methyl acetate	11 UJ	11 UJ	5.5 U	5.4 U	10 U	10 U
Methyl tert-butyl ether	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Methylcyclohexane	11 UJ	11 UJ	5.5 U	5.4 U	10 U	10 U
Methylene chloride	**3.9 J**	**4.2 J**	5.5 UJ	5.4 UJ	10 U	10 U
m-Xylene & p-Xylene	5.4 UJ	5.4 UJ	11 U	11 U	5.1 U	5.1 U
o-Xylene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Styrene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Tetrachloroethene	**1600 J+**	**160 J-**	**1.7 J**	**0.97 J**	5.1 U	5.1 U
Toluene	5.4 UJ	5.4 UJ	5.5 UJ	5.4 UJ	5.1 U	5.1 U
trans-1,2-Dichloroethene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.4 UJ	5.4 UJ	5.5 U	5.4 U	5.1 U	5.1 U
Trichloroethene	**3.3 J**	**2.6 J**	**0.30 J**	**0.22 J**	5.1 U	5.1 U
Trichlorofluoromethane	5.4 UJ	5.4 UJ	**0.62 J**	**0.59 J**	5.1 U	5.1 U
Vinyl chloride	5.4 UJ	5.4 UJ	11 U	11 U	5.1 U	5.1 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	SU08-984-Z1 10/22/2007	SU08-986-Z1 10/23/2007	SU11-05/D-Z8 10/29/2007	SU11-990-Z1 10/29/2007	SU12-07/D-Z6 11/01/2007	SU12-11/I-995 11/07/2007
Nickel by 6010B (mg/kg)						
Nickel	**1.9 J**	**35.8 J**	**1.4 J**	**1.5 J**	**3.1 J**	**2.8 J**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,1,2,2-Tetrachloroethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2 U	5.2 U	5.1 UJ	5.1 UJ	5.1 U	5.0 U
1,1,2-Trichloroethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,1-Dichloroethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,1-Dichloroethene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,2,3-Trichlorobenzene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,2,4-Trichlorobenzene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,2-Dichlorobenzene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,2-Dichloroethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,2-Dichloropropane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,3-Dichlorobenzene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,4-Dichlorobenzene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
1,4-Dioxane[1]	410 U	420 U	410 U	410 U	410 U	400 U
2-Butanone	21 U	21 U	20 U	20 U	20 U	20 U
2-Hexanone	21 U	21 U	20 U	20 U	20 U	20 U
4-Methyl-2-Pentanone	21 U	21 U	20 U	20 U	20 U	20 U
Acetone	21 U	21 U	20 U	20 U	20 U	**12 J**
Benzene	5.2 U	5.2 U	5.1 U	5.1 U	**0.21 J**	5.0 U
Bromochloromethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Bromodichloromethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Bromoform	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Bromomethane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	SU08-984-Z1 10/22/2007	SU08-986-Z1 10/23/2007	SU11-05/D-Z8 10/29/2007	SU11-990-Z1 10/29/2007	SU12-07/D-Z6 11/01/2007	SU12-11/I-995 11/07/2007
Carbon disulfide	5.2 U	5.2 U	5.1 UJ	5.1 UJ	5.1 U	5.0 U
Carbon tetrachloride	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Chlorobenzene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
cis-1,3-Dichloropropene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Isopropylbenzene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U	10 UJ
Methyl tert-butyl ether	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	**4.7 J**
m-Xylene & p-Xylene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
o-Xylene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Styrene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Tetrachloroethene	5.2 U	5.2 UJ	5.1 U	5.1 U	**1.3 J**	5.0 U
Toluene	5.2 U	5.2 U	5.1 UJ	5.1 UJ	**0.92 J**	5.0 U
trans-1,2-Dichloroethene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
trans-1,3-Dichloropropene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Trichloroethene	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Trichlorofluoromethane	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U
Vinyl chloride	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.0 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	SU12-11/I-Z4 11/07/2007	SU12-17/I-Z2 11/13/2007	SU12-22/D-Z7 11/14/2007	SU12-992-Z1 11/01/2007	SU12-997-Z1 11/13/2007	SU12-999-Z1 11/14/2007
Nickel by 6010B (mg/kg)						
Nickel	**3.0 J**	**3.6 J**	4 U	**2.4 J**	**4.0 J-**	4 U
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	10 U	5.1 U	5.1 U	10 U	5.1 U
1,1,2-Trichloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	**0.81 J**	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichlorobenzene	**0.33 J**	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichloropropane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
1,4-Dioxane[1]	400 U	--	410 U	410 U	--	410 U
2-Butanone	20 U	20 U	20 U	20 U	20 U	20 U
2-Hexanone	20 U	20 U	20 U	20 U	20 U	20 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	20 U	20 U	20 U
Acetone	20 UJ	41 U	20 U	20 U	41 U	20 U
Benzene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Bromochloromethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Bromodichloromethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Bromoform	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Bromomethane	10 U	10 U	10 U	10 UJ	10 U	10 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	SU12-11/I-Z4 11/07/2007	SU12-17/I-Z2 11/13/2007	SU12-22/D-Z7 11/14/2007	SU12-992-Z1 11/01/2007	SU12-997-Z1 11/13/2007	SU12-999-Z1 11/14/2007
Carbon disulfide	5.0 U	5.1 UJ	5.1 U	5.1 U	5.1 UJ	5.1 U
Carbon tetrachloride	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Chlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Cyclohexane	10 U	5.1 U	10 U	10 U	5.1 U	10 U
Dibromochloromethane	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Isopropylbenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Methyl acetate	10 UJ	5.1 U	10 UJ	10 U	5.1 U	10 UJ
Methyl tert-butyl ether	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Methylcyclohexane	10 U	5.1 U	10 U	10 U	5.1 U	10 U
Methylene chloride	10 U	**5.4**	10 UJ	10 U	**4.5 J**	10 U
m-Xylene & p-Xylene	5.0 U	10 U	5.1 U	5.1 U	10 U	5.1 U
o-Xylene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Styrene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Tetrachloroethene	5.0 U	**0.48 J**	5.1 U	**0.80 J**	**0.44 J**	5.1 U
Toluene	**0.48 J**	5.1 UJ	5.1 U	**0.48 J**	5.1 UJ	5.1 U
trans-1,2-Dichloroethene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Trichloroethene	5.0 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Trichlorofluoromethane	5.0 U	**0.40 J**	5.1 U	5.1 U	10 U	5.1 U
Vinyl chloride	5.0 U	10 U	5.1 U	5.1 U	10 U	5.1 U

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	SU13-07/D-980-Z8 10/17/2007	SU13-07/D-Z8 10/17/2007	SU14-03/D-Z8 10/25/2007	SU14-988-Z1 10/25/2007
Nickel by 6010B (mg/kg)				
Nickel	4 U	4 U	4 UJ	4 UJ
VOCs by 8260B (µg/kg)				
1,1,1-Trichloroethane	5.9 U	6.0 U	5.2 U	5.2 U
1,1,2,2-Tetrachloroethane	5.9 U	6.0 U	5.2 U	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	12 U	12 U	10 UJ	10 UJ
1,1,2-Trichloroethane	5.9 U	6.0 U	5.2 U	5.2 U
1,1-Dichloroethane	5.9 U	6.0 U	5.2 U	5.2 U
1,1-Dichloroethene	5.9 U	6.0 U	5.2 U	5.2 U
1,2,3-Trichlorobenzene	5.9 U	6.0 U	5.2 U	5.2 U
1,2,4-Trichlorobenzene	5.9 U	6.0 U	5.2 U	5.2 U
1,2-Dibromo-3-chloropropane	12 U	12 U	10 U	10 U
1,2-Dibromoethane	5.9 U	6.0 U	5.2 U	5.2 U
1,2-Dichlorobenzene	5.9 U	6.0 U	5.2 U	5.2 U
1,2-Dichloroethane	5.9 U	6.0 U	5.2 U	5.2 U
1,2-Dichloropropane	5.9 U	6.0 U	5.2 U	5.2 U
1,3-Dichlorobenzene	5.9 U	6.0 U	5.2 U	5.2 U
1,4-Dichlorobenzene	5.9 U	6.0 U	5.2 U	5.2 U
1,4-Dioxane[1]	--	--	--	--
2-Butanone	24 UJ	24 UJ	21 UJ	21 UJ
2-Hexanone	24 UJ	24 UJ	21 UJ	21 UJ
4-Methyl-2-Pentanone	24 UJ	24 UJ	21 UJ	21 UJ
Acetone	47 UJ	48 UJ	42 UJ	42 UJ
Benzene	5.9 U	6.0 U	5.2 U	5.2 U
Bromochloromethane	5.9 U	6.0 U	5.2 U	5.2 U
Bromodichloromethane	5.9 U	6.0 U	5.2 U	5.2 U
Bromoform	5.9 U	6.0 U	5.2 U	5.2 U
Bromomethane	12 U	12 U	10 U	10 UJ

Table 3.3-2a Summary of Complete Nickel and VOC Results for Field Duplicates Samples.
RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte	SU13-07/D-980-Z8 10/17/2007	SU13-07/D-Z8 10/17/2007	SU14-03/D-Z8 10/25/2007	SU14-988-Z1 10/25/2007
Carbon disulfide	5.9 UJ	6.0 UJ	5.2 UJ	5.2 UJ
Carbon tetrachloride	5.9 U	6.0 U	5.2 U	5.2 U
Chlorobenzene	5.9 U	6.0 U	5.2 U	5.2 U
Chloroethane	12 U	12 U	10 U	10 U
Chloroform	5.9 U	6.0 U	5.2 U	5.2 U
Chloromethane	12 U	12 U	10 U	10 U
cis-1,2-Dichloroethene	5.9 U	6.0 U	5.2 U	5.2 U
cis-1,3-Dichloropropene	5.9 U	6.0 U	5.2 U	5.2 U
Cyclohexane	5.9 U	6.0 U	5.2 U	5.2 U
Dibromochloromethane	5.9 U	6.0 U	5.2 U	5.2 U
Dichlorodifluoromethane	12 U	12 U	10 U	10 U
Ethylbenzene	5.9 U	6.0 U	5.2 U	5.2 U
Isopropylbenzene	5.9 U	6.0 U	5.2 U	5.2 U
Methyl acetate	5.9 U	6.0 U	5.2 U	5.2 U
Methyl tert-butyl ether	5.9 U	6.0 U	5.2 U	5.2 U
Methylcyclohexane	5.9 U	6.0 U	5.2 U	5.2 U
Methylene chloride	**0.35 J**	**0.54 J**	5.2 UJ	5.2 UJ
m-Xylene & p-Xylene	12 U	12 U	10 U	10 U
o-Xylene	5.9 U	6.0 U	5.2 U	5.2 U
Styrene	5.9 U	**0.41 J**	5.2 U	5.2 U
Tetrachloroethene	**130**	**130**	5.2 UJ	5.2 UJ
Toluene	**0.50 J**	**0.62 J**	5.2 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.9 U	6.0 U	5.2 U	5.2 U
trans-1,3-Dichloropropene	5.9 U	6.0 U	5.2 U	5.2 U
Trichloroethene	**0.45 J**	**0.50 J**	5.2 U	5.2 U
Trichlorofluoromethane	**0.51 J**	**0.67 J**	**0.64 J**	**0.74 J**
Vinyl chloride	12 U	12 U	10 U	10 U

Key for Table 3.3-2a

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z5	38-40 ft	11/08/2007	0.159 ± 0.061		0.028	0.004 ± 0.013	U	0.027	0.164 ± 0.061		0.028
100-996-Z1	38-40 ft	11/08/2007	0.173 ± 0.058		0.026	0.008 ± 0.014	UJ	0.022	0.165 ± 0.055		0.018
100-11-Z3	16-18 ft	10/30/2007	11.5 ± 1.6		0.03	0.55 ± 0.13		0.01	11.3 ± 1.6		0.03
100-11-991	16-18 ft	10/30/2007	12.3 ± 1.7		0.03	0.51 ± 0.12		0.01	11.6 ± 1.6		0.02
140-07/D-Z8	63-64 ft	11/06/2007	0.067 ± 0.034		0.020	0.006 ± 0.016	U	0.028	0.117 ± 0.046		0.020
140-994-Z1	63-64 ft	11/06/2007	0.078 ± 0.038		0.026	0.004 ± 0.011	U	0.021	0.109 ± 0.044		0.010
C3-01-Z4	28-30 ft	10/26/2007	1.15 ± 0.20		0.02	0.062 ± 0.036		0.024	1.04 ± 0.18		0.02
C3-01-989	28-30 ft	10/26/2007	1.42 ± 0.24		0.02	0.071 ± 0.039		0.013	1.33 ± 0.22		0.02
C7-01-Z4	29.5-30 ft	10/17/2007	2.45 ± 0.35		0.01	0.114 ± 0.051		0.027	2.24 ± 0.33		0.02
C7-981-Z1	29.5-30 ft	10/17/2007	2.24 ± 0.33		0.03	0.137 ± 0.056		0.014	2.11 ± 0.31		0.03
C9-03/D-Z8	60-61 ft	10/24/2007	0.68 ± 0.13		0.02	0.072 ± 0.037		0.020	0.62 ± 0.12		0.02
C9-03/D-987	60-61 ft	10/24/2007	0.89 ± 0.17		0.02	0.050 ± 0.034		0.013	0.82 ± 0.16		0.01
C10-02-Z4	28-30 ft	10/22/2007	0.148 ± 0.053		0.021	-0.001 ± 0.011	U	0.022	0.137 ± 0.051		0.027
C10-02-983	28-30 ft	10/22/2007	0.125 ± 0.044		0.015	0.012 ± 0.017	UJ	0.011	0.141 ± 0.047		0.015
DR-K-Z4	30-32 ft	11/05/2007	7.7 ± 1.0		0.02	0.375 ± 0.094		0.012	1.85 ± 0.29		0.02
DR-K-993	30-32 ft	11/05/2007	8.5 ± 1.2		0.03	0.37 ± 0.10		0.01	1.96 ± 0.32		0.02
EM-13-SO-01	3 ft	11/13/2007	63 ± 11		1	3.3 ± 1.9		1.2	62 ± 11		1
EM-13-SO-998	3 ft	11/13/2007	70 ± 10		0.4	3.8 ± 1.3		0.4	65.9 ± 9.6		0.4
EM-8-SO-01	3 ft	11/14/2007	48.4 ± 6.9		0.03	2.63 ± 0.46		0.03	48.1 ± 6.9		0.04
EM-8-1000	3 ft	11/14/2007	43.6 ± 6.0		0.04	2.67 ± 0.44		0.03	45.3 ± 6.3		0.03

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
LPH-C/D-Z2	8.0-10.0 ft	10/18/2007	0.65 ± 0.15		0.03	0.051 ± 0.041		0.036	0.68 ± 0.16		0.03
LPH-C/D-Z2-982	8.0-10.0 ft	10/18/2007	0.58 ± 0.13		0.02	0.030 ± 0.028		0.029	0.68 ± 0.14		0.02
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.081 ± 0.036		0.021	-0.0010 ± 0.009	U	0.019	0.107 ± 0.041		0.009
SU08-984-Z1	38.5-40 ft	10/22/2007	0.124 ± 0.047		0.022	0.0 ± 0.0	U	0.01	0.120 ± 0.046		0.022
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.234 ± 0.067		0.010	0.016 ± 0.020	UJ	0.025	0.305 ± 0.079		0.022
SU08-986-Z1	5.5-6.5 ft	10/23/2007	2.01 ± 0.32		0.03	0.085 ± 0.044		0.029	1.65 ± 0.27		0.02
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.098 ± 0.042		0.018	0.007 ± 0.016	UJ	0.026	0.133 ± 0.050		0.021
SU11-990-Z1	61-62.5 ft	10/29/2007	0.137 ± 0.051		0.029	-0.005 ± 0.016	U	0.036	0.121 ± 0.049		0.035
SU12-07/D-Z6	41-43 ft	11/01/2007	2.00 ± 0.31		0.02	0.075 ± 0.039		0.012	0.143 ± 0.050		0.021
SU12-992-Z1	41-43 ft	11/01/2007	2.36 ± 0.36		0.02	0.100 ± 0.046		0.012	0.146 ± 0.051	J	0.01
SU12-11/I-Z4	24-26 ft	11/07/2007	0.332 ± 0.083		0.024	0.010 ± 0.018	UJ	0.027	0.180 ± 0.058		0.028
SU12-11/I-995	24-26 ft	11/07/2007	0.329 ± 0.084		0.023	0.023 ± 0.022		0.022	0.105 ± 0.044		0.023
SU12-17/I-Z2	13-14 ft	11/13/2007	0.224 ± 0.065		0.023	0.008 ± 0.014	UJ	0.020	0.169 ± 0.054		0.016
SU12-997-Z1	13-14 ft	11/13/2007	0.198 ± 0.060		0.021	0.00335 ± 0.009	U	0.020	0.202 ± 0.060		0.019
SU12-22/D-Z7	54-55 ft	11/14/2007	0.063 ± 0.033		0.024	0.008 ± 0.013	UJ	0.020	0.073 ± 0.034		0.019
SU12-999-Z1	54-55 ft	11/14/2007	0.074 ± 0.034		0.016	-0.0011 ± 0.009	U	0.020	0.074 ± 0.034		0.016
SU13-07/D-Z8	62-64 ft	10/17/2007	0.162 ± 0.050		0.022	0.008 ± 0.014	UJ	0.021	0.116 ± 0.042		0.017
SU13-07/D-980-Z8	62-64 ft	10/17/2007	0.099 ± 0.039		0.017	0.007 ± 0.015	U	0.025	0.109 ± 0.041		0.020
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.319 ± 0.079		0.016	0.0 ± 0.0	U	0.01	0.311 ± 0.078		0.024
SU14-988-Z1	59.5-61 ft	10/25/2007	0.190 ± 0.058		0.019	0.018 ± 0.020	J	0.012	0.266 ± 0.071		0.016

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:		Thorium-228			Thorium-230			Thorium-232		
		Units:		pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z5	38-40 ft	11/08/2007	0.159	0.147 ± 0.087		0.076	0.100 ± 0.066	J	0.053	0.147 ± 0.079		0.047
100-996-Z1	38-40 ft	11/08/2007	0.173	0.1 ± 0.14	UJ	0.19	0.30 ± 0.18		0.14	0.14 ± 0.12		0.06
100-11-Z3	16-18 ft	10/30/2007	11.5	1.06 ± 0.20		0.03	0.52 ± 0.12		0.02	1.01 ± 0.19		0.02
100-11-991	16-18 ft	10/30/2007	12.3	1.07 ± 0.19		0.03	0.48 ± 0.11		0.02	0.90 ± 0.17		0.02
140-07/D-Z8	63-64 ft	11/06/2007	0.067	0.152 ± 0.055		0.031	0.120 ± 0.047		0.011	0.138 ± 0.050		0.018
140-994-Z1	63-64 ft	11/06/2007	0.078	0.109 ± 0.048	J	0.032	0.114 ± 0.049		0.030	0.094 ± 0.042		0.019
C3-01-Z4	28-30 ft	10/26/2007	1.15	0.136 ± 0.052		0.030	0.123 ± 0.049		0.025	0.102 ± 0.043		0.018
C3-01-989	28-30 ft	10/26/2007	1.42	0.144 ± 0.052		0.027	0.172 ± 0.056		0.017	0.151 ± 0.053		0.020
C7-01-Z4	29.5-30 ft	10/17/2007	2.45	0.210 ± 0.075		0.034	0.310 ± 0.093		0.034	0.203 ± 0.073		0.015
C7-981-Z1	29.5-30 ft	10/17/2007	2.24	0.119 ± 0.055		0.038	0.163 ± 0.063		0.033	0.151 ± 0.059		0.025
C9-03/D-Z8	60-61 ft	10/24/2007	0.68	0.221 ± 0.068		0.038	0.143 ± 0.050		0.017	0.166 ± 0.055		0.024
C9-03/D-987	60-61 ft	10/24/2007	0.89	0.281 ± 0.079		0.030	0.154 ± 0.054		0.011	0.265 ± 0.075		0.021
C10-02-Z4	28-30 ft	10/22/2007	0.148	0.067 ± 0.042		0.039	0.180 ± 0.064		0.021	0.100 ± 0.046		0.021
C10-02-983	28-30 ft	10/22/2007	0.125	0.095 ± 0.052		0.042	0.171 ± 0.068		0.015	0.063 ± 0.040		0.029
DR-K-Z4	30-32 ft	11/05/2007	7.7	0.22 ± 0.11		0.08	0.29 ± 0.12		0.06	0.35 ± 0.13		0.05
DR-K-993	30-32 ft	11/05/2007	8.5	0.105 ± 0.072		0.074	0.190 ± 0.083		0.041	0.083 ± 0.053		0.035
EM-13-SO-01	3 ft	11/13/2007	63	0.87 ± 0.19	J	0.04	0.93 ± 0.20	J	0.02	0.95 ± 0.20	J	0.03
EM-13-SO-998	3 ft	11/13/2007	70	0.074 ± 0.044	J	0.044	0.129 ± 0.049	J	0.021	0.140 ± 0.052	J	0.021
EM-8-SO-01	3 ft	11/14/2007	48.4	3.09 ± 0.50		0.05	0.98 ± 0.19		0.03	3.09 ± 0.50		0.02
EM-8-1000	3 ft	11/14/2007	43.6	2.47 ± 0.40		0.04	0.98 ± 0.19		0.02	2.42 ± 0.39		0.02

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
LPH-C/D-Z2	8.0-10.0 ft	10/18/2007	0.65	0.61 ± 0.15		0.04	0.44 ± 0.12		0.03	0.50 ± 0.13		0.02
LPH-C/D-Z2-982	8.0-10.0 ft	10/18/2007	0.58	0.73 ± 0.17		0.05	0.69 ± 0.16		0.02	0.62 ± 0.15		0.03
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.081	0.105 ± 0.054		0.038	0.088 ± 0.050	U	0.038	0.100 ± 0.051		0.015
SU08-984-Z1	38.5-40 ft	10/22/2007	0.124	0.145 ± 0.054		0.032	0.109 ± 0.046	U	0.028	0.101 ± 0.042		0.020
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.234	0.305 ± 0.078		0.026	0.253 ± 0.069		0.022	0.295 ± 0.075		0.015
SU08-986-Z1	5.5-6.5 ft	10/23/2007	2.01	0.307 ± 0.084		0.032	0.305 ± 0.083		0.030	0.297 ± 0.082		0.034
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.098	0.234 ± 0.071		0.030	0.227 ± 0.069		0.021	0.179 ± 0.059		0.018
SU11-990-Z1	61-62.5 ft	10/29/2007	0.137	0.202 ± 0.062		0.027	0.128 ± 0.047		0.019	0.181 ± 0.057		0.019
SU12-07/D-Z6	41-43 ft	11/01/2007	2.00	0.149 ± 0.052		0.028	0.148 ± 0.050		0.016	0.092 ± 0.039		0.022
SU12-992-Z1	41-43 ft	11/01/2007	2.36	0.086 ± 0.042	J	0.033	0.125 ± 0.047		0.017	0.112 ± 0.045		0.020
SU12-11/I-Z4	24-26 ft	11/07/2007	0.332	0.114 ± 0.052		0.045	0.161 ± 0.056		0.023	0.151 ± 0.054		0.010
SU12-11/I-995	24-26 ft	11/07/2007	0.329	0.077 ± 0.041		0.036	0.152 ± 0.053		0.020	0.152 ± 0.052		0.017
SU12-17/I-Z2	13-14 ft	11/13/2007	0.224	0.157 ± 0.055		0.038	0.228 ± 0.065		0.031	0.207 ± 0.061		0.029
SU12-997-Z1	13-14 ft	11/13/2007	0.198	0.154 ± 0.054		0.033	0.229 ± 0.065		0.027	0.148 ± 0.051		0.019
SU12-22/D-Z7	54-55 ft	11/14/2007	0.063	0.134 ± 0.053		0.032	0.144 ± 0.055		0.030	0.140 ± 0.052		0.019
SU12-999-Z1	54-55 ft	11/14/2007	0.074	0.153 ± 0.057		0.027	0.108 ± 0.048		0.031	0.102 ± 0.045		0.025
SU13-07/D-Z8	62-64 ft	10/17/2007	0.162	0.251 ± 0.085		0.040	0.261 ± 0.087	J	0.043	0.232 ± 0.081		0.041
SU13-07/D-980-Z8	62-64 ft	10/17/2007	0.099	0.176 ± 0.070		0.042	0.153 ± 0.062		0.023	0.184 ± 0.068		0.027
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.319	0.75 ± 0.15		0.03	0.306 ± 0.082		0.018	0.84 ± 0.17		0.02
SU14-988-Z1	59.5-61 ft	10/25/2007	0.190	0.61 ± 0.13		0.04	0.232 ± 0.067		0.017	0.53 ± 0.12		0.02

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]				Radium-228[2]				Actinium-228			
		Units:	pCi/g				pCi/g				pCi/g			
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC		Result	Qual	MDC	
100-06/D-Z5	38-40 ft	11/08/2007	0.159	0.106 ± 0.069	J	0.10	0.17 ± 0.12	J	0.16		0.17 ± 0.12	J	0.16	
100-996-Z1	38-40 ft	11/08/2007	0.173	0.108 ± 0.091	UJ	0.15	-0.04 ± 0.18	UJ	0.32		-- ± --	--	--	
100-11-Z3	16-18 ft	10/30/2007	11.5	0.51 ± 0.15		0.13	0.58 ± 0.19		0.30		0.58 ± 0.19		0.30	
100-11-991	16-18 ft	10/30/2007	12.3	0.18 ± 0.10	J	0.16	0.52 ± 0.18	J	0.28		0.52 ± 0.18	J	0.28	
140-07/D-Z8	63-64 ft	11/06/2007	0.067	0.024 ± 0.059	UJ	0.11	0.062 ± 0.069	UJ	0.10		-- ± --	--	--	
140-994-Z1	63-64 ft	11/06/2007	0.078	0.010 ± 0.070	UJ	0.14	0.0 ± 0.031	UJ	0.11		-- ± --	--	--	
C3-01-Z4	28-30 ft	10/26/2007	1.15	0.042 ± 0.076	UJ	0.14	0.07 ± 0.15	UJ	0.28		-- ± --	--	--	
C3-01-989	28-30 ft	10/26/2007	1.42	0.052 ± 0.069	UJ	0.12	0.06 ± 0.11	UJ	0.19		-- ± --	--	--	
C7-01-Z4	29.5-30 ft	10/17/2007	2.45	0.15 ± 0.10	UJ	0.16	0.14 ± 0.15	U	0.25		-- ± --	--	--	
C7-981-Z1	29.5-30 ft	10/17/2007	2.24	0.106 ± 0.070		0.10	0.1 ± 0.12	U	0.20		-- ± --	--	--	
C9-03/D-Z8	60-61 ft	10/24/2007	0.68	0.105 ± 0.091	UJ	0.16	0.10 ± 0.14	U	0.24		-- ± --	--	--	
C9-03/D-987	60-61 ft	10/24/2007	0.89	0.056 ± 0.088	U	0.17	0.16 ± 0.18	U	0.31		-- ± --	--	--	
C10-02-Z4	28-30 ft	10/22/2007	0.148	0.059 ± 0.085	UJ	0.15	0.07 ± 0.15	UJ	0.28		-- ± --	--	--	
C10-02-983	28-30 ft	10/22/2007	0.125	0.020 ± 0.091	U	0.18	0.13 ± 0.14	UJ	0.22		-- ± --	--	--	
DR-K-Z4	30-32 ft	11/05/2007	7.7	0.059 ± 0.085	U	0.16	0.08 ± 0.15	U	0.26		-- ± --	--	--	
DR-K-993	30-32 ft	11/05/2007	8.5	0.154 ± 0.097		0.15	0.17 ± 0.16	UJ	0.25		-- ± --	--	--	
EM-13-SO-01	3 ft	11/13/2007	63	0.66 ± 0.20		0.20	0.98 ± 0.26		0.33		0.98 ± 0.26		0.33	
EM-13-SO-998	3 ft	11/13/2007	70	0.89 ± 0.27		0.22	1.67 ± 0.33		0.11		1.67 ± 0.33		0.11	
EM-8-SO-01	3 ft	11/14/2007	48.4	0.46 ± 0.14		0.18	1.72 ± 0.28		0.36		1.72 ± 0.28		0.36	
EM-8-1000	3 ft	11/14/2007	43.6	0.73 ± 0.16		0.15	1.92 ± 0.27		0.29		1.92 ± 0.27		0.29	

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Analyte:			Radium-226[1]				Radium-228[2]				Actinium-228			
Units:			pCi/g				pCi/g				pCi/g			
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC		Result	Qual	MDC	
LPH-C/D-Z2	8.0-10.0 ft	10/18/2007	0.65	0.64 ± 0.14		0.09	0.43 ± 0.16		0.28		0.43 ± 0.16		0.28	
LPH-C/D-Z2-982	8.0-10.0 ft	10/18/2007	0.58	0.60 ± 0.13		0.06	0.44 ± 0.17		0.27		0.44 ± 0.17		0.27	
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.081	0.087 ± 0.082	UJ	0.14	-0.04 ± 0.16	UJ	0.16		-- ± --	--	--	
SU08-984-Z1	38.5-40 ft	10/22/2007	0.124	0.037 ± 0.090	U	0.17	-0.01 ± 0.15	U	0.28		-- ± --	--	--	
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.234	0.237 ± 0.096	J	0.14	0.27 ± 0.13	J	0.22		0.27 ± 0.13	J	0.22	
SU08-986-Z1	5.5-6.5 ft	10/23/2007	2.01	0.182 ± 0.088	J	0.13	0.17 ± 0.13	UJ	0.20		-- ± --	--	--	
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.098	0.111 ± 0.061	UJ	0.13	0.02 ± 0.12	UJ	0.23		-- ± --	--	--	
SU11-990-Z1	61-62.5 ft	10/29/2007	0.137	0.114 ± 0.071	UJ	0.12	0.10 ± 0.10	UJ	0.17		-- ± --	--	--	
SU12-07/D-Z6	41-43 ft	11/01/2007	2.00	0.048 ± 0.081	U	0.15	0.06 ± 0.16	U	0.29		-- ± --	--	--	
SU12-992-Z1	41-43 ft	11/01/2007	2.36	0.025 ± 0.070	U	0.14	0.009 ± 0.14	U	0.26		-- ± --	--	--	
SU12-11/I-Z4	24-26 ft	11/07/2007	0.332	0.018 ± 0.076	UJ	0.15	0.08 ± 0.13	UJ	0.23		-- ± --	--	--	
SU12-11/I-995	24-26 ft	11/07/2007	0.329	0.122 ± 0.082	UJ	0.13	0.12 ± 0.15	UJ	0.25		-- ± --	--	--	
SU12-17/I-Z2	13-14 ft	11/13/2007	0.224	0.19 ± 0.12		0.19	0.18 ± 0.19	UJ	0.31		-- ± --	--	--	
SU12-997-Z1	13-14 ft	11/13/2007	0.198	0.22 ± 0.10		0.15	0.02 ± 0.10	U	0.20		-- ± --	--	--	
SU12-22/D-Z7	54-55 ft	11/14/2007	0.063	0.159 ± 0.089		0.13	0.05 ± 0.10	U	0.19		-- ± --	--	--	
SU12-999-Z1	54-55 ft	11/14/2007	0.074	0.023 ± 0.089	U	0.17	0.14 ± 0.15	UJ	0.23		-- ± --	--	--	
SU13-07/D-Z8	62-64 ft	10/17/2007	0.162	0.12 ± 0.11	UJ	0.19	0.15 ± 0.20	U	0.34		-- ± --	--	--	
SU13-07/D-980-Z8	62-64 ft	10/17/2007	0.099	0.23 ± 0.10		0.15	0.28 ± 0.18		0.27		0.28 ± 0.18		0.27	
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.319	0.33 ± 0.13		0.19	0.61 ± 0.18		0.27		0.61 ± 0.18		0.27	
SU14-988-Z1	59.5-61 ft	10/25/2007	0.190	0.40 ± 0.13		0.16	0.57 ± 0.18		0.27		0.57 ± 0.18		0.27	

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212					Bismuth-214				Cesium-137			
		Units:	pCi/g					pCi/g				pCi/g			
Sample ID	Sample Depth	Sample Date	R	Result			Qual	MDC	Result			Qual	MDC	Result			Qual	MDC
100-06/D-Z5	38-40 ft	11/08/2007	0.159	--	±	--	--	--	0.106	±	0.069	J	0.10	--	±	--	--	--
100-996-Z1	38-40 ft	11/08/2007	0.173	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
100-11-Z3	16-18 ft	10/30/2007	11.5	--	±	--	--	--	0.51	±	0.15		0.13	--	±	--	--	--
100-11-991	16-18 ft	10/30/2007	12.3	--	±	--	--	--	0.18	±	0.10	J	0.16	--	±	--	--	--
140-07/D-Z8	63-64 ft	11/06/2007	0.067	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
140-994-Z1	63-64 ft	11/06/2007	0.078	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
C3-01-Z4	28-30 ft	10/26/2007	1.15	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
C3-01-989	28-30 ft	10/26/2007	1.42	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
C7-01-Z4	29.5-30 ft	10/17/2007	2.45	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
C7-981-Z1	29.5-30 ft	10/17/2007	2.24	--	±	--	--	--	0.106	±	0.070		0.10	--	±	--	--	--
C9-03/D-Z8	60-61 ft	10/24/2007	0.68	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
C9-03/D-987	60-61 ft	10/24/2007	0.89	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
C10-02-Z4	28-30 ft	10/22/2007	0.148	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
C10-02-983	28-30 ft	10/22/2007	0.125	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
DR-K-Z4	30-32 ft	11/05/2007	7.7	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
DR-K-993	30-32 ft	11/05/2007	8.5	--	±	--	--	--	0.154	±	0.097		0.15	--	±	--	--	--
EM-13-SO-01	3 ft	11/13/2007	63	--	±	--	--	--	0.66	±	0.20		0.20	0.171	±	0.094		0.14
EM-13-SO-998	3 ft	11/13/2007	70	--	±	--	--	--	0.89	±	0.27		0.22	0.27	±	0.10		0.14
EM-8-SO-01	3 ft	11/14/2007	48.4	1.93	±	0.56		0.36	0.46	±	0.14		0.18	--	±	--	--	--
EM-8-1000	3 ft	11/14/2007	43.6	1.70	±	0.56		0.49	0.73	±	0.16		0.15	--	±	--	--	--

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212					Bismuth-214				Cesium-137			
		Units:	pCi/g					pCi/g				pCi/g			
Sample ID	Sample Depth	Sample Date	R	Result			Qual	MDC	Result			Qual	MDC	Result			Qual	MDC
LPH-C/D-Z2	8.0-10.0 ft	10/18/2007	0.65	--	±	--	--	--	0.64	±	0.14		0.09	--	±	--	--	--
LPH-C/D-Z2-982	8.0-10.0 ft	10/18/2007	0.58	--	±	--	--	--	0.60	±	0.13		0.06	--	±	--	--	--
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.081	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU08-984-Z1	38.5-40 ft	10/22/2007	0.124	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.234	--	±	--	--	--	0.237	±	0.096	J	0.14	--	±	--	--	--
SU08-986-Z1	5.5-6.5 ft	10/23/2007	2.01	--	±	--	--	--	0.182	±	0.088	J	0.13	--	±	--	--	--
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.098	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU11-990-Z1	61-62.5 ft	10/29/2007	0.137	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU12-07/D-Z6	41-43 ft	11/01/2007	2.00	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU12-992-Z1	41-43 ft	11/01/2007	2.36	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU12-11/I-Z4	24-26 ft	11/07/2007	0.332	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU12-11/I-995	24-26 ft	11/07/2007	0.329	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU12-17/I-Z2	13-14 ft	11/13/2007	0.224	--	±	--	--	--	0.19	±	0.12		0.19	--	±	--	--	--
SU12-997-Z1	13-14 ft	11/13/2007	0.198	--	±	--	--	--	0.22	±	0.10		0.15	--	±	--	--	--
SU12-22/D-Z7	54-55 ft	11/14/2007	0.063	--	±	--	--	--	0.159	±	0.089		0.13	--	±	--	--	--
SU12-999-Z1	54-55 ft	11/14/2007	0.074	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU13-07/D-Z8	62-64 ft	10/17/2007	0.162	--	±	--	--	--	--	±	--	--	--	--	±	--	--	--
SU13-07/D-980-Z8	62-64 ft	10/17/2007	0.099	--	±	--	--	--	0.23	±	0.10		0.15	--	±	--	--	--
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.319	--	±	--	--	--	0.33	±	0.13		0.19	--	±	--	--	--
SU14-988-Z1	59.5-61 ft	10/25/2007	0.190	--	±	--	--	--	0.40	±	0.13		0.16	--	±	--	--	--

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:		Potassium-40			Lead 210			Protactinium-234m		
		Units:		pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z5	38-40 ft	11/08/2007	0.159	3.03 ± 0.83	J	0.70	-- ± --	--	--	-- ± --	--	--
100-996-Z1	38-40 ft	11/08/2007	0.173	2.93 ± 0.86	J	0.43	-- ± --	--	--	-- ± --	--	--
100-11-Z3	16-18 ft	10/30/2007	11.5	6.6 ± 1.4		0.8	-- ± --	--	--	-- ± --	--	--
100-11-991	16-18 ft	10/30/2007	12.3	5.2 ± 1.1	J	0.6	-- ± --	--	--	-- ± --	--	--
140-07/D-Z8	63-64 ft	11/06/2007	0.067	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
140-994-Z1	63-64 ft	11/06/2007	0.078	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C3-01-Z4	28-30 ft	10/26/2007	1.15	2.52 ± 0.83	J	0.60	-- ± --	--	--	-- ± --	--	--
C3-01-989	28-30 ft	10/26/2007	1.42	3.29 ± 0.88	J	0.82	-- ± --	--	--	-- ± --	--	--
C7-01-Z4	29.5-30 ft	10/17/2007	2.45	1.87 ± 0.74		0.70	-- ± --	--	--	-- ± --	--	--
C7-981-Z1	29.5-30 ft	10/17/2007	2.24	1.84 ± 0.72		0.85	-- ± --	--	--	-- ± --	--	--
C9-03/D-Z8	60-61 ft	10/24/2007	0.68	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C9-03/D-987	60-61 ft	10/24/2007	0.89	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C10-02-Z4	28-30 ft	10/22/2007	0.148	2.85 ± 0.85	J	0.46	-- ± --	--	--	-- ± --	--	--
C10-02-983	28-30 ft	10/22/2007	0.125	2.46 ± 0.85		0.79	-- ± --	--	--	-- ± --	--	--
DR-K-Z4	30-32 ft	11/05/2007	7.7	3.7 ± 1.3		1.3	-- ± --	--	--	-- ± --	--	--
DR-K-993	30-32 ft	11/05/2007	8.5	2.84 ± 0.92		1.1	-- ± --	--	--	-- ± --	--	--
EM-13-SO-01	3 ft	11/13/2007	63	5.9 ± 1.5		1.2	-- ± --	--	--	64 ± 16	J	15
EM-13-SO-998	3 ft	11/13/2007	70	7.4 ± 1.5		1.2	-- ± --	--	--	53 ± 13	J	13
EM-8-SO-01	3 ft	11/14/2007	48.4	10.7 ± 1.6	J	0.4	-- ± --	--	--	-- ± --	--	--
EM-8-1000	3 ft	11/14/2007	43.6	6.2 ± 1.2	J	1.2	-- ± --	--	--	28.2 ± 9.2		10

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40				Lead 210				Protactinium-234m			
		Units:	pCi/g				pCi/g				pCi/g			
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC		Result	Qual	MDC	
LPH-C/D-Z2	8.0-10.0 ft	10/18/2007	0.65	7.3 ± 1.4		1.1	-- ± --	--	--		-- ± --	--	--	
LPH-C/D-Z2-982	8.0-10.0 ft	10/18/2007	0.58	8.1 ± 1.5		1.2	-- ± --	--	--		-- ± --	--	--	
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.081	1.22 ± 0.73		0.99	-- ± --	--	--		-- ± --	--	--	
SU08-984-Z1	38.5-40 ft	10/22/2007	0.124	1.51 ± 0.69		0.74	-- ± --	--	--		-- ± --	--	--	
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.234	7.0 ± 1.1	J	0.5	-- ± --	--	--		-- ± --	--	--	
SU08-986-Z1	5.5-6.5 ft	10/23/2007	2.01	8.0 ± 1.2	J	0.7	2.0 ± 1.2	J	1.6		-- ± --	--	--	
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.098	1.06 ± 0.51	J	0.54	-- ± --	--	--		-- ± --	--	--	
SU11-990-Z1	61-62.5 ft	10/29/2007	0.137	-- ± --	--	--	-- ± --	--	--		-- ± --	--	--	
SU12-07/D-Z6	41-43 ft	11/01/2007	2.00	3.9 ± 1.1		0.7	-- ± --	--	--		-- ± --	--	--	
SU12-992-Z1	41-43 ft	11/01/2007	2.36	1.84 ± 0.62		0.65	-- ± --	--	--		-- ± --	--	--	
SU12-11/I-Z4	24-26 ft	11/07/2007	0.332	2.47 ± 0.79	J	0.55	-- ± --	--	--		-- ± --	--	--	
SU12-11/I-995	24-26 ft	11/07/2007	0.329	2.86 ± 0.84	J	0.46	-- ± --	--	--		-- ± --	--	--	
SU12-17/I-Z2	13-14 ft	11/13/2007	0.224	6.8 ± 1.3		0.5	-- ± --	--	--		-- ± --	--	--	
SU12-997-Z1	13-14 ft	11/13/2007	0.198	6.2 ± 1.1		0.8	-- ± --	--	--		-- ± --	--	--	
SU12-22/D-Z7	54-55 ft	11/14/2007	0.063	-- ± --	--	--	-- ± --	--	--		-- ± --	--	--	
SU12-999-Z1	54-55 ft	11/14/2007	0.074	-- ± --	--	--	-- ± --	--	--		-- ± --	--	--	
SU13-07/D-Z8	62-64 ft	10/17/2007	0.162	0.73 ± 0.65	UJ	1.0	-- ± --	--	--		-- ± --	--	--	
SU13-07/D-980-Z8	62-64 ft	10/17/2007	0.099	-- ± --	--	--	-- ± --	--	--		-- ± --	--	--	
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.319	-- ± --	--	--	-- ± --	--	--		-- ± --	--	--	
SU14-988-Z1	59.5-61 ft	10/25/2007	0.190	2.21 ± 0.86		0.93	-- ± --	--	--		-- ± --	--	--	

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212				Lead-214			
		Units:	pCi/g				pCi/g			
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z5	38-40 ft	11/08/2007	0.159	0.161 ± 0.077	J	0.075	-- ± --	--	--
100-996-Z1	38-40 ft	11/08/2007	0.173	0.199 ± 0.065	J	0.065	0.152 ± 0.081	J	0.13
100-11-Z3	16-18 ft	10/30/2007	11.5	0.56 ± 0.12		0.11	0.31 ± 0.10		0.15
100-11-991	16-18 ft	10/30/2007	12.3	0.73 ± 0.15	J	0.12	0.289 ± 0.084	J	0.11
140-07/D-Z8	63-64 ft	11/06/2007	0.067	-- ± --	--	--	-- ± --	--	--
140-994-Z1	63-64 ft	11/06/2007	0.078	0.061 ± 0.037	J	0.058	-- ± --	--	--
C3-01-Z4	28-30 ft	10/26/2007	1.15	0.107 ± 0.067	UJ	0.11	0.145 ± 0.080	J	0.12
C3-01-989	28-30 ft	10/26/2007	1.42	0.104 ± 0.052	J	0.060	0.137 ± 0.059	J	0.075
C7-01-Z4	29.5-30 ft	10/17/2007	2.45	0.27 ± 0.10		0.1	0.146 ± 0.078		0.11
C7-981-Z1	29.5-30 ft	10/17/2007	2.24	0.26 ± 0.10		0.09	0.096 ± 0.054		0.075
C9-03/D-Z8	60-61 ft	10/24/2007	0.68	0.40 ± 0.11		0.11	-- ± --	--	--
C9-03/D-987	60-61 ft	10/24/2007	0.89	0.206 ± 0.079		0.091	-- ± --	--	--
C10-02-Z4	28-30 ft	10/22/2007	0.148	0.192 ± 0.080	J	0.086	-- ± --	--	--
C10-02-983	28-30 ft	10/22/2007	0.125	0.130 ± 0.068		0.076	-- ± --	--	--
DR-K-Z4	30-32 ft	11/05/2007	7.7	0.26 ± 0.11		0.11	0.19 ± 0.10		0.15
DR-K-993	30-32 ft	11/05/2007	8.5	0.47 ± 0.12		0.11	0.266 ± 0.093		0.14
EM-13-SO-01	3 ft	11/13/2007	63	1.44 ± 0.29		0.23	0.61 ± 0.16		0.24
EM-13-SO-998	3 ft	11/13/2007	70	1.51 ± 0.22		0.17	0.83 ± 0.21		0.17
EM-8-SO-01	3 ft	11/14/2007	48.4	2.20 ± 0.26		0.16	0.56 ± 0.13		0.17
EM-8-1000	3 ft	11/14/2007	43.6	2.50 ± 0.34		0.24	0.58 ± 0.14		0.20

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212				Lead-214			
		Units:	pCi/g				pCi/g			
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC
LPH-C/D-Z2	8.0-10.0 ft	10/18/2007	0.65	0.62 ± 0.12		0.10	0.45 ± 0.11		0.13
LPH-C/D-Z2-982	8.0-10.0 ft	10/18/2007	0.58	0.477 ± 0.099		0.11	0.53 ± 0.12		0.13
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.081	0.18 ± 0.10		0.11	-- ± --	--	--
SU08-984-Z1	38.5-40 ft	10/22/2007	0.124	0.092 ± 0.056		0.084	-- ± --	--	--
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.234	0.44 ± 0.14	J	0.12	0.283 ± 0.084	J	0.11
SU08-986-Z1	5.5-6.5 ft	10/23/2007	2.01	0.280 ± 0.081	J	0.093	0.219 ± 0.080	J	0.12
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.098	0.177 ± 0.058	J	0.060	0.210 ± 0.083	J	0.10
SU11-990-Z1	61-62.5 ft	10/29/2007	0.137	0.107 ± 0.051	J	0.075	0.133 ± 0.069	J	0.11
SU12-07/D-Z6	41-43 ft	11/01/2007	2.00	0.224 ± 0.082		0.087	-- ± --	--	--
SU12-992-Z1	41-43 ft	11/01/2007	2.36	0.289 ± 0.091		0.091	0.131 ± 0.056		0.10
SU12-11/I-Z4	24-26 ft	11/07/2007	0.332	0.103 ± 0.060	J	0.078	-- ± --	--	--
SU12-11/I-995	24-26 ft	11/07/2007	0.329	0.170 ± 0.057	J	0.058	-- ± --	--	--
SU12-17/I-Z2	13-14 ft	11/13/2007	0.224	0.31 ± 0.13		0.13	0.184 ± 0.088		0.14
SU12-997-Z1	13-14 ft	11/13/2007	0.198	0.201 ± 0.083		0.13	0.235 ± 0.083		0.14
SU12-22/D-Z7	54-55 ft	11/14/2007	0.063	0.274 ± 0.096		0.096	-- ± --	--	--
SU12-999-Z1	54-55 ft	11/14/2007	0.074	0.159 ± 0.059		0.070	-- ± --	--	--
SU13-07/D-Z8	62-64 ft	10/17/2007	0.162	0.337 ± 0.099		0.097	0.153 ± 0.099		0.15
SU13-07/D-980-Z8	62-64 ft	10/17/2007	0.099	0.38 ± 0.10		0.11	0.175 ± 0.075		0.14
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.319	0.92 ± 0.17		0.14	0.48 ± 0.13		0.18
SU14-988-Z1	59.5-61 ft	10/25/2007	0.190	0.67 ± 0.12		0.10	0.42 ± 0.12		0.13

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:		Thallium-208				Thorium-234				
		Units:		pCi/g				pCi/g				
Sample ID	Sample Depth	Sample Date	R	Result			Qual	MDC	Result			Qual	MDC
100-06/D-Z5	38-40 ft	11/08/2007	0.159	--	±	--	--	--	--	±	--	--	--
100-996-Z1	38-40 ft	11/08/2007	0.173	--	±	--	--	--	--	±	--	--	--
100-11-Z3	16-18 ft	10/30/2007	11.5	0.319	±	0.083		0.061	6.8	±	1.6		1.7
100-11-991	16-18 ft	10/30/2007	12.3	0.252	±	0.080	J	0.064	6.6	±	1.1	J	1.5
140-07/D-Z8	63-64 ft	11/06/2007	0.067	--	±	--	--	--	--	±	--	--	--
140-994-Z1	63-64 ft	11/06/2007	0.078	--	±	--	--	--	--	±	--	--	--
C3-01-Z4	28-30 ft	10/26/2007	1.15	--	±	--	--	--	1.21	±	0.44	J	0.78
C3-01-989	28-30 ft	10/26/2007	1.42	--	±	--	--	--	1.04	±	0.38	J	0.69
C7-01-Z4	29.5-30 ft	10/17/2007	2.45	--	±	--	--	--	1.65	±	0.58		0.96
C7-981-Z1	29.5-30 ft	10/17/2007	2.24	--	±	--	--	--	1.60	±	0.53		0.98
C9-03/D-Z8	60-61 ft	10/24/2007	0.68	0.079	±	0.041		0.057	--	±	--	--	--
C9-03/D-987	60-61 ft	10/24/2007	0.89	--	±	--	--	--	--	±	--	--	--
C10-02-Z4	28-30 ft	10/22/2007	0.148	--	±	--	--	--	--	±	--	--	--
C10-02-983	28-30 ft	10/22/2007	0.125	--	±	--	--	--	--	±	--	--	--
DR-K-Z4	30-32 ft	11/05/2007	7.7	--	±	--	--	--	--	±	--	--	--
DR-K-993	30-32 ft	11/05/2007	8.5	--	±	--	--	--	2.61	±	0.74		1.3
EM-13-SO-01	3 ft	11/13/2007	63	0.44	±	0.12		0.14	45.2	±	4.2		4.2
EM-13-SO-998	3 ft	11/13/2007	70	0.59	±	0.13		0.09	46.2	±	4.0		3.5
EM-8-SO-01	3 ft	11/14/2007	48.4	0.72	±	0.11		0.06	27.9	±	3.6		2.6
EM-8-1000	3 ft	11/14/2007	43.6	0.76	±	0.13		0.09	26.1	±	2.6		3.2

Table 3.3-2b Summary of Complete Results for Radiological Field Duplicates Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thallium-208				Thorium-234			
		Units:	pCi/g				pCi/g			
Sample ID	Sample Depth	Sample Date	R	Result	Qual	MDC	Result	Qual	MDC
LPH-C/D-Z2	8.0-10.0 ft	10/18/2007	0.65	0.170 ± 0.068		0.092	-- ± --	--	--
LPH-C/D-Z2-982	8.0-10.0 ft	10/18/2007	0.58	0.153 ± 0.067		0.093	-- ± --	--	--
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.081	-- ± --	--	--	-- ± --	--	--
SU08-984-Z1	38.5-40 ft	10/22/2007	0.124	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.234	0.168 ± 0.043	J	0.042	-- ± --	--	--
SU08-986-Z1	5.5-6.5 ft	10/23/2007	2.01	-- ± --	--	--	1.15 ± 0.49	J	0.97
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.098	-- ± --	--	--	-- ± --	--	--
SU11-990-Z1	61-62.5 ft	10/29/2007	0.137	-- ± --	--	--	1.14 ± 0.72	J	0.89
SU12-07/D-Z6	41-43 ft	11/01/2007	2.00	-- ± --	--	--	-- ± --	--	--
SU12-992-Z1	41-43 ft	11/01/2007	2.36	-- ± --	--	--	-- ± --	--	--
SU12-11/I-Z4	24-26 ft	11/07/2007	0.332	-- ± --	--	--	-- ± --	--	--
SU12-11/I-995	24-26 ft	11/07/2007	0.329	-- ± --	--	--	-- ± --	--	--
SU12-17/I-Z2	13-14 ft	11/13/2007	0.224	0.108 ± 0.055		0.075	-- ± --	--	--
SU12-997-Z1	13-14 ft	11/13/2007	0.198	-- ± --	--	--	1.14 ± 0.72		1.0
SU12-22/D-Z7	54-55 ft	11/14/2007	0.063	-- ± --	--	--	-- ± --	--	--
SU12-999-Z1	54-55 ft	11/14/2007	0.074	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z8	62-64 ft	10/17/2007	0.162	0.164 ± 0.055		0.046	-- ± --	--	--
SU13-07/D-980-Z8	62-64 ft	10/17/2007	0.099	0.126 ± 0.050		0.060	-- ± --	--	--
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.319	0.177 ± 0.072		0.10	-- ± --	--	--
SU14-988-Z1	59.5-61 ft	10/25/2007	0.190	0.350 ± 0.084		0.061	-- ± --	--	--

Key for Table 3.3-2b

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	140-07/D-Z1	140-07/D-Z2	140-07/D-Z3	140-07/D-Z4
Sample Depth:	2-3 ft	9-10 ft	22-23 ft	30-31 ft
Sample Date:	11/05/2007	11/05/2007	11/05/2007	11/05/2007
Analyte				
Nickel by 6010B (mg/kg)				
Nickel	**3.7 J**	**5.8**	4 U	**2.6 J**
VOCs by 8260B (µg/kg)				
1,1,1-Trichloroethane	5.3 U	5.2 UJ	5.1 U	5.2 U
1,1,2,2-Tetrachloroethane	5.3 U	5.2 UJ	5.1 U	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.3 U	5.2 UJ	5.1 U	5.2 U
1,1,2-Trichloroethane	5.3 U	5.2 UJ	5.1 U	5.2 U
1,1-Dichloroethane	5.3 U	5.2 UJ	5.1 U	5.2 U
1,1-Dichloroethene	5.3 U	5.2 UJ	5.1 U	5.2 U
1,2,3-Trichlorobenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
1,2,3-Trichlorobenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
1,2,4-Trichlorobenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
1,2-Dibromo-3-chloropropane	11 U	10 UJ	10 U	10 U
1,2-Dibromoethane	5.3 U	5.2 UJ	5.1 U	5.2 U
1,2-Dichlorobenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
1,2-Dichloroethane	5.3 U	5.2 UJ	5.1 U	5.2 U
1,2-Dichloropropane	5.3 U	5.2 UJ	5.1 U	5.2 U
1,3-Dichlorobenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
1,4-Dichlorobenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
1,4-Dioxane	430 U	410 UJ	410 U	410 U
2-Butanone	21 U	21 UJ	20 U	21 U
2-Hexanone	21 U	21 UJ	20 U	21 U
4-Methyl-2-Pentanone	21 U	21 UJ	20 U	21 U
Acetone	21 U	21 UJ	20 U	21 U
Benzene	5.3 U	5.2 UJ	5.1 U	5.2 U
Bromochloromethane	5.3 U	5.2 UJ	5.1 U	5.2 U
Bromodichloromethane	5.3 U	5.2 UJ	5.1 U	5.2 U
Bromoform	5.3 U	5.2 UJ	5.1 U	5.2 U
Bromomethane	11 U	10 UJ	10 U	10 U

Table 3.3-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	140-07/D-Z1	140-07/D-Z2	140-07/D-Z3	140-07/D-Z4
Sample Depth:	2-3 ft	9-10 ft	22-23 ft	30-31 ft
Sample Date:	11/05/2007	11/05/2007	11/05/2007	11/05/2007
Analyte				
Carbon disulfide	5.3 UJ	5.2 UJ	5.1 UJ	5.2 UJ
Carbon tetrachloride	5.3 U	5.2 UJ	5.1 U	5.2 U
Chlorobenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
Chloroethane	11 U	10 UJ	10 U	10 U
Chloroform	5.3 U	5.2 UJ	5.1 U	5.2 U
Chloromethane	11 U	10 UJ	10 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.2 UJ	5.1 U	5.2 U
cis-1,3-Dichloropropene	5.3 U	5.2 UJ	5.1 U	5.2 U
Cyclohexane	11 U	10 UJ	10 U	10 U
Dibromochloromethane	5.3 U	5.2 UJ	5.1 U	5.2 U
Dichlorodifluoromethane	11 UJ	10 UJ	10 UJ	10 UJ
Ethylbenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
Isopropylbenzene	5.3 U	5.2 UJ	5.1 U	5.2 U
Methyl acetate	11 U	10 UJ	10 U	10 U
Methyl tert-butyl ether	5.3 U	5.2 UJ	5.1 U	5.2 U
Methylcyclohexane	11 U	10 UJ	10 U	10 U
Methylene chloride	11 U	10 UJ	10 U	10 U
m-Xylene & p-Xylene	5.3 U	5.2 UJ	5.1 U	5.2 U
o-Xylene	5.3 U	5.2 UJ	5.1 U	5.2 U
Styrene	5.3 U	5.2 UJ	5.1 U	5.2 U
Tetrachloroethene	**2.7 J**	**1.8 J**	5.1 U	5.2 U
Toluene	**0.38 J**	5.2 UJ	5.1 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.3 U	5.2 UJ	5.1 U	5.2 U
trans-1,3-Dichloropropene	5.3 U	5.2 UJ	5.1 U	5.2 U
Trichloroethene	5.3 U	5.2 UJ	5.1 U	5.2 U
Trichlorofluoromethane	5.3 U	5.2 UJ	5.1 U	5.2 U
Vinyl chloride	5.3 UJ	5.2 UJ	5.1 UJ	5.2 UJ

Table 3.3-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	140-07/D-Z5	140-07/D-Z6	140-07/D-Z7	140-07/D-Z8
Sample Depth:	38-39 ft	43-44 ft	55-56 ft	63-64 ft
Sample Date:	11/05/2007	11/06/2007	11/06/2007	11/06/2007
Analyte				
Nickel by 6010B (mg/kg)				
Nickel	4 U	4 U	4 U	**1.2 J**
VOCs by 8260B (µg/kg)				
1,1,1-Trichloroethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,1,2,2-Tetrachloroethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,1,2-Trichloroethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,1-Dichloroethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,1-Dichloroethene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,2,3-Trichlorobenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,2,3-Trichlorobenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,2,4-Trichlorobenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,2-Dibromo-3-chloropropane	10 U	10 UJ	10 U	10 UJ
1,2-Dibromoethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,2-Dichlorobenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,2-Dichloroethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,2-Dichloropropane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,3-Dichlorobenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,4-Dichlorobenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
1,4-Dioxane	410 U	410 UJ	410 U	410 UJ
2-Butanone	21 U	21 UJ	21 U	20 UJ
2-Hexanone	21 U	21 UJ	21 U	20 UJ
4-Methyl-2-Pentanone	21 U	21 UJ	21 U	20 UJ
Acetone	21 U	**11 J**	**7.7 J**	20 UJ
Benzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Bromochloromethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Bromodichloromethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Bromoform	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Bromomethane	10 U	10 UJ	10 U	10 UJ

Table 3.3-3a Complete Nickel and VOC Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	140-07/D-Z5	140-07/D-Z6	140-07/D-Z7	140-07/D-Z8
Sample Depth:	38-39 ft	43-44 ft	55-56 ft	63-64 ft
Sample Date:	11/05/2007	11/06/2007	11/06/2007	11/06/2007
Analyte				
Carbon disulfide	5.2 UJ	5.2 UJ	5.1 U	5.1 UJ
Carbon tetrachloride	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Chlorobenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Chloroethane	10 U	10 UJ	10 U	10 UJ
Chloroform	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Chloromethane	10 U	10 UJ	10 U	10 UJ
cis-1,2-Dichloroethene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
cis-1,3-Dichloropropene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Cyclohexane	10 U	10 UJ	10 U	10 UJ
Dibromochloromethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Dichlorodifluoromethane	10 UJ	10 UJ	10 U	10 UJ
Ethylbenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Isopropylbenzene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Methyl acetate	10 U	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Methylcyclohexane	10 U	10 UJ	10 U	10 UJ
Methylene chloride	10 U	10 UJ	10 U	**2.8 J**
m-Xylene & p-Xylene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
o-Xylene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Styrene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Tetrachloroethene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Toluene	5.2 UJ	**0.42 J**	**0.51 J**	**0.50 J**
trans-1,2-Dichloroethene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
trans-1,3-Dichloropropene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Trichloroethene	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Trichlorofluoromethane	5.2 U	5.2 UJ	5.1 U	5.1 UJ
Vinyl chloride	5.2 UJ	5.2 UJ	5.1 U	5.1 UJ

Key for Table 3.3-3a

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	100-06/D-Z1 2-4 ft 11/07/2007	100-06/D-Z2 13-14 ft 11/07/2007	100-06/D-Z3 18-19 ft 11/07/2007	100-06/D-Z4 31-32 ft 11/07/2007
Nickel by 6010B (mg/kg)				
Nickel	**11.2**	**4.7**	**3.1 J**	**2.4 J**
VOCs by 8260B (µg/kg)				
1,1,1-Trichloroethane	5.3 U	5.1 U	5.1 UJ	5.1 U
1,1,2,2-Tetrachloroethane	5.3 U	5.1 U	5.1 UJ	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.3 U	5.1 U	5.1 UJ	5.1 U
1,1,2-Trichloroethane	5.3 U	5.1 U	5.1 UJ	5.1 U
1,1-Dichloroethane	5.3 U	5.1 U	5.1 UJ	5.1 U
1,1-Dichloroethene	5.3 U	5.1 U	5.1 UJ	5.1 U
1,2,3-Trichlorobenzene	5.3 U	5.1 U	5.1 UJ	5.1 U
1,2,4-Trichlorobenzene	5.3 U	5.1 U	5.1 UJ	5.1 U
1,2-Dibromo-3-chloropropane	11 U	10 U	10 UJ	10 U
1,2-Dibromoethane	5.3 U	5.1 U	5.1 UJ	5.1 U
1,2-Dichlorobenzene	5.3 U	5.1 U	5.1 UJ	5.1 U
1,2-Dichloroethane	5.3 U	5.1 U	5.1 UJ	5.1 U
1,2-Dichloropropane	5.3 U	5.1 U	5.1 UJ	5.1 U
1,3-Dichlorobenzene	5.3 U	5.1 U	5.1 UJ	5.1 U
1,4-Dichlorobenzene	5.3 U	5.1 U	5.1 UJ	5.1 U
1,4-Dioxane[1]	430 U	400 U	400 UJ	410 U
2-Butanone	21 U	20 U	20 UJ	20 U
2-Hexanone	21 U	20 U	20 UJ	20 U
4-Methyl-2-Pentanone	21 U	20 U	20 UJ	20 U
Acetone	21 U	20 U	**8.8 J**	20 U
Benzene	5.3 U	5.1 U	5.1 UJ	5.1 U
Bromochloromethane	5.3 U	5.1 U	5.1 UJ	5.1 U
Bromodichloromethane	5.3 U	5.1 U	5.1 UJ	5.1 U
Bromoform	5.3 U	5.1 U	5.1 UJ	5.1 U
Bromomethane	11 U	10 U	10 UJ	10 U

Table 3.3-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	100-06/D-Z1 2-4 ft 11/07/2007	100-06/D-Z2 13-14 ft 11/07/2007	100-06/D-Z3 18-19 ft 11/07/2007	100-06/D-Z4 31-32 ft 11/07/2007
Carbon disulfide	5.3 U	5.1 U	5.1 UJ	**0.76 J**
Carbon tetrachloride	5.3 U	5.1 U	5.1 UJ	5.1 U
Chlorobenzene	5.3 U	5.1 U	5.1 UJ	5.1 U
Chloroethane	11 U	10 U	10 UJ	10 U
Chloroform	5.3 U	5.1 U	5.1 UJ	5.1 U
Chloromethane	11 U	10 U	10 UJ	10 U
cis-1,2-Dichloroethene	5.3 U	5.1 U	5.1 UJ	5.1 U
cis-1,3-Dichloropropene	5.3 U	5.1 U	5.1 UJ	5.1 U
Cyclohexane	11 U	10 U	10 UJ	10 U
Dibromochloromethane	5.3 U	5.1 U	5.1 UJ	5.1 U
Dichlorodifluoromethane	11 U	10 U	10 UJ	10 U
Ethylbenzene	5.3 U	5.1 U	5.1 UJ	5.1 U
Isopropylbenzene	5.3 U	5.1 U	5.1 UJ	5.1 U
Methyl acetate	11 UJ	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	5.3 U	5.1 U	5.1 UJ	5.1 U
Methylcyclohexane	11 U	10 U	10 UJ	10 U
Methylene chloride	11 U	10 U	**2.9 J**	10 U
m-Xylene & p-Xylene	5.3 U	5.1 U	5.1 UJ	5.1 U
o-Xylene	5.3 U	5.1 U	5.1 UJ	5.1 U
Styrene	5.3 U	5.1 U	5.1 UJ	5.1 U
Tetrachloroethene	**4000**	**0.97 J**	**9.9 J-**	**1.7 J**
Toluene	5.3 U	**0.49 J**	5.1 UJ	**0.36 J**
trans-1,2-Dichloroethene	5.3 U	5.1 U	5.1 UJ	5.1 U
trans-1,3-Dichloropropene	5.3 U	5.1 U	5.1 UJ	5.1 U
Trichloroethene	**4.7 J**	5.1 U	5.1 UJ	5.1 U
Trichlorofluoromethane	5.3 U	5.1 U	5.1 UJ	5.1 U
Vinyl chloride	5.3 U	5.1 U	5.1 UJ	5.1 U

Table 3.3-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	100-06/D-Z5 38-40 ft 11/08/2007	100-06/D-Z6 47-48 ft 11/08/2007	100-06/D-Z7 51-52 ft 11/08/2007	100-11-Z3 16-18 ft 10/30/2007
Nickel by 6010B (mg/kg)				
Nickel	**1.8 J**	**1.6 J**	**7.7**	**41.3**
VOCs by 8260B (µg/kg)				
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 UJ	7.7 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 UJ	7.7 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.1 U	5.1 UJ	15 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 UJ	7.7 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 UJ	7.7 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 UJ	7.7 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 UJ	7.7 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 UJ	7.7 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 UJ	15 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 UJ	7.7 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 UJ	7.7 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 UJ	7.7 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 UJ	7.7 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 UJ	7.7 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 UJ	7.7 U
1,4-Dioxane[1]	410 U	410 U	410 UJ	--
2-Butanone	20 U	20 U	21 UJ	31 UJ
2-Hexanone	20 U	20 U	21 UJ	31 U
4-Methyl-2-Pentanone	20 U	20 U	21 UJ	31 U
Acetone	**7.6 J**	20 U	21 UJ	**24 J**
Benzene	5.1 U	5.1 U	5.1 UJ	**0.41 J**
Bromochloromethane	5.1 U	5.1 U	5.1 UJ	7.7 U
Bromodichloromethane	5.1 U	5.1 U	5.1 UJ	7.7 U
Bromoform	5.1 U	5.1 U	5.1 UJ	7.7 U
Bromomethane	10 U	10 U	10 UJ	15 U

Table 3.3-3b Complete Nickel and VOC Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	100-06/D-Z5 38-40 ft 11/08/2007	100-06/D-Z6 47-48 ft 11/08/2007	100-06/D-Z7 51-52 ft 11/08/2007	100-11-Z3 16-18 ft 10/30/2007
Carbon disulfide	5.1 U	5.1 U	5.1 UJ	7.7 UJ
Carbon tetrachloride	5.1 U	5.1 U	5.1 UJ	7.7 U
Chlorobenzene	5.1 U	5.1 U	5.1 UJ	7.7 U
Chloroethane	10 U	10 U	10 UJ	15 U
Chloroform	5.1 U	5.1 U	5.1 UJ	7.7 U
Chloromethane	10 U	10 U	10 UJ	15 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 UJ	**0.66 J**
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 UJ	7.7 U
Cyclohexane	10 U	10 U	10 UJ	7.7 U
Dibromochloromethane	5.1 U	5.1 U	5.1 UJ	7.7 U
Dichlorodifluoromethane	10 U	10 U	10 UJ	15 U
Ethylbenzene	5.1 U	5.1 U	5.1 UJ	7.7 U
Isopropylbenzene	5.1 U	5.1 U	5.1 UJ	7.7 U
Methyl acetate	10 UJ	10 UJ	10 UJ	7.7 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 UJ	7.7 U
Methylcyclohexane	10 U	10 U	10 UJ	7.7 U
Methylene chloride	**4.8 J**	10 U	10 UJ	**6.6 J**
m-Xylene & p-Xylene	5.1 U	5.1 U	5.1 UJ	15 U
o-Xylene	5.1 U	5.1 U	5.1 UJ	7.7 U
Styrene	5.1 U	5.1 U	5.1 UJ	7.7 U
Tetrachloroethene	**1.1 J**	**5.4**	**53 J-**	**300**
Toluene	5.1 UJ	**0.35 J**	**0.42 J**	7.7 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 UJ	7.7 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 UJ	7.7 U
Trichloroethene	5.1 U	5.1 U	5.1 UJ	**17**
Trichlorofluoromethane	5.1 U	5.1 U	5.1 UJ	**0.68 J**
Vinyl chloride	5.1 U	5.1 U	5.1 UJ	15 U

Key for Table 3.3-3b

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-3c Complete Nickel and VOC Results for Area Between Buildings 100 and 140 Soil Samples (SU08), RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU08-02/D-Z1 2.4-3.5 ft 10/22/2007	SU08-02/D-Z2 12-14 ft 10/22/2007	SU08-02/D-Z3 16.5-17.5 ft 10/22/2007	SU08-02/D-Z4 25.6-26 ft 10/22/2007	SU08-02/D-Z5 38.5-40 ft 10/22/2007	SU08-02/D-Z6 42.5-44 ft 10/22/2007
Nickel by 6010B (mg/kg)						
Nickel	**3.3 J**	**3.8 J**	**1.5 J**	**1.9 J**	**1.9 J**	4 U
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	11 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
1,4-Dioxane	410 U	410 U	410 U	410 U	410 U	430 U
2-Butanone	20 U	20 U	20 U	21 U	21 U	22 U
2-Hexanone	20 U	20 U	20 U	21 U	21 U	22 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	21 U	21 U	22 U
Acetone	20 U	20 U	20 U	21 U	21 U	22 U
Benzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Bromoform	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	11 U

Table 3.3-3c Complete Nickel and VOC Results for Area Between Buildings 100 and 140 Soil Samples (SU08), RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU08-02/D-Z1 2.4-3.5 ft 10/22/2007	SU08-02/D-Z2 12-14 ft 10/22/2007	SU08-02/D-Z3 16.5-17.5 ft 10/22/2007	SU08-02/D-Z4 25.6-26 ft 10/22/2007	SU08-02/D-Z5 38.5-40 ft 10/22/2007	SU08-02/D-Z6 42.5-44 ft 10/22/2007
Carbon disulfide	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	**1.1 J**
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Chlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	11 U
Chloroform	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	11 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	11 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U	11 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U	11 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	11 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
o-Xylene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Styrene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Tetrachloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Toluene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Trichloroethene	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U
Vinyl chloride	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 U

Table 3.3-3c Complete Nickel and VOC Results for Area Between Buildings 100 and 140 Soil Samples (SU08), RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU08-11/D-Z1 5.5-6.5 ft 10/23/2007	SU08-11/D-Z2 10-11.3 ft 10/23/2007	SU08-11/D-Z3 18-19 ft 10/23/2007	SU08-11/D-Z4 28-29 ft 10/23/2007	SU08-11/D-Z5 35-36 ft 10/24/2007	SU08-11/D-Z6 43-44 ft 10/24/2007	SU08-11/D-Z7 54.5-55.5 ft 10/24/2007
Nickel by 6010B (mg/kg)							
Nickel	**3.8 J**	**208**	**3.2 J**	**2.7 J**	4 U	**1.5 J**	**9.6**
VOCs by 8260B (µg/kg)							
1,1,1-Trichloroethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,1,2,2-Tetrachloroethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,1,2-Trichloroethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,1-Dichloroethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,1-Dichloroethene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,2,3-Trichlorobenzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,2,4-Trichlorobenzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,2-Dibromo-3-chloropropane	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U
1,2-Dibromoethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,2-Dichlorobenzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,2-Dichloroethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,2-Dichloropropane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,3-Dichlorobenzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,4-Dichlorobenzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
1,4-Dioxane	410 U	420 UJ	410 U	410 U	420 U	410 U	500 U
2-Butanone	21 U	21 UJ	20 U	20 U	21 U	21 U	25 U
2-Hexanone	21 U	21 UJ	20 U	20 U	21 U	21 U	25 U
4-Methyl-2-Pentanone	21 U	21 UJ	20 U	20 U	21 U	21 U	25 U
Acetone	21 U	21 UJ	20 U	20 U	21 U	21 U	25 U
Benzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Bromochloromethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Bromodichloromethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Bromoform	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Bromomethane	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U

Table 3.3-3c Complete Nickel and VOC Results for Area Between Buildings 100 and 140 Soil Samples (SU08), RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU08-11/D-Z1 5.5-6.5 ft 10/23/2007	SU08-11/D-Z2 10-11.3 ft 10/23/2007	SU08-11/D-Z3 18-19 ft 10/23/2007	SU08-11/D-Z4 28-29 ft 10/23/2007	SU08-11/D-Z5 35-36 ft 10/24/2007	SU08-11/D-Z6 43-44 ft 10/24/2007	SU08-11/D-Z7 54.5-55.5 ft 10/24/2007
Carbon disulfide	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Carbon tetrachloride	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Chlorobenzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Chloroethane	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U
Chloroform	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Chloromethane	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U
cis-1,2-Dichloroethene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
cis-1,3-Dichloropropene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Cyclohexane	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U
Dibromochloromethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Dichlorodifluoromethane	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U
Ethylbenzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Isopropylbenzene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Methyl acetate	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U
Methyl tert-butyl ether	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Methylcyclohexane	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U
Methylene chloride	10 U	11 UJ	10 U	10 U	10 U	10 U	12 U
m-Xylene & p-Xylene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
o-Xylene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Styrene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Tetrachloroethene	5.1 U	5.3 UJ	5.1 UJ	5.1 U	**66 J+**	**6.3 J+**	**4.7 J**
Toluene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
trans-1,2-Dichloroethene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
trans-1,3-Dichloropropene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Trichloroethene	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Trichlorofluoromethane	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U
Vinyl chloride	5.1 U	5.3 UJ	5.1 U	5.1 U	5.2 U	5.1 U	6.2 U

Key for Table 3.3-3c

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU09-10-Z8 64-66 ft 10/16/2007	SU13-07/D-Z1 6-8 ft 10/16/2007	SU13-07/D-Z2 14-16 ft 10/16/2007	SU13-07/D-Z3 22-24 ft 10/16/2007	SU13-07/D-Z4 30-32 ft 10/17/2007
Nickel by 6010B (mg/kg)					
Nickel	**1.3 J**	**7.3**	**3.9 J**	**2.8 J**	**1.3 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,1,2,2-Tetrachloroethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.7 U	5.4 U	5.1 U	5.2 U	10 U
1,1,2-Trichloroethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,1-Dichloroethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,1-Dichloroethene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,2,3-Trichlorobenzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,2,4-Trichlorobenzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,2-Dibromo-3-chloropropane	11 U	11 U	10 U	10 U	10 U
1,2-Dibromoethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,2-Dichlorobenzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,2-Dichloroethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,2-Dichloropropane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,3-Dichlorobenzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,4-Dichlorobenzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
1,4-Dioxane[1]	450 U	430 U	410 U	410 U	--
2-Butanone	23 U	22 U	20 U	21 U	21 UJ
2-Hexanone	23 U	22 U	20 U	21 U	21 UJ
4-Methyl-2-Pentanone	23 U	22 U	20 U	21 U	21 UJ
Acetone	23 U	22 U	20 U	21 U	41 UJ
Benzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Bromochloromethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Bromodichloromethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Bromoform	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Bromomethane	11 U	11 U	10 U	10 U	10 UJ

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU09-10-Z8 64-66 ft 10/16/2007	SU13-07/D-Z1 6-8 ft 10/16/2007	SU13-07/D-Z2 14-16 ft 10/16/2007	SU13-07/D-Z3 22-24 ft 10/16/2007	SU13-07/D-Z4 30-32 ft 10/17/2007
Carbon disulfide	5.7 U	5.4 U	5.1 U	5.2 U	5.2 UJ
Carbon tetrachloride	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Chlorobenzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Chloroethane	11 U	11 U	10 U	10 U	10 U
Chloroform	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Chloromethane	11 U	11 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
cis-1,3-Dichloropropene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Cyclohexane	11 U	11 U	10 U	10 U	5.2 U
Dibromochloromethane	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Dichlorodifluoromethane	11 U	11 U	10 U	10 U	10 U
Ethylbenzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Isopropylbenzene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Methyl acetate	11 U	11 U	10 U	10 U	5.2 U
Methyl tert-butyl ether	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Methylcyclohexane	11 U	11 U	10 U	10 U	5.2 U
Methylene chloride	11 U	11 U	10 U	10 U	5.2 U
m-Xylene & p-Xylene	5.7 U	5.4 U	5.1 U	5.2 U	10 U
o-Xylene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Styrene	5.7 U	5.4 U	5.1 U	5.2 U	**0.47 J**
Tetrachloroethene	5.7 U	**1.9 J**	5.1 U	5.2 U	**5.2**
Toluene	5.7 U	5.4 U	5.1 U	5.2 U	**0.48 J**
trans-1,2-Dichloroethene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
trans-1,3-Dichloropropene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Trichloroethene	5.7 U	5.4 U	5.1 U	5.2 U	5.2 U
Trichlorofluoromethane	5.7 U	5.4 U	5.1 U	5.2 U	**0.41 J**
Vinyl chloride	5.7 U	5.4 U	5.1 U	5.2 U	10 U

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU13-07/D-Z5 32-34 ft 10/17/2007	SU13-07/D-Z6 46-48 ft 10/17/2007	SU13-07/D-Z7 54-56 ft 10/17/2007	SU13-07/D-Z8 62-64 ft 10/17/2007	SU14-03/D-Z1 7-8 ft 10/25/2007
Nickel by 6010B (mg/kg)					
Nickel	**3.7 J**	**2.9 J**	4 U	4 U	12.4 U
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,1,2,2-Tetrachloroethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	13 U	10 U	12 U	11 UJ
1,1,2-Trichloroethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,1-Dichloroethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,1-Dichloroethene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,2,3-Trichlorobenzene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,2,4-Trichlorobenzene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,2-Dibromo-3-chloropropane	10 U	13 U	10 U	12 U	11 U
1,2-Dibromoethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,2-Dichlorobenzene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,2-Dichloroethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,2-Dichloropropane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,3-Dichlorobenzene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,4-Dichlorobenzene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
1,4-Dioxane[1]	--	--	--	--	--
2-Butanone	21 UJ	27 UJ	21 UJ	24 UJ	22 UJ
2-Hexanone	21 UJ	27 UJ	21 UJ	24 UJ	22 UJ
4-Methyl-2-Pentanone	21 UJ	27 UJ	21 UJ	24 UJ	22 UJ
Acetone	41 UJ	53 UJ	41 UJ	48 UJ	44 UJ
Benzene	**0.26 J**	6.7 U	5.1 U	6.0 U	5.5 U
Bromochloromethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Bromodichloromethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Bromoform	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Bromomethane	10 U	13 U	10 U	12 U	11 UJ

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU13-07/D-Z5 32-34 ft 10/17/2007	SU13-07/D-Z6 46-48 ft 10/17/2007	SU13-07/D-Z7 54-56 ft 10/17/2007	SU13-07/D-Z8 62-64 ft 10/17/2007	SU14-03/D-Z1 7-8 ft 10/25/2007
Carbon disulfide	5.1 UJ	6.7 UJ	5.1 UJ	6.0 UJ	5.5 UJ
Carbon tetrachloride	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Chlorobenzene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Chloroethane	10 U	13 U	10 U	12 U	11 U
Chloroform	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Chloromethane	10 U	13 U	10 U	12 U	11 U
cis-1,2-Dichloroethene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
cis-1,3-Dichloropropene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Cyclohexane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Dibromochloromethane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Dichlorodifluoromethane	10 U	13 U	10 U	12 U	11 U
Ethylbenzene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Isopropylbenzene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Methyl acetate	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Methyl tert-butyl ether	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Methylcyclohexane	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Methylene chloride	**0.34 J**	**0.41 J**	5.1 U	**0.54 J**	5.5 UJ
m-Xylene & p-Xylene	10 U	13 U	10 U	12 U	11 U
o-Xylene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Styrene	5.1 U	6.7 U	5.1 U	**0.41 J**	5.5 U
Tetrachloroethene	**1.5 J**	**0.82 J**	**14**	**130**	5.5 UJ
Toluene	**0.68 J**	**0.66 J**	**0.19 J**	**0.62 J**	5.5 UJ
trans-1,2-Dichloroethene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
trans-1,3-Dichloropropene	5.1 U	6.7 U	5.1 U	6.0 U	5.5 U
Trichloroethene	5.1 U	6.7 U	5.1 U	**0.50 J**	5.5 U
Trichlorofluoromethane	**0.55 J**	**0.91 J**	**0.41 J**	**0.67 J**	**0.68 J**
Vinyl chloride	10 U	13 U	10 U	12 U	11 U

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU14-03/D-Z2 13-14 ft 10/25/2007	SU14-03/D-Z3 20-21 ft 10/25/2007	SU14-03/D-Z4 29-31 ft 10/25/2007	SU14-03/D-Z5 37-38 ft 10/25/2007	SU14-03/D-Z6 47.5-48.5 ft 10/25/2007
Nickel by 6010B (mg/kg)					
Nickel	7.0 U	3.4 UJ	2.2 UJ	2.0 UJ	4 UJ
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,1,2,2-Tetrachloroethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	11 UJ	10 UJ	10 UJ	10 UJ	10 UJ
1,1,2-Trichloroethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,1-Dichloroethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,1-Dichloroethene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,2,3-Trichlorobenzene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,2,4-Trichlorobenzene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,2-Dibromo-3-chloropropane	11 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,2-Dichlorobenzene	5.5 U	5.2 U	5.2 UJ	5.1 U	5.2 U
1,2-Dichloroethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,2-Dichloropropane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
1,3-Dichlorobenzene	5.5 U	5.2 U	5.2 UJ	5.1 U	5.2 U
1,4-Dichlorobenzene	5.5 U	5.2 U	5.2 UJ	5.1 U	5.2 U
1,4-Dioxane[1]	--	--	--	--	--
2-Butanone	22 UJ	21 UJ	21 UJ	20 UJ	21 UJ
2-Hexanone	22 UJ	21 UJ	21 UJ	20 UJ	21 UJ
4-Methyl-2-Pentanone	22 UJ	21 UJ	21 UJ	20 UJ	21 UJ
Acetone	44 UJ	41 UJ	41 UJ	41 UJ	42 UJ
Benzene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Bromochloromethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Bromodichloromethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Bromoform	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Bromomethane	11 U	10 UJ	10 U	10 U	10 UJ

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU14-03/D-Z2 13-14 ft 10/25/2007	SU14-03/D-Z3 20-21 ft 10/25/2007	SU14-03/D-Z4 29-31 ft 10/25/2007	SU14-03/D-Z5 37-38 ft 10/25/2007	SU14-03/D-Z6 47.5-48.5 ft 10/25/2007
Carbon disulfide	5.5 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 UJ
Carbon tetrachloride	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Chlorobenzene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Chloroethane	11 U	10 U	10 U	10 U	10 U
Chloroform	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Chloromethane	11 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
cis-1,3-Dichloropropene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Cyclohexane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Dibromochloromethane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Dichlorodifluoromethane	11 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.5 U	5.2 U	5.2 UJ	5.1 U	5.2 U
Isopropylbenzene	5.5 U	5.2 U	5.2 UJ	5.1 U	5.2 U
Methyl acetate	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Methyl tert-butyl ether	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Methylcyclohexane	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Methylene chloride	5.5 UJ	5.2 U	5.2 UJ	5.1 UJ	5.2 UJ
m-Xylene & p-Xylene	11 U	10 U	10 UJ	10 U	10 U
o-Xylene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Styrene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Tetrachloroethene	**1.5 J**	**1.0 J**	**1.5 J**	5.1 UJ	**3.8 J**
Toluene	5.5 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
trans-1,3-Dichloropropene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Trichloroethene	5.5 U	5.2 U	5.2 U	5.1 U	5.2 U
Trichlorofluoromethane	**0.56 J**	**0.76 J**	**0.91 J**	**0.48 J**	**0.75 J**
Vinyl chloride	11 U	10 U	10 U	10 U	10 U

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU14-03/D-Z7 51.5-52.5 ft 10/25/2007	SU14-03/D-Z8 59.5-61 ft 10/25/2007	SU14-10/D-Z1 4-6 ft 10/17/2007	SU14-10/D-Z2 8-10 ft 10/17/2007	SU14-10/D-Z3 22-24 ft 10/17/2007
Nickel by 6010B (mg/kg)					
Nickel	4 UJ	4 UJ	**5.7**	**8.1**	**1.9 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,1,2,2-Tetrachloroethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	11 UJ	10 UJ	11 U	11 U	11 U
1,1,2-Trichloroethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,1-Dichloroethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,1-Dichloroethene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,2,3-Trichlorobenzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,2,4-Trichlorobenzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,2-Dibromo-3-chloropropane	11 U	10 U	11 U	11 U	11 U
1,2-Dibromoethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,2-Dichlorobenzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,2-Dichloroethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,2-Dichloropropane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,3-Dichlorobenzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,4-Dichlorobenzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
1,4-Dioxane[1]	--	--	--	--	--
2-Butanone	22 UJ	21 UJ	21 UJ	22 UJ	21 UJ
2-Hexanone	22 UJ	21 UJ	21 UJ	22 UJ	21 UJ
4-Methyl-2-Pentanone	22 UJ	21 UJ	21 UJ	22 UJ	21 UJ
Acetone	44 UJ	42 UJ	43 UJ	45 UJ	42 UJ
Benzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Bromochloromethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Bromodichloromethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Bromoform	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Bromomethane	11 UJ	10 U	11 U	11 U	11 U

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU14-03/D-Z7 51.5-52.5 ft 10/25/2007	SU14-03/D-Z8 59.5-61 ft 10/25/2007	SU14-10/D-Z1 4-6 ft 10/17/2007	SU14-10/D-Z2 8-10 ft 10/17/2007	SU14-10/D-Z3 22-24 ft 10/17/2007
Carbon disulfide	5.5 UJ	5.2 UJ	5.4 UJ	5.6 UJ	5.3 UJ
Carbon tetrachloride	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Chlorobenzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Chloroethane	11 U	10 U	11 U	11 U	11 U
Chloroform	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Chloromethane	11 U	10 U	11 U	11 U	11 U
cis-1,2-Dichloroethene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
cis-1,3-Dichloropropene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Cyclohexane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Dibromochloromethane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Dichlorodifluoromethane	11 U	10 U	11 U	11 U	11 U
Ethylbenzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Isopropylbenzene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Methyl acetate	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Methyl tert-butyl ether	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Methylcyclohexane	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Methylene chloride	5.5 UJ	5.2 UJ	**0.41 J**	**1.1 J**	**1.2 J**
m-Xylene & p-Xylene	11 U	10 U	11 U	11 U	11 U
o-Xylene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Styrene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Tetrachloroethene	**1.2 J**	5.2 UJ	**1.1 J**	5.6 U	5.3 U
Toluene	5.5 UJ	5.2 UJ	**0.25 J**	**0.46 J**	**0.37 J**
trans-1,2-Dichloroethene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
trans-1,3-Dichloropropene	5.5 U	5.2 U	5.4 U	5.6 U	5.3 U
Trichloroethene	**0.60 J**	5.2 U	5.4 U	5.6 U	5.3 U
Trichlorofluoromethane	**1.3 J**	**0.64 J**	11 U	**0.96 J**	**0.58 J**
Vinyl chloride	11 U	10 U	11 U	11 U	11 U

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU14-10/D-Z4 30-32 ft 10/17/2007	SU14-10/D-Z5 36-38 ft 10/17/2007	SU14-10/D-Z6 46-48 ft 10/18/2007	SU14-10/D-Z7 54-56 ft 10/18/2007	SU14-10/D-Z8 62-64 ft 10/18/2007
Nickel by 6010B (mg/kg)					
Nickel		**4.2**	**2.8 J**	**1.7 J**	4 U
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,1,2,2-Tetrachloroethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	16 U	11 U	11 U	11 U
1,1,2-Trichloroethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,1-Dichloroethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,1-Dichloroethene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,2,3-Trichlorobenzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,2,4-Trichlorobenzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,2-Dibromo-3-chloropropane	10 UJ	16 U	11 U	11 UJ	11 UJ
1,2-Dibromoethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,2-Dichlorobenzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,2-Dichloroethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,2-Dichloropropane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,3-Dichlorobenzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,4-Dichlorobenzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
1,4-Dioxane[1]	--	--	--	--	--
2-Butanone	**1.0 J**	32 UJ	21 UJ	21 UJ	22 UJ
2-Hexanone	20 UJ	32 UJ	21 UJ	21 UJ	22 UJ
4-Methyl-2-Pentanone	20 UJ	32 UJ	21 UJ	21 UJ	22 UJ
Acetone	41 UJ	64 UJ	43 UJ	43 UJ	44 UJ
Benzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Bromochloromethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Bromodichloromethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Bromoform	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Bromomethane	10 UJ	16 U	11 U	11 U	11 U

Table 3.3-3d Complete Nickel and VOC Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU14-10/D-Z4 30-32 ft 10/17/2007	SU14-10/D-Z5 36-38 ft 10/17/2007	SU14-10/D-Z6 46-48 ft 10/18/2007	SU14-10/D-Z7 54-56 ft 10/18/2007	SU14-10/D-Z8 62-64 ft 10/18/2007
Carbon disulfide	5.1 UJ	8.0 UJ	5.4 UJ	5.3 UJ	5.5 UJ
Carbon tetrachloride	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Chlorobenzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Chloroethane	10 UJ	16 U	11 U	11 UJ	11 UJ
Chloroform	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Chloromethane	10 U	16 U	11 U	11 U	11 U
cis-1,2-Dichloroethene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
cis-1,3-Dichloropropene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Cyclohexane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Dibromochloromethane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Dichlorodifluoromethane	10 U	16 U	11 U	11 U	11 U
Ethylbenzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Isopropylbenzene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Methyl acetate	5.1 UJ	8.0 U	5.4 U	5.3 U	5.5 U
Methyl tert-butyl ether	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Methylcyclohexane	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Methylene chloride	**1.9 J**	**1.4 J**	5.4 UJ	5.3 UJ	5.5 UJ
m-Xylene & p-Xylene	10 U	16 U	11 U	11 U	11 U
o-Xylene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Styrene	5.1 U	8.0 U	**0.40 J**	**0.47 J**	5.5 U
Tetrachloroethene	5.1 U	8.0 U	5.4 U	5.3 U	**0.63 J**
Toluene	5.1 U	**0.55 J**	5.4 UJ	5.3 UJ	5.5 UJ
trans-1,2-Dichloroethene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
trans-1,3-Dichloropropene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Trichloroethene	5.1 U	8.0 U	5.4 U	5.3 U	5.5 U
Trichlorofluoromethane	10 U	**0.59 J**	**0.68 J**	**0.41 J**	**0.51 J**
Vinyl chloride	10 U	16 U	11 U	11 U	11 U

Key for Table 3.3-3d

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU11-05/D-Z3 22-23 ft 10/26/2007	SU11-05/D-Z4 28-29 ft 10/26/2007	SU11-05/D-Z5 36-37.5 ft 10/29/2007	SU11-05/D-Z6 41-42 ft 10/29/2007	SU11-05/D-Z7 51.5-52.5 ft 10/29/2007
Nickel by 6010B (mg/kg)					
Nickel	4 U	**1.2 J**	**2.5 J**	**1.3 J**	**1.4 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.1 U	5.1 UJ	5.2 UJ	5.1 UJ
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
1,4-Dioxane[1]	410 U	410 U	410 U	410 U	400 U
2-Butanone	20 U	20 U	20 U	21 U	20 U
2-Hexanone	20 U	20 U	20 U	21 U	20 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	21 U	20 U
Acetone	20 U	20 U	**5.8 J**	21 U	20 U
Benzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Bromoform	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Bromomethane	10 U	10 U	10 UJ	10 UJ	10 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU11-05/D-Z3 22-23 ft 10/26/2007	SU11-05/D-Z4 28-29 ft 10/26/2007	SU11-05/D-Z5 36-37.5 ft 10/29/2007	SU11-05/D-Z6 41-42 ft 10/29/2007	SU11-05/D-Z7 51.5-52.5 ft 10/29/2007
Carbon disulfide	5.1 U	5.1 U	5.1 UJ	**2.0 J**	5.1 UJ
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Chlorobenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Chloroethane	10 U	10 U	10 U	10 U	10 U
Chloroform	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Chloromethane	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 UJ	10 UJ	10 U	10 U	10 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
o-Xylene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Styrene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Tetrachloroethene	5.1 UJ	5.1 UJ	5.1 U	5.2 U	5.1 U
Toluene	5.1 UJ	5.1 UJ	5.1 UJ	5.2 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Trichloroethene	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U
Vinyl chloride	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU11-05/D-Z8 61-62.5 ft 10/29/2007	SU11-16/D-Z4 31-32 ft 10/30/2007	SU11-16/D-Z5 32-34 ft 10/30/2007	SU11-16/D-Z6 40-41 ft 10/30/2007	SU11-16/D-Z7 53-54 ft 10/30/2007
Nickel by 6010B (mg/kg)					
Nickel	**1.4 J**	**2.8 J**	**2.5 J**	**1.9 J**	4 U
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.0 UJ	5.1 U	8.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 UJ	10 U	10 U	10 U	16 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,1-Dichloroethane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,1-Dichloroethene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	16 U
1,2-Dibromoethane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,2-Dichloroethane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,2-Dichloropropane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
1,4-Dioxane[1]	410 U	--	--	--	--
2-Butanone	20 U	20 U	20 U	20 U	32 U
2-Hexanone	20 U	20 U	20 U	20 U	32 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	20 U	32 U
Acetone	20 U	41 U	40 U	41 U	64 U
Benzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Bromochloromethane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Bromodichloromethane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Bromoform	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Bromomethane	10 UJ	10 UJ	10 UJ	10 UJ	16 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU11-05/D-Z8 61-62.5 ft 10/29/2007	SU11-16/D-Z4 31-32 ft 10/30/2007	SU11-16/D-Z5 32-34 ft 10/30/2007	SU11-16/D-Z6 40-41 ft 10/30/2007	SU11-16/D-Z7 53-54 ft 10/30/2007
Carbon disulfide	5.1 UJ	5.1 UJ	5.0 UJ	5.1 UJ	8.0 UJ
Carbon tetrachloride	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Chlorobenzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Chloroethane	10 U	10 U	10 U	10 U	16 U
Chloroform	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Chloromethane	10 U	10 UJ	10 U	10 U	16 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Cyclohexane	10 U	5.1 U	5.0 U	5.1 U	8.0 U
Dibromochloromethane	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	16 U
Ethylbenzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Isopropylbenzene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Methyl acetate	10 U	5.1 U	5.0 U	5.1 U	8.0 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Methylcyclohexane	10 U	5.1 U	5.0 U	5.1 U	8.0 U
Methylene chloride	10 U	**3.2 J**	**3.7 J**	5.1 UJ	8.0 UJ
m-Xylene & p-Xylene	5.1 U	10 U	10 U	10 U	16 U
o-Xylene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Styrene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Tetrachloroethene	5.1 U	**0.53 J**	**0.57 J**	**0.78 J**	**0.58 J**
Toluene	5.1 UJ	5.1 UJ	5.0 UJ	5.1 UJ	8.0 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Trichloroethene	5.1 U	5.1 U	5.0 U	5.1 U	8.0 U
Trichlorofluoromethane	5.1 U	**0.38 J**	**0.41 J**	**0.59 J**	**0.51 J**
Vinyl chloride	5.1 U	10 U	10 U	10 U	16 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU11-16/D-Z8 59-60 ft 10/30/2007	SU12-01/D-Z1 6-8 ft 11/09/2007	SU12-01/D-Z2 15-16 ft 11/09/2007	SU12-01/D-Z3 22-24 ft 11/09/2007	SU12-01/D-Z4 30-32 ft 11/09/2007
Nickel by 6010B (mg/kg)					
Nickel	**1.2 J**	**5.8**	**4.4**	**1.4 J**	**2.0 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,1,2,2-Tetrachloroethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,1,2-Trichloroethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,1-Dichloroethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,1-Dichloroethene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,2,3-Trichlorobenzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,2,4-Trichlorobenzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,2-Dibromo-3-chloropropane	10 U	10 UJ	10 UJ	10 UJ	10 UJ
1,2-Dibromoethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,2-Dichlorobenzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,2-Dichloroethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,2-Dichloropropane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,3-Dichlorobenzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,4-Dichlorobenzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
1,4-Dioxane[1]	--	400 UJ	410 UJ	410 UJ	410 UJ
2-Butanone	20 U	20 UJ	20 UJ	21 UJ	21 UJ
2-Hexanone	20 U	20 UJ	20 UJ	21 UJ	21 UJ
4-Methyl-2-Pentanone	20 U	20 UJ	20 UJ	21 UJ	21 UJ
Acetone	40 U	20 UJ	20 UJ	21 UJ	21 UJ
Benzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Bromochloromethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Bromodichloromethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Bromoform	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Bromomethane	10 U	10 UJ	10 UJ	10 UJ	10 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU11-16/D-Z8 59-60 ft 10/30/2007	SU12-01/D-Z1 6-8 ft 11/09/2007	SU12-01/D-Z2 15-16 ft 11/09/2007	SU12-01/D-Z3 22-24 ft 11/09/2007	SU12-01/D-Z4 30-32 ft 11/09/2007
Carbon disulfide	5.1 UJ	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Carbon tetrachloride	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Chlorobenzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Chloroethane	10 U	10 UJ	10 UJ	10 UJ	10 UJ
Chloroform	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Chloromethane	10 U	10 UJ	10 UJ	10 UJ	10 UJ
cis-1,2-Dichloroethene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
cis-1,3-Dichloropropene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Cyclohexane	5.1 U	10 UJ	10 UJ	10 UJ	10 UJ
Dibromochloromethane	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Dichlorodifluoromethane	10 U	10 UJ	10 UJ	10 UJ	10 UJ
Ethylbenzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Isopropylbenzene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Methyl acetate	5.1 U	10 UJ	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Methylcyclohexane	5.1 U	10 UJ	10 UJ	10 UJ	10 UJ
Methylene chloride	**3.2 J**	10 UJ	10 UJ	10 UJ	10 UJ
m-Xylene & p-Xylene	10 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
o-Xylene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Styrene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Tetrachloroethene	**0.72 J**	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Toluene	5.1 UJ	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
trans-1,3-Dichloropropene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Trichloroethene	5.1 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Trichlorofluoromethane	**0.35 J**	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Vinyl chloride	10 U	5.0 UJ	5.1 UJ	5.1 UJ	5.1 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU12-01/D-Z5 33-34 ft 11/09/2007	SU12-01/D-Z6 46-48 ft 11/12/2007	SU12-01/D-Z7 53-54 ft 11/12/2007	SU12-01/D-Z8 61-62 ft 11/12/2007	SU12-03/I-Z3 16-18 ft 11/05/2007
Nickel by 6010B (mg/kg)					
Nickel	**2.5 J**	4 UJ	4 UJ	4 UJ	**11.8**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,1,2,2-Tetrachloroethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,1,2-Trichloroethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,1-Dichloroethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,1-Dichloroethene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,2,3-Trichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,2,4-Trichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,2-Dibromo-3-chloropropane	10 UJ	10 UJ	10 UJ	10 UJ	10 U
1,2-Dibromoethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,2-Dichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,2-Dichloroethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,2-Dichloropropane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,3-Dichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,4-Dichlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
1,4-Dioxane[1]	420 UJ	410 UJ	410 UJ	410 UJ	420 UJ
2-Butanone	21 UJ	20 UJ	21 UJ	20 UJ	21 U
2-Hexanone	21 UJ	20 UJ	21 UJ	20 UJ	21 U
4-Methyl-2-Pentanone	21 UJ	20 UJ	21 UJ	20 UJ	21 U
Acetone	21 UJ	20 UJ	21 UJ	20 UJ	21 U
Benzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Bromochloromethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Bromodichloromethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Bromoform	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Bromomethane	10 UJ	10 UJ	10 UJ	10 UJ	10 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-01/D-Z5 33-34 ft 11/09/2007	SU12-01/D-Z6 46-48 ft 11/12/2007	SU12-01/D-Z7 53-54 ft 11/12/2007	SU12-01/D-Z8 61-62 ft 11/12/2007	SU12-03/I-Z3 16-18 ft 11/05/2007
Carbon disulfide	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Carbon tetrachloride	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Chlorobenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Chloroethane	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Chloroform	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Chloromethane	10 UJ	10 UJ	10 UJ	10 UJ	10 U
cis-1,2-Dichloroethene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
cis-1,3-Dichloropropene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Cyclohexane	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Dibromochloromethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Dichlorodifluoromethane	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Ethylbenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Isopropylbenzene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Methyl acetate	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Methylcyclohexane	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Methylene chloride	10 UJ	10 UJ	10 UJ	10 UJ	10 U
m-Xylene & p-Xylene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
o-Xylene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Styrene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Tetrachloroethene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	**28**
Toluene	**0.41 J**	**0.50 J**	**0.56 J**	**0.37 J**	5.2 UJ
trans-1,2-Dichloroethene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
trans-1,3-Dichloropropene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Trichloroethene	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Trichlorofluoromethane	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U
Vinyl chloride	5.2 UJ	5.1 UJ	5.2 UJ	5.1 UJ	5.2 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU12-03/I-Z4 24-26 ft 11/05/2007	SU12-04/I-Z1 6-8 ft 11/06/2007	SU12-04/I-Z2 10-12 ft 11/06/2007	SU12-04/I-Z3 18-20 ft 11/06/2007	SU12-04/I-Z4 28-30 ft 11/06/2007
Nickel by 6010B (mg/kg)					
Nickel	**2.6 J**	**11.4**	**3.9 J**	**2.1 J**	**2.0 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,1-Dichloroethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,1-Dichloroethene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	11 UJ	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,2-Dichloroethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,2-Dichloropropane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
1,4-Dioxane[1]	410 UJ	440 UJ	410 U	410 U	410 U
2-Butanone	21 U	22 UJ	21 U	21 U	21 U
2-Hexanone	21 U	22 UJ	21 U	21 U	21 U
4-Methyl-2-Pentanone	21 U	22 UJ	21 U	21 U	21 U
Acetone	21 U	22 UJ	21 U	21 U	21 U
Benzene	5.1 U	**0.21 J**	5.1 U	5.1 U	5.1 U
Bromochloromethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Bromodichloromethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Bromoform	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Bromomethane	10 U	11 UJ	10 U	10 U	10 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-03/I-Z4 24-26 ft 11/05/2007	SU12-04/I-Z1 6-8 ft 11/06/2007	SU12-04/I-Z2 10-12 ft 11/06/2007	SU12-04/I-Z3 18-20 ft 11/06/2007	SU12-04/I-Z4 28-30 ft 11/06/2007
Carbon disulfide	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Carbon tetrachloride	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Chlorobenzene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Chloroethane	10 U	11 UJ	10 U	10 U	10 U
Chloroform	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Chloromethane	10 U	11 UJ	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Cyclohexane	10 U	11 UJ	10 U	10 U	10 U
Dibromochloromethane	5.1 UJ	5.5 UJ	5.1 U	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	11 UJ	10 U	10 U	10 U
Ethylbenzene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Isopropylbenzene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Methyl acetate	10 UJ	11 UJ	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Methylcyclohexane	10 U	11 UJ	10 U	10 U	10 U
Methylene chloride	10 U	11 UJ	10 U	10 U	10 U
m-Xylene & p-Xylene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
o-Xylene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Styrene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Tetrachloroethene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Toluene	5.1 U	5.5 UJ	**0.54 J**	5.1 U	**0.45 J**
trans-1,2-Dichloroethene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Trichloroethene	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Trichlorofluoromethane	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Vinyl chloride	5.1 U	5.5 UJ	5.1 U	5.1 U	5.1 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-07/D-Z1 5-6 ft 11/01/2007	SU12-07/D-Z2 12.5-14 ft 11/01/2007	SU12-07/D-Z3 17-18 ft 11/01/2007	SU12-07/D-Z4 24-25 ft 11/01/2007	SU12-07/D-Z5 38.5-39.5 ft 11/01/2007
Nickel by 6010B (mg/kg)					
Nickel	**44.9 J-**	**11.0 J-**	**4.4 J-**	**5.9 J-**	**2.8 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	**1.1 J**	5.5 U	5.1 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	11 U	11 U	10 U	10 U	10 U
1,2-Dibromoethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,2-Dichloroethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,2-Dichloropropane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
1,4-Dichlorobenzene	**0.34 J**	5.5 U	5.1 U	5.1 U	5.1 U
1,4-Dioxane[1]	450 U	440 U	410 U	410 U	410 U
2-Butanone	**11 J**	22 U	20 U	**3.9 J**	20 U
2-Hexanone	22 U	22 U	20 U	20 U	20 U
4-Methyl-2-Pentanone	22 U	22 U	20 U	20 U	20 U
Acetone	**19 J**	22 U	20 U	**4.5 J**	20 U
Benzene	**0.46 J**	5.5 U	5.1 U	5.1 U	5.1 U
Bromochloromethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Bromodichloromethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Bromoform	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Bromomethane	11 UJ	11 UJ	10 UJ	10 UJ	10 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-07/D-Z1 5-6 ft 11/01/2007	SU12-07/D-Z2 12.5-14 ft 11/01/2007	SU12-07/D-Z3 17-18 ft 11/01/2007	SU12-07/D-Z4 24-25 ft 11/01/2007	SU12-07/D-Z5 38.5-39.5 ft 11/01/2007
Carbon disulfide	5.6 U	5.5 UJ	5.1 U	5.1 U	5.1 U
Carbon tetrachloride	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Chlorobenzene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Chloroethane	11 U	11 U	10 U	10 U	10 U
Chloroform	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Chloromethane	11 U	11 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	**4.4 J**	5.5 U	5.1 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Cyclohexane	11 U	11 U	10 U	10 U	10 U
Dibromochloromethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Dichlorodifluoromethane	11 U	11 UJ	10 U	10 U	10 U
Ethylbenzene	**8.1**	5.5 U	5.1 U	**0.44 J**	5.1 U
Isopropylbenzene	**2.9 J**	5.5 U	5.1 U	5.1 U	5.1 U
Methyl acetate	11 U	11 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Methylcyclohexane	11 U	11 U	10 U	10 U	10 U
Methylene chloride	11 U	11 U	10 U	10 U	10 U
m-Xylene & p-Xylene	**4.2 J**	5.5 U	5.1 U	5.1 U	5.1 U
o-Xylene	**3.2 J**	5.5 U	5.1 U	5.1 U	5.1 U
Styrene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Tetrachloroethene	**6.5**	**71**	**2.5 J**	**16**	**0.54 J**
Toluene	**12**	5.5 U	**0.35 J**	**1.5 J**	**0.32 J**
trans-1,2-Dichloroethene	**0.96 J**	5.5 U	5.1 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Trichloroethene	5.6 U	**2.6 J**	5.1 U	5.1 U	5.1 U
Trichlorofluoromethane	5.6 U	5.5 U	5.1 U	5.1 U	5.1 U
Vinyl chloride	**4.3 J**	5.5 UJ	5.1 U	5.1 U	5.1 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-07/D-Z6 41-43 ft 11/01/2007	SU12-07/D-Z7 53-54 ft 11/01/2007	SU12-07/D-Z8 62-63 ft 11/01/2007	SU12-08/I-Z1 7-8 ft 11/02/2007	SU12-08/I-Z2 13-14 ft 11/02/2007
Nickel by 6010B (mg/kg)					
Nickel	**3.1 J**	**1.7 J**	**1.6 J**	**4.2**	**1.7 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
1,4-Dioxane[1]	410 U	410 U	410 U	400 U	400 U
2-Butanone	20 U	20 U	20 U	20 U	20 U
2-Hexanone	20 U	20 U	20 U	20 U	20 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	20 U	20 U
Acetone	20 U	20 U	20 U	20 U	20 U
Benzene	**0.21 J**	5.1 U	5.1 U	5.0 U	5.0 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Bromoform	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Bromomethane	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-07/D-Z6 41-43 ft 11/01/2007	SU12-07/D-Z7 53-54 ft 11/01/2007	SU12-07/D-Z8 62-63 ft 11/01/2007	SU12-08/I-Z1 7-8 ft 11/02/2007	SU12-08/I-Z2 13-14 ft 11/02/2007
Carbon disulfide	5.1 U	5.1 U	5.1 U	5.0 UJ	5.0 U
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Chlorobenzene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Chloroethane	10 U	10 U	10 U	10 U	10 U
Chloroform	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Chloromethane	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 UJ	10 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.1 U	5.0 U	**0.78 J**
o-Xylene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Styrene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Tetrachloroethene	**1.3 J**	5.1 U	5.1 U	5.0 U	5.0 U
Toluene	**0.92 J**	**0.47 J**	**0.43 J**	**0.44 J**	**0.86 J**
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Trichloroethene	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U	5.0 U	5.0 U
Vinyl chloride	5.1 U	5.1 U	5.1 U	5.0 UJ	5.0 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-08/I-Z3 20-21 ft 11/02/2007	SU12-08/I-Z4 30-31 ft 11/02/2007	SU12-11/I-Z1 6-8 ft 11/07/2007	SU12-11/I-Z2 10-12 ft 11/07/2007	SU12-11/I-Z3 22-24 ft 11/07/2007
Nickel by 6010B (mg/kg)					
Nickel	**2.2 J**	**2.4 J**	**19.6**	**32.7**	**3.9 J**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,1,2,2-Tetrachloroethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,1,2-Trichloroethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,1-Dichloroethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,1-Dichloroethene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,2,3-Trichlorobenzene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,2,4-Trichlorobenzene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,2-Dibromo-3-chloropropane	10 U	10 U	11 U	11 U	10 UJ
1,2-Dibromoethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,2-Dichlorobenzene	5.1 U	5.0 U	5.4 U	5.4 UJ	5.1 UJ
1,2-Dichloroethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,2-Dichloropropane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,3-Dichlorobenzene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,4-Dichlorobenzene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
1,4-Dioxane[1]	400 UJ	400 U	430 U	430 U	400 UJ
2-Butanone	20 U	20 U	22 U	21 U	20 UJ
2-Hexanone	20 U	20 U	22 U	21 U	20 UJ
4-Methyl-2-Pentanone	20 U	20 U	22 U	21 U	20 UJ
Acetone	20 U	20 U	**7.9 J**	**7.5 J**	20 UJ
Benzene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Bromochloromethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Bromodichloromethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Bromoform	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Bromomethane	10 U	10 UJ	11 U	11 U	10 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-08/I-Z3 20-21 ft 11/02/2007	SU12-08/I-Z4 30-31 ft 11/02/2007	SU12-11/I-Z1 6-8 ft 11/07/2007	SU12-11/I-Z2 10-12 ft 11/07/2007	SU12-11/I-Z3 22-24 ft 11/07/2007
Carbon disulfide	5.1 U	5.0 U	5.4 U	5.4 U	**0.88 J**
Carbon tetrachloride	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Chlorobenzene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Chloroethane	10 U	10 U	11 U	11 U	10 UJ
Chloroform	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Chloromethane	10 U	10 U	11 U	11 U	10 UJ
cis-1,2-Dichloroethene	5.1 U	5.0 U	**1.4 J**	**2.1 J**	5.1 UJ
cis-1,3-Dichloropropene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Cyclohexane	10 U	10 U	11 U	11 U	10 UJ
Dibromochloromethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Dichlorodifluoromethane	10 U	10 U	11 U	11 U	10 UJ
Ethylbenzene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Isopropylbenzene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Methyl acetate	10 UJ	10 U	11 UJ	11 UJ	10 UJ
Methyl tert-butyl ether	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Methylcyclohexane	10 U	10 U	11 U	11 U	10 UJ
Methylene chloride	10 U	10 U	11 U	**2.9 J**	**5.2 J**
m-Xylene & p-Xylene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
o-Xylene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Styrene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Tetrachloroethene	**5.8**	**0.55 J**	**590 J-**	**210**	**5.1 J-**
Toluene	5.1 U	**0.39 J**	5.4 UJ	**0.52 J**	**0.47 J**
trans-1,2-Dichloroethene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
trans-1,3-Dichloropropene	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Trichloroethene	5.1 U	5.0 U	**13**	**6.7**	5.1 UJ
Trichlorofluoromethane	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ
Vinyl chloride	5.1 U	5.0 U	5.4 U	5.4 U	5.1 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU12-11/I-Z4 24-26 ft 11/07/2007	SU12-12/I-Z2 8-10 ft 11/06/2007	SU12-12/I-Z3 18-20 ft 11/06/2007	SU12-12/I-Z4 26-28 ft 11/07/2007	SU12-17/I-Z1 4-6 ft 11/12/2007
Nickel by 6010B (mg/kg)					
Nickel	**3.0 J**	**2.5 J**	**2.2 J**	**2.2 J**	**4.2 J-**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,1,2,2-Tetrachloroethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,1,2-Trichloroethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,1-Dichloroethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,1-Dichloroethene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,2,3-Trichlorobenzene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,2,4-Trichlorobenzene	**0.81 J**	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,2-Dibromo-3-chloropropane	10 U	10 UJ	10 U	10 U	10 UJ
1,2-Dibromoethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,2-Dichlorobenzene	**0.33 J**	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,2-Dichloroethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,2-Dichloropropane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,3-Dichlorobenzene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,4-Dichlorobenzene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
1,4-Dioxane[1]	400 U	400 UJ	400 U	400 U	400 UJ
2-Butanone	20 U	20 UJ	20 U	20 U	20 UJ
2-Hexanone	20 U	20 UJ	20 U	20 U	20 UJ
4-Methyl-2-Pentanone	20 U	20 UJ	20 U	20 U	20 UJ
Acetone	20 UJ	20 UJ	20 U	**8.8 J**	20 UJ
Benzene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Bromochloromethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Bromodichloromethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Bromoform	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Bromomethane	10 U	10 UJ	10 U	10 U	10 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-11/I-Z4 24-26 ft 11/07/2007	SU12-12/I-Z2 8-10 ft 11/06/2007	SU12-12/I-Z3 18-20 ft 11/06/2007	SU12-12/I-Z4 26-28 ft 11/07/2007	SU12-17/I-Z1 4-6 ft 11/12/2007
Carbon disulfide	5.0 U	5.0 UJ	5.0 U	**1.3 J**	5.0 UJ
Carbon tetrachloride	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Chlorobenzene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Chloroethane	10 U	10 UJ	10 U	10 U	10 UJ
Chloroform	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Chloromethane	10 U	10 UJ	10 U	10 U	10 UJ
cis-1,2-Dichloroethene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
cis-1,3-Dichloropropene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Cyclohexane	10 U	10 UJ	10 U	10 U	10 UJ
Dibromochloromethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Dichlorodifluoromethane	10 U	10 UJ	10 U	10 U	10 UJ
Ethylbenzene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Isopropylbenzene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Methyl acetate	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Methylcyclohexane	10 U	10 UJ	10 U	10 U	10 UJ
Methylene chloride	10 U	10 UJ	10 U	10 U	10 UJ
m-Xylene & p-Xylene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
o-Xylene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Styrene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Tetrachloroethene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Toluene	**0.48 J**	5.0 UJ	**0.86 J**	5.0 U	**0.44 J**
trans-1,2-Dichloroethene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
trans-1,3-Dichloropropene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Trichloroethene	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Trichlorofluoromethane	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
Vinyl chloride	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU12-17/I-Z2 13-14 ft 11/13/2007	SU12-17/I-Z3 21-22 ft 11/13/2007	SU12-17/I-Z4 25-26 ft 11/13/2007	SU12-22/D-Z1 3-4 ft 11/13/2007
Nickel by 6010B (mg/kg)				
Nickel	**3.6 J**	**2.0 J**	**1.7 J**	**19.8 J-**
VOCs by 8260B (µg/kg)				
1,1,1-Trichloroethane	5.1 U	5.0 U	5.0 U	5.6 U
1,1,2,2-Tetrachloroethane	5.1 U	5.0 U	5.0 U	5.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U	11 U
1,1,2-Trichloroethane	5.1 U	5.0 U	5.0 U	5.6 U
1,1-Dichloroethane	5.1 U	5.0 U	5.0 U	5.6 U
1,1-Dichloroethene	5.1 U	5.0 U	5.0 U	5.6 U
1,2,3-Trichlorobenzene	5.1 U	5.0 U	5.0 U	5.6 U
1,2,4-Trichlorobenzene	5.1 U	5.0 U	5.0 U	5.6 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	11 U
1,2-Dibromoethane	5.1 U	5.0 U	5.0 U	5.6 U
1,2-Dichlorobenzene	5.1 U	5.0 U	5.0 UJ	**5.0 J**
1,2-Dichloroethane	5.1 U	5.0 U	5.0 U	5.6 U
1,2-Dichloropropane	5.1 U	5.0 U	5.0 U	5.6 U
1,3-Dichlorobenzene	5.1 U	5.0 U	5.0 UJ	5.6 U
1,4-Dichlorobenzene	5.1 U	5.0 U	5.0 UJ	**0.51 J**
1,4-Dioxane[1]	--	--	--	--
2-Butanone	20 U	20 U	20 U	**46**
2-Hexanone	20 U	20 U	20 U	23 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	23 U
Acetone	41 U	40 U	**21 J**	**240**
Benzene	5.1 U	5.0 U	5.0 U	**0.20 J**
Bromochloromethane	5.1 U	5.0 U	5.0 U	5.6 U
Bromodichloromethane	5.1 U	5.0 U	5.0 U	5.6 U
Bromoform	5.1 U	5.0 U	5.0 U	5.6 U
Bromomethane	10 U	10 U	10 UJ	11 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-17/I-Z2 13-14 ft 11/13/2007	SU12-17/I-Z3 21-22 ft 11/13/2007	SU12-17/I-Z4 25-26 ft 11/13/2007	SU12-22/D-Z1 3-4 ft 11/13/2007
Carbon disulfide	5.1 UJ	5.0 UJ	5.0 UJ	5.6 UJ
Carbon tetrachloride	5.1 U	5.0 U	5.0 U	5.6 U
Chlorobenzene	5.1 U	5.0 U	5.0 U	5.6 U
Chloroethane	10 U	10 U	10 U	11 U
Chloroform	5.1 U	5.0 U	**0.52 J**	5.6 U
Chloromethane	10 U	10 U	10 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.0 U	5.0 U	**3.5 J**
cis-1,3-Dichloropropene	5.1 U	5.0 U	5.0 U	5.6 U
Cyclohexane	5.1 U	5.0 U	5.0 U	5.6 U
Dibromochloromethane	5.1 U	5.0 U	5.0 U	5.6 U
Dichlorodifluoromethane	10 U	10 U	10 U	11 U
Ethylbenzene	5.1 U	5.0 U	5.0 UJ	5.6 U
Isopropylbenzene	5.1 U	5.0 U	5.0 UJ	5.6 U
Methyl acetate	5.1 U	5.0 U	5.0 U	**2.7 J**
Methyl tert-butyl ether	5.1 U	5.0 U	5.0 U	5.6 U
Methylcyclohexane	5.1 U	5.0 U	5.0 U	5.6 U
Methylene chloride	**5.4**	5.0 UJ	**24**	**11**
m-Xylene & p-Xylene	10 U	10 U	10 UJ	**0.94 J**
o-Xylene	5.1 U	5.0 U	5.0 UJ	5.6 U
Styrene	5.1 U	5.0 U	5.0 U	5.6 U
Tetrachloroethene	**0.48 J**	**0.47 J**	**4.7 J**	**0.63 J**
Toluene	5.1 UJ	5.0 UJ	5.0 UJ	**1.3 J**
trans-1,2-Dichloroethene	5.1 U	5.0 U	5.0 U	5.6 U
trans-1,3-Dichloropropene	5.1 U	5.0 U	5.0 U	5.6 U
Trichloroethene	5.1 U	5.0 U	5.0 U	**0.23 J**
Trichlorofluoromethane	**0.40 J**	**0.48 J**	**0.33 J**	**0.27 J**
Vinyl chloride	10 U	10 U	10 U	11 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-22/D-Z2 15-16 ft 11/13/2007	SU12-22/D-Z3 19-20 ft 11/13/2007	SU12-22/D-Z4 27-28 ft 11/13/2007	SU12-22/D-Z5 38-39 ft 11/13/2007
Nickel by 6010B (mg/kg)				
Nickel	**2.5 J**	**1.3 J**	**3.5 J**	**1.9 J**
VOCs by 8260B (µg/kg)				
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U
1,4-Dioxane[1]	--	--	--	--
2-Butanone	20 U	20 U	20 U	20 U
2-Hexanone	20 U	20 U	20 U	20 U
4-Methyl-2-Pentanone	20 U	20 U	20 U	20 U
Acetone	41 U	40 U	41 U	41 U
Benzene	5.1 U	5.1 U	5.1 U	5.1 U
Bromochloromethane	5.1 U	5.1 U	5.1 U	5.1 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U	5.1 U
Bromoform	5.1 U	5.1 U	5.1 U	5.1 U
Bromomethane	10 U	10 U	10 U	10 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	SU12-22/D-Z2 15-16 ft 11/13/2007	SU12-22/D-Z3 19-20 ft 11/13/2007	SU12-22/D-Z4 27-28 ft 11/13/2007	SU12-22/D-Z5 38-39 ft 11/13/2007
Carbon disulfide	5.1 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Carbon tetrachloride	5.1 U	5.1 U	5.1 U	5.1 U
Chlorobenzene	5.1 U	5.1 U	5.1 U	5.1 U
Chloroethane	10 U	10 U	10 U	10 U
Chloroform	5.1 U	5.1 U	5.1 U	5.1 U
Chloromethane	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.1 U
Cyclohexane	5.1 U	5.1 U	5.1 U	5.1 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.1 U	5.1 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U	5.1 U
Methyl acetate	5.1 U	5.1 U	5.1 U	5.1 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U	5.1 U
Methylcyclohexane	5.1 U	5.1 U	5.1 U	5.1 U
Methylene chloride	5.1 UJ	5.1 UJ	5.1 UJ	**5.0 J**
m-Xylene & p-Xylene	10 U	10 U	10 U	10 U
o-Xylene	5.1 U	5.1 U	5.1 U	5.1 U
Styrene	5.1 U	5.1 U	5.1 U	5.1 U
Tetrachloroethene	5.1 U	5.1 U	5.1 U	**0.46 J**
Toluene	5.1 UJ	5.1 UJ	5.1 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U	5.1 U
Trichloroethene	5.1 U	5.1 U	5.1 U	5.1 U
Trichlorofluoromethane	**0.39 J**	**0.42 J**	10 U	**0.40 J**
Vinyl chloride	10 U	10 U	10 U	10 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU12-22/D-Z6 46-47 ft 11/14/2007	SU12-22/D-Z7 54-55 ft 11/14/2007	SU12-22/D-Z8 63-64 ft 11/14/2007
Nickel by 6010B (mg/kg)			
Nickel	**1.6 J**	4 U	**1.3 J**
VOCs by 8260B (µg/kg)			
1,1,1-Trichloroethane	5.1 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.1 U	5.1 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.1 U
1,1-Dichloroethane	5.1 U	5.1 U	5.1 U
1,1-Dichloroethene	5.1 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.1 U
1,2-Dichloroethane	5.1 U	5.1 U	5.1 U
1,2-Dichloropropane	5.1 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.1 U
1,4-Dioxane[1]	410 U	410 U	410 U
2-Butanone	20 U	20 U	20 U
2-Hexanone	20 U	20 U	20 U
4-Methyl-2-Pentanone	20 U	20 U	20 U
Acetone	**5.4 J**	20 U	20 U
Benzene	5.1 U	5.1 U	5.1 U
Bromochloromethane	5.1 U	5.1 U	5.1 U
Bromodichloromethane	5.1 U	5.1 U	5.1 U
Bromoform	5.1 U	5.1 U	5.1 U
Bromomethane	10 U	10 U	10 U

Table 3.3-3e Complete Nickel and VOC Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	SU12-22/D-Z6 46-47 ft 11/14/2007	SU12-22/D-Z7 54-55 ft 11/14/2007	SU12-22/D-Z8 63-64 ft 11/14/2007
Carbon disulfide	5.1 U	5.1 U	5.1 U
Carbon tetrachloride	5.1 U	5.1 U	5.1 U
Chlorobenzene	5.1 U	5.1 U	5.1 U
Chloroethane	10 U	10 U	10 U
Chloroform	5.1 U	5.1 U	5.1 U
Chloromethane	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U
Cyclohexane	10 U	10 U	10 U
Dibromochloromethane	5.1 U	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U
Ethylbenzene	5.1 U	5.1 U	5.1 U
Isopropylbenzene	5.1 U	5.1 U	5.1 U
Methyl acetate	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	5.1 U	5.1 U	5.1 U
Methylcyclohexane	10 U	10 U	10 U
Methylene chloride	10 U	10 UJ	10 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.1 U
o-Xylene	5.1 U	5.1 U	5.1 U
Styrene	5.1 U	5.1 U	5.1 U
Tetrachloroethene	5.1 U	5.1 U	5.1 U
Toluene	5.1 UJ	5.1 U	5.1 U
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.1 U
Trichloroethene	5.1 U	5.1 U	5.1 U
Trichlorofluoromethane	5.1 U	5.1 U	5.1 U
Vinyl chloride	5.1 U	5.1 U	5.1 U

Key for Table 3.3-3e

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C1-01-Z4	C1-02-Z3	C1-03-Z3	C2-01-Z4	C2-02-Z5	C3-01-Z4
Sample Depth:	30-32 ft	21-23 ft	23-25 ft	32-34 ft	34-36 ft	28-30 ft
Sample Date:	10/31/2007	11/01/2007	11/01/2007	10/30/2007	10/26/2007	10/26/2007
Analyte						
Nickel by 6010B (mg/kg)						
Nickel	**2.9 J**	**54.3 J-**	**2.7 J**	**2.3 J**	**1.4 J**	**1.8 J**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,1,2,2-Tetrachloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	5.1 U	5.1 U	10 U	5.2 U	5.2 U
1,1,2-Trichloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,1-Dichloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,1-Dichloroethene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,2,3-Trichlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,2,4-Trichlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,2-Dichlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,2-Dichloroethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,2-Dichloropropane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,3-Dichlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,4-Dichlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
1,4-Dioxane[1]	--	410 U	410 U	--	410 U	410 U
2-Butanone	20 U	20 U	21 U	20 U	21 U	21 U
2-Hexanone	20 U	20 U	21 U	20 U	21 U	21 U
4-Methyl-2-Pentanone	20 U	20 U	21 U	20 U	21 U	21 U
Acetone	**13 J**	20 U	21 U	41 U	21 U	21 U
Benzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Bromochloromethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Bromodichloromethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Bromoform	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Bromomethane	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C1-01-Z4	C1-02-Z3	C1-03-Z3	C2-01-Z4	C2-02-Z5	C3-01-Z4
Sample Depth:	30-32 ft	21-23 ft	23-25 ft	32-34 ft	34-36 ft	28-30 ft
Sample Date:	10/31/2007	11/01/2007	11/01/2007	10/30/2007	10/26/2007	10/26/2007
Analyte						
Carbon disulfide	5.0 UJ	5.1 U	5.1 U	5.1 UJ	5.2 U	5.2 U
Carbon tetrachloride	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Chlorobenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	**0.25 J**	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
cis-1,3-Dichloropropene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Cyclohexane	5.0 U	10 U	10 U	5.1 U	10 U	10 U
Dibromochloromethane	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Isopropylbenzene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Methyl acetate	5.0 U	10 U	10 U	5.1 U	10 U	10 U
Methyl tert-butyl ether	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Methylcyclohexane	5.0 U	10 U	10 U	5.1 U	10 U	10 U
Methylene chloride	**5.3**	10 U	10 U	**3.3 J**	10 UJ	10 UJ
m-Xylene & p-Xylene	10 U	5.1 U	5.1 U	10 U	5.2 U	5.2 U
o-Xylene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Styrene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Tetrachloroethene	**0.44 J**	5.1 U	**0.58 J**	**0.57 J**	5.2 UJ	5.2 U
Toluene	5.0 UJ	**0.65 J**	**1.1 J**	5.1 UJ	5.2 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
trans-1,3-Dichloropropene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Trichloroethene	5.0 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U
Trichlorofluoromethane	**0.25 J**	5.1 U	5.1 U	**0.45 J**	5.2 U	5.2 U
Vinyl chloride	10 U	5.1 U	5.1 U	10 U	5.2 U	5.2 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C3-02-Z4	C4-01/D-Z5	C4-01/D-Z6	C4-01/D-Z7	C4-01/D-Z8	C4-02-Z4
Sample Depth:	30-32 ft	33-35 ft	41-43 ft	55-56 ft	57-58 ft	30-31 ft
Sample Date:	10/30/2007	10/24/2007	10/24/2007	10/25/2007	10/25/2007	10/22/2007
Analyte						
Nickel by 6010B (mg/kg)						
Nickel	**3.4 J**	**3.6 J**	**5.1**	**2.6 J**	**3.2 J**	**2.4 J**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
1,1,2,2-Tetrachloroethane	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	5.2 UJ	5.1 U	3500 UJ	7400 UJ	5.3 U
1,1,2-Trichloroethane	5.2 U	5.2 UJ	**9.5 J**	1800 UJ	3700 U	5.3 U
1,1-Dichloroethane	5.2 U	5.2 UJ	5.1 U	1800 UJ	3700 U	5.3 U
1,1-Dichloroethene	5.2 U	5.2 UJ	5.1 U	1800 UJ	3700 U	5.3 U
1,2,3-Trichlorobenzene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
1,2,4-Trichlorobenzene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
1,2-Dibromo-3-chloropropane	10 U	10 UJ	10 UJ	3500 UJ	7400 U	11 U
1,2-Dibromoethane	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
1,2-Dichlorobenzene	5.2 U	**150 J**	**120 J**	1800 UJ	3700 U	5.3 U
1,2-Dichloroethane	5.2 U	5.2 UJ	5.1 U	1800 UJ	3700 U	5.3 U
1,2-Dichloropropane	5.2 U	5.2 UJ	5.1 U	1800 UJ	3700 U	5.3 U
1,3-Dichlorobenzene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
1,4-Dichlorobenzene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
1,4-Dioxane[1]	--	410 UJ	410 U	--	--	420 U
2-Butanone	21 U	21 UJ	21 U	7100 UJ	15000 UJ	21 U
2-Hexanone	21 U	21 UJ	21 UJ	7100 UJ	15000 UJ	21 U
4-Methyl-2-Pentanone	21 U	21 UJ	21 UJ	7100 UJ	15000 UJ	21 U
Acetone	42 U	21 UJ	**50 J+**	14000 UJ	30000 UJ	21 U
Benzene	5.2 U	5.2 UJ	5.1 U	1800 UJ	3700 U	5.3 U
Bromochloromethane	5.2 U	5.2 UJ	5.1 U	1800 UJ	3700 U	5.3 U
Bromodichloromethane	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Bromoform	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Bromomethane	10 UJ	10 UJ	10 U	3500 UJ	7400 UJ	11 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C3-02-Z4	C4-01/D-Z5	C4-01/D-Z6	C4-01/D-Z7	C4-01/D-Z8	C4-02-Z4
Sample Depth:	30-32 ft	33-35 ft	41-43 ft	55-56 ft	57-58 ft	30-31 ft
Sample Date:	10/30/2007	10/24/2007	10/24/2007	10/25/2007	10/25/2007	10/22/2007
Analyte						
Carbon disulfide	5.2 UJ	5.2 UJ	5.1 U	1800 UJ	3700 UJ	5.3 U
Carbon tetrachloride	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Chlorobenzene	5.2 U	5.2 UJ	**5.8 J**	1800 UJ	3700 U	5.3 U
Chloroethane	10 U	10 UJ	10 U	3500 UJ	7400 UJ	11 U
Chloroform	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Chloromethane	10 U	10 UJ	10 U	3500 UJ	7400 U	11 U
cis-1,2-Dichloroethene	5.2 U	5.2 UJ	**5.2 J+**	**160 J**	3700 U	5.3 U
cis-1,3-Dichloropropene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Cyclohexane	5.2 U	10 UJ	10 UJ	1800 UJ	3700 U	11 U
Dibromochloromethane	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Dichlorodifluoromethane	10 U	10 UJ	10 U	3500 UJ	7400 U	11 U
Ethylbenzene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Isopropylbenzene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Methyl acetate	5.2 U	10 UJ	10 U	1800 UJ	3700 U	11 U
Methyl tert-butyl ether	5.2 U	5.2 UJ	5.1 U	1800 UJ	3700 U	5.3 U
Methylcyclohexane	5.2 U	10 UJ	10 UJ	1800 UJ	3700 U	11 U
Methylene chloride	5.2 UJ	10 UJ	**2.8 J**	1800 UJ	3700 UJ	**8.5 J**
m-Xylene & p-Xylene	10 U	5.2 UJ	5.1 UJ	3500 UJ	7400 U	5.3 U
o-Xylene	5.2 U	5.2 UJ	**3.6 J**	1800 UJ	3700 U	5.3 U
Styrene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Tetrachloroethene	**1.3 J**	**780000**	**270000**	**75000 J**	**410000**	**3.4 J**
Toluene	5.2 UJ	5.2 UJ	**2.0 J**	1800 UJ	3700 UJ	5.3 U
trans-1,2-Dichloroethene	5.2 U	5.2 UJ	5.1 U	1800 UJ	3700 U	5.3 U
trans-1,3-Dichloropropene	5.2 U	5.2 UJ	5.1 UJ	1800 UJ	3700 U	5.3 U
Trichloroethene	5.2 U	**440 J**	**290 J**	**840 J**	**570 J**	5.3 U
Trichlorofluoromethane	**0.31 J**	5.2 UJ	5.1 U	3500 UJ	7400 U	5.3 U
Vinyl chloride	10 U	5.2 UJ	5.1 U	3500 UJ	7400 U	5.3 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C4-03-Z4	C5-01-Z4	C5-02-Z4	C6-01-Z7	C6-02/D-Z7	C6-03/D-Z3
Sample Depth:	31-32 ft	28-30 ft	31-33 ft	54-56 ft	50-52 ft	20-22 ft
Sample Date:	10/18/2007	11/01/2007	10/31/2007	10/31/2007	10/25/2007	10/25/2007
Analyte						
Nickel by 6010B (mg/kg)						
Nickel	**4.8**	**2.7 J**	**1.3 J**	**1.3 J**	3.3 UJ	1.4 UJ
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,1,2,2-Tetrachloroethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	5.2 U	10 U	15 U	15 UJ	10 UJ
1,1,2-Trichloroethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,1-Dichloroethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,1-Dichloroethene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,2,3-Trichlorobenzene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,2,4-Trichlorobenzene	5.2 U	5.2 U	5.2 U	7.4 UJ	7.3 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	15 U	15 U	10 U
1,2-Dibromoethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,2-Dichlorobenzene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,2-Dichloroethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,2-Dichloropropane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,3-Dichlorobenzene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,4-Dichlorobenzene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
1,4-Dioxane[1]	--	420 U	--	--	--	--
2-Butanone	21 UJ	21 U	21 U	30 U	29 UJ	20 UJ
2-Hexanone	21 UJ	21 U	21 U	30 U	29 UJ	20 UJ
4-Methyl-2-Pentanone	21 UJ	21 U	21 U	30 U	29 UJ	20 UJ
Acetone	41 UJ	21 U	42 U	59 U	58 UJ	41 UJ
Benzene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Bromochloromethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Bromodichloromethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Bromoform	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Bromomethane	10 U	10 UJ	10 UJ	15 UJ	15 UJ	10 UJ

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	C4-03-Z4 31-32 ft 10/18/2007	C5-01-Z4 28-30 ft 11/01/2007	C5-02-Z4 31-33 ft 10/31/2007	C6-01-Z7 54-56 ft 10/31/2007	C6-02/D-Z7 50-52 ft 10/25/2007	C6-03/D-Z3 20-22 ft 10/25/2007
Carbon disulfide	5.2 UJ	**0.71 J**	5.2 UJ	7.4 UJ	7.3 UJ	5.1 UJ
Carbon tetrachloride	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Chlorobenzene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Chloroethane	10 U	10 U	10 U	15 U	15 U	10 U
Chloroform	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Chloromethane	10 U	10 U	10 U	15 UJ	15 U	10 U
cis-1,2-Dichloroethene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
cis-1,3-Dichloropropene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Cyclohexane	5.2 U	10 U	5.2 U	7.4 U	7.3 U	5.1 U
Dibromochloromethane	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	15 U	15 U	10 U
Ethylbenzene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Isopropylbenzene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Methyl acetate	5.2 U	10 U	5.2 U	7.4 U	7.3 U	5.1 U
Methyl tert-butyl ether	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Methylcyclohexane	5.2 U	10 U	5.2 U	7.4 U	7.3 U	5.1 U
Methylene chloride	5.2 UJ	10 U	5.2 UJ	7.4 UJ	7.3 UJ	5.1 UJ
m-Xylene & p-Xylene	10 U	5.2 U	10 U	15 U	15 U	10 U
o-Xylene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Styrene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Tetrachloroethene	**0.28 J**	5.2 U	**0.59 J**	**0.61 J**	**2.6 J**	**0.97 J**
Toluene	5.2 UJ	**0.96 J**	5.2 UJ	7.4 UJ	7.3 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
trans-1,3-Dichloropropene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Trichloroethene	5.2 U	5.2 U	5.2 U	7.4 U	7.3 U	5.1 U
Trichlorofluoromethane	**0.46 J**	5.2 U	**0.52 J**	15 U	**1.1 J**	**0.69 J**
Vinyl chloride	10 U	5.2 U	10 U	15 U	15 U	10 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C7-01-Z4	C7-01-Z5	C7-02-Z4	C8-01-Z4	C8-02-Z4	C9-01-Z7
Sample Depth:	29.5-30 ft	35-36 ft	29.5-30 ft	28.5-30 ft	29-30 ft	48-50 ft
Sample Date:	10/17/2007	10/17/2007	10/17/2007	10/16/2007	10/16/2007	10/22/2007
Analyte						
Nickel by 6010B (mg/kg)						
Nickel	**2.4 J**	**4.8**	**2.9 J**	**37.8**	**17.4**	**119**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,1,2,2-Tetrachloroethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U	5.1 U	5.1 U	6.3 U
1,1,2-Trichloroethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,1-Dichloroethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,1-Dichloroethene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,2,3-Trichlorobenzene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,2,4-Trichlorobenzene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	13 U
1,2-Dibromoethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,2-Dichlorobenzene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,2-Dichloroethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,2-Dichloropropane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,3-Dichlorobenzene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,4-Dichlorobenzene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
1,4-Dioxane[1]	--	--	--	410 U	410 U	500 U
2-Butanone	21 UJ	21 UJ	20 UJ	20 U	20 U	25 U
2-Hexanone	21 UJ	21 UJ	20 UJ	20 U	20 U	25 U
4-Methyl-2-Pentanone	21 UJ	21 UJ	20 UJ	20 U	20 U	25 U
Acetone	41 UJ	**12 J**	41 UJ	20 U	20 U	25 U
Benzene	5.1 U	**0.19 J**	5.1 U	5.1 U	5.1 U	6.3 U
Bromochloromethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Bromodichloromethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Bromoform	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Bromomethane	10 UJ	10 UJ	10 UJ	10 U	10 U	13 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C7-01-Z4	C7-01-Z5	C7-02-Z4	C8-01-Z4	C8-02-Z4	C9-01-Z7
Sample Depth:	29.5-30 ft	35-36 ft	29.5-30 ft	28.5-30 ft	29-30 ft	48-50 ft
Sample Date:	10/17/2007	10/17/2007	10/17/2007	10/16/2007	10/16/2007	10/22/2007
Analyte						
Carbon disulfide	5.1 UJ	5.2 UJ	5.1 UJ	5.1 U	5.1 U	6.3 U
Carbon tetrachloride	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Chlorobenzene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	13 U
Chloroform	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	13 U
cis-1,2-Dichloroethene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
cis-1,3-Dichloropropene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Cyclohexane	5.1 U	5.2 U	5.1 U	10 U	10 U	13 U
Dibromochloromethane	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	13 U
Ethylbenzene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Isopropylbenzene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Methyl acetate	5.1 U	5.2 U	5.1 U	10 U	10 U	13 U
Methyl tert-butyl ether	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Methylcyclohexane	5.1 U	5.2 U	5.1 U	10 U	10 U	13 U
Methylene chloride	5.1 U	5.2 U	5.1 U	10 U	10 U	**9.5 J**
m-Xylene & p-Xylene	10 U	10 U	10 U	5.1 U	5.1 U	6.3 U
o-Xylene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Styrene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Tetrachloroethene	**0.99 J**	**9.9**	**0.24 J**	5.1 U	5.1 U	**2.5 J**
Toluene	**0.32 J**	**0.46 J**	**0.34 J**	5.1 U	5.1 U	6.3 U
trans-1,2-Dichloroethene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
trans-1,3-Dichloropropene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Trichloroethene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	6.3 U
Trichlorofluoromethane	**0.29 J**	**0.33 J**	**0.37 J**	5.1 U	5.1 U	6.3 U
Vinyl chloride	10 U	10 U	10 U	5.1 U	5.1 U	6.3 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C9-02/D-Z7	C9-02/D-Z8	C9-03/D-Z6	C9-03/D-Z7	C9-03/D-Z8	C9-04/D-Z7
Sample Depth:	52-53 ft	62-63 ft	45-46 ft	52-53 ft	60-61 ft	50-52 ft
Sample Date:	10/23/2007	10/23/2007	10/24/2007	10/24/2007	10/24/2007	10/23/2007
Analyte						
Nickel by 6010B (mg/kg)						
Nickel	**64.1**	**527**	**8020**	**1180**	**2.2 J**	**36.6**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,1,2,2-Tetrachloroethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,1,2-Trichloroethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,1-Dichloroethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,1-Dichloroethene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,2,3-Trichlorobenzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,2,4-Trichlorobenzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	11 U	10 U	11 U
1,2-Dibromoethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,2-Dichlorobenzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,2-Dichloroethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,2-Dichloropropane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,3-Dichlorobenzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,4-Dichlorobenzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
1,4-Dioxane[1]	410 U	410 U	420 U	440 U	420 U	430 U
2-Butanone	20 U	21 U	21 U	22 U	21 U	21 U
2-Hexanone	20 U	21 U	21 U	22 U	21 U	21 U
4-Methyl-2-Pentanone	20 U	21 U	21 U	22 U	21 U	21 U
Acetone	20 U	21 U	21 U	**29**	**7.1 J**	21 U
Benzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Bromochloromethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Bromodichloromethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Bromoform	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Bromomethane	10 U	10 U	10 U	11 U	10 U	11 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C9-02/D-Z7	C9-02/D-Z8	C9-03/D-Z6	C9-03/D-Z7	C9-03/D-Z8	C9-04/D-Z7
Sample Depth:	52-53 ft	62-63 ft	45-46 ft	52-53 ft	60-61 ft	50-52 ft
Sample Date:	10/23/2007	10/23/2007	10/24/2007	10/24/2007	10/24/2007	10/23/2007
Analyte						
Carbon disulfide	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Carbon tetrachloride	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Chlorobenzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Chloroethane	10 U	10 U	10 U	11 U	10 U	11 U
Chloroform	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Chloromethane	10 U	10 U	10 U	11 U	10 U	11 U
cis-1,2-Dichloroethene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
cis-1,3-Dichloropropene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Cyclohexane	10 U	10 U	10 U	11 U	10 U	11 U
Dibromochloromethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Dichlorodifluoromethane	10 U	10 U	10 U	11 U	10 U	11 U
Ethylbenzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Isopropylbenzene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Methyl acetate	10 U	10 U	10 U	11 U	10 U	11 U
Methyl tert-butyl ether	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Methylcyclohexane	10 U	10 U	10 U	11 U	10 U	11 U
Methylene chloride	10 U	10 U	10 U	11 U	10 U	11 U
m-Xylene & p-Xylene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
o-Xylene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Styrene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Tetrachloroethene	5.1 U	5.1 U	**2.4 J**	**9.5**	5.2 U	5.3 UJ
Toluene	5.1 U	5.1 UJ	5.2 UJ	5.4 U	5.2 U	5.3 UJ
trans-1,2-Dichloroethene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
trans-1,3-Dichloropropene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Trichloroethene	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Trichlorofluoromethane	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U
Vinyl chloride	5.1 U	5.1 U	5.2 U	5.4 U	5.2 U	5.3 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C9-04/D-Z8	C10-01-Z4	C10-02-Z4	C11-01-Z7	C11-02-Z6	C11-02-Z7
Sample Depth:	60-61 ft	28-30 ft	28-30 ft	51-52 ft	47-48 ft	51-52 ft
Sample Date:	10/23/2007	10/22/2007	10/22/2007	10/19/2007	10/18/2007	10/18/2007
Analyte						
Nickel by 6010B (mg/kg)						
Nickel	**42.3**	**12.5**	**3.3 J**	**10.1**	4 U	**4.3**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
1,1,2,2-Tetrachloroethane	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.4 U	5.9 U	6.0 U	10 U	10 U	13 U
1,1,2-Trichloroethane	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
1,1-Dichloroethane	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
1,1-Dichloroethene	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
1,2,3-Trichlorobenzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
1,2,4-Trichlorobenzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
1,2-Dibromo-3-chloropropane	11 U	12 U	12 U	10 UJ	10 U	13 U
1,2-Dibromoethane	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
1,2-Dichlorobenzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
1,2-Dichloroethane	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
1,2-Dichloropropane	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
1,3-Dichlorobenzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
1,4-Dichlorobenzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
1,4-Dioxane[1]	430 U	470 UJ	480 U	--	--	--
2-Butanone	22 U	24 U	24 U	20 UJ	21 UJ	25 UJ
2-Hexanone	22 U	24 UJ	24 U	20 UJ	21 UJ	25 UJ
4-Methyl-2-Pentanone	22 U	24 U	24 U	20 UJ	21 UJ	25 UJ
Acetone	22 U	24 U	24 U	41 UJ	41 UJ	50 UJ
Benzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
Bromochloromethane	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Bromodichloromethane	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Bromoform	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Bromomethane	11 U	12 U	12 U	10 U	10 U	13 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C9-04/D-Z8	C10-01-Z4	C10-02-Z4	C11-01-Z7	C11-02-Z6	C11-02-Z7
Sample Depth:	60-61 ft	28-30 ft	28-30 ft	51-52 ft	47-48 ft	51-52 ft
Sample Date:	10/23/2007	10/22/2007	10/22/2007	10/19/2007	10/18/2007	10/18/2007
Analyte						
Carbon disulfide	5.4 U	5.9 U	6.0 U	5.1 UJ	5.1 UJ	6.3 UJ
Carbon tetrachloride	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Chlorobenzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
Chloroethane	11 U	12 U	12 U	10 UJ	10 U	13 U
Chloroform	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Chloromethane	11 U	12 U	12 U	10 U	10 U	13 U
cis-1,2-Dichloroethene	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
cis-1,3-Dichloropropene	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Cyclohexane	11 U	12 UJ	12 U	5.1 U	5.1 U	**0.31 J**
Dibromochloromethane	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Dichlorodifluoromethane	11 U	12 UJ	12 U	10 U	10 U	13 U
Ethylbenzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
Isopropylbenzene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
Methyl acetate	11 U	12 U	12 U	5.1 U	5.1 U	6.3 U
Methyl tert-butyl ether	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Methylcyclohexane	11 U	12 UJ	12 U	5.1 U	5.1 U	6.3 U
Methylene chloride	11 U	12 U	12 U	**0.47 J**	5.1 UJ	6.3 UJ
m-Xylene & p-Xylene	5.4 U	5.9 UJ	6.0 U	10 U	10 U	13 U
o-Xylene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
Styrene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	6.3 U
Tetrachloroethene	5.4 UJ	**2.5 J**	**1.7 J**	**2.0 J**	**11**	**250**
Toluene	5.4 UJ	5.9 UJ	6.0 U	5.1 UJ	5.1 UJ	6.3 UJ
trans-1,2-Dichloroethene	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
trans-1,3-Dichloropropene	5.4 U	5.9 U	6.0 U	5.1 U	5.1 U	6.3 U
Trichloroethene	5.4 U	5.9 UJ	6.0 U	5.1 U	5.1 U	**1.5 J**
Trichlorofluoromethane	5.4 U	5.9 U	6.0 U	10 U	**0.53 J**	**0.72 J**
Vinyl chloride	5.4 U	5.9 U	6.0 U	10 U	10 U	13 U

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	C12-01-Z5	C12-02-Z4	C13-01-Z2	C13-02-Z2	C13-03-Z2	C13-03-Z3
Sample Depth:	32-33.5 ft	30-32 ft	14.5-16 ft	14.5-16 ft	15.5-16 ft	23-24 ft
Sample Date:	10/22/2007	10/22/2007	10/16/2007	10/16/2007	10/17/2007	10/17/2007
Analyte						
Nickel by 6010B (mg/kg)						
Nickel	**3.5 J**	**6.6**	**2.0 J**	**2.9 J**	**5.4**	**1.4 J**
VOCs by 8260B (µg/kg)						
1,1,1-Trichloroethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,1,2,2-Tetrachloroethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	7.8 UJ	5.1 U	5.1 U	10 U	10 U
1,1,2-Trichloroethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,1-Dichloroethene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,2,3-Trichlorobenzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,2,4-Trichlorobenzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	16 UJ	10 U	10 U	10 U	10 U
1,2-Dibromoethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichlorobenzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichloroethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,2-Dichloropropane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,3-Dichlorobenzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,4-Dichlorobenzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
1,4-Dioxane[1]	410 U	620 UJ	410 U	410 U	--	--
2-Butanone	20 U	31 UJ	20 U	20 U	20 UJ	20 UJ
2-Hexanone	20 U	31 UJ	20 U	20 U	20 UJ	20 UJ
4-Methyl-2-Pentanone	20 U	31 UJ	20 U	20 U	20 UJ	20 UJ
Acetone	20 U	31 UJ	20 U	20 U	41 UJ	41 UJ
Benzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Bromochloromethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Bromodichloromethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Bromoform	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Bromomethane	10 U	16 UJ	10 U	10 U	10 U	10 UJ

Table 3.3-3f Complete Nickel and VOC Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	C12-01-Z5 32-33.5 ft 10/22/2007	C12-02-Z4 30-32 ft 10/22/2007	C13-01-Z2 14.5-16 ft 10/16/2007	C13-02-Z2 14.5-16 ft 10/16/2007	C13-03-Z2 15.5-16 ft 10/17/2007	C13-03-Z3 23-24 ft 10/17/2007
Carbon disulfide	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 UJ	5.1 UJ
Carbon tetrachloride	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Chlorobenzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Chloroethane	10 U	16 UJ	10 U	10 U	10 U	10 U
Chloroform	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Chloromethane	10 U	16 UJ	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
cis-1,3-Dichloropropene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Cyclohexane	10 U	16 UJ	10 U	10 U	5.1 U	5.1 U
Dibromochloromethane	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Dichlorodifluoromethane	10 U	16 UJ	10 U	10 U	10 U	10 U
Ethylbenzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Isopropylbenzene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Methyl acetate	10 U	16 UJ	10 U	10 U	5.1 U	5.1 U
Methyl tert-butyl ether	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Methylcyclohexane	10 U	16 UJ	10 U	10 U	5.1 U	5.1 U
Methylene chloride	**7.0 J**	**11 J**	10 U	10 U	5.1 U	**0.48 J**
m-Xylene & p-Xylene	5.1 U	7.8 UJ	5.1 U	5.1 U	10 U	10 U
o-Xylene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Styrene	5.1 U	7.8 UJ	5.1 U	5.1 U	**0.32 J**	**0.27 J**
Tetrachloroethene	**1.9 J**	**2.6 J**	5.1 U	5.1 U	**0.99 J**	**0.77 J**
Toluene	5.1 U	7.8 UJ	5.1 U	5.1 U	**0.38 J**	**0.52 J**
trans-1,2-Dichloroethene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
trans-1,3-Dichloropropene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Trichloroethene	5.1 U	7.8 UJ	5.1 U	5.1 U	5.1 U	5.1 U
Trichlorofluoromethane	5.1 U	7.8 UJ	5.1 U	5.1 U	**0.33 J**	**0.84 J**
Vinyl chloride	5.1 U	7.8 UJ	5.1 U	5.1 U	10 U	10 U

Key for Table 3.3-3f

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	DR-AA-Z1 4-6 ft 11/09/2007	DR-AA-Z2 10-12 ft 11/09/2007	DR-BB-1/2-Z1 4-6 ft 11/08/2007	DR-BB-1/2-Z2 8-10 ft 11/08/2007	DR-CC-Z1 2-4 ft 11/08/2007	DR-CC-Z2 10-12 ft 11/08/2007	DR-D-Z2 13-14 ft 10/31/2007
Nickel by 6010B (mg/kg)							
Nickel	**9.8**	**9.2**	**4.4**	**2.6 J**	**5.9**	**3.7 J**	**2.6 J**
VOCs by 8260B (µg/kg)							
1,1,1-Trichloroethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,1,2,2-Tetrachloroethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	10 U
1,1,2-Trichloroethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,1-Dichloroethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,1-Dichloroethene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,2,3-Trichlorobenzene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,2,4-Trichlorobenzene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,2-Dibromo-3-chloropropane	11 UJ	12 UJ	11 UJ	11 UJ	11 U	10 UJ	10 U
1,2-Dibromoethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,2-Dichlorobenzene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,2-Dichloroethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,2-Dichloropropane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,3-Dichlorobenzene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,4-Dichlorobenzene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
1,4-Dioxane[1]	430 UJ	480 UJ	430 UJ	460 UJ	430 U	410 UJ	--
2-Butanone	22 UJ	24 UJ	21 UJ	23 UJ	21 U	20 UJ	20 U
2-Hexanone	22 UJ	24 UJ	21 UJ	23 UJ	21 U	20 UJ	20 U
4-Methyl-2-Pentanone	22 UJ	24 UJ	21 UJ	23 UJ	21 U	20 UJ	20 U
Acetone	22 UJ	24 UJ	**14 J**	27 UJ	21 U	**15 J**	40 U
Benzene	**0.20 J**	6.0 UJ	**0.49 J**	5.7 UJ	5.4 U	**0.42 J**	5.0 U
Bromochloromethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Bromodichloromethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Bromoform	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Bromomethane	11 UJ	12 UJ	11 UJ	11 UJ	11 U	10 UJ	10 UJ

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	DR-AA-Z1 4-6 ft 11/09/2007	DR-AA-Z2 10-12 ft 11/09/2007	DR-BB-1/2-Z1 4-6 ft 11/08/2007	DR-BB-1/2-Z2 8-10 ft 11/08/2007	DR-CC-Z1 2-4 ft 11/08/2007	DR-CC-Z2 10-12 ft 11/08/2007	DR-D-Z2 13-14 ft 10/31/2007
Carbon disulfide	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 UJ
Carbon tetrachloride	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Chlorobenzene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Chloroethane	11 UJ	12 UJ	11 UJ	11 UJ	11 U	10 UJ	10 U
Chloroform	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Chloromethane	11 UJ	12 UJ	11 UJ	11 UJ	11 U	10 UJ	10 U
cis-1,2-Dichloroethene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
cis-1,3-Dichloropropene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Cyclohexane	11 UJ	12 UJ	11 UJ	11 UJ	11 U	10 UJ	5.0 U
Dibromochloromethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Dichlorodifluoromethane	11 UJ	12 UJ	11 UJ	11 UJ	11 U	10 UJ	10 U
Ethylbenzene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Isopropylbenzene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Methyl acetate	11 UJ	12 UJ	11 UJ	11 UJ	11 UJ	10 UJ	5.0 U
Methyl tert-butyl ether	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Methylcyclohexane	11 UJ	12 UJ	11 UJ	11 UJ	11 U	10 UJ	5.0 U
Methylene chloride	11 UJ	12 UJ	11 UJ	14 UJ	11 U	**3.4 J**	5.0 UJ
m-Xylene & p-Xylene	5.4 UJ	6.0 UJ	**0.69 J**	**0.94 J**	5.4 U	**1.4 J**	10 U
o-Xylene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	**0.93 J**	5.0 U
Styrene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Tetrachloroethene	**6.7 J-**	**25 J-**	**23 J-**	5.7 UJ	5.4 U	5.1 UJ	**0.53 J**
Toluene	**0.46 J**	**0.84 J**	**1.1 J**	**1.3 J**	**1.4 J**	**1.3 J**	5.0 UJ
trans-1,2-Dichloroethene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
trans-1,3-Dichloropropene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Trichloroethene	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	5.0 U
Trichlorofluoromethane	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	**0.50 J**
Vinyl chloride	5.4 UJ	6.0 UJ	5.3 UJ	5.7 UJ	5.4 U	5.1 UJ	10 U

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID:	DR-J-Z3	DR-K-Z4	DR-W-Z1	DR-X-Z1	DR-X-Z2	DR-Y-Z1	DR-Y-Z2
Sample Depth:	16-18 ft	30-32 ft	4-5 ft	4-6 ft	8-10 ft	4-6 ft	10-12 ft
Sample Date:	11/06/2007	11/05/2007	11/09/2007	11/09/2007	11/09/2007	11/08/2007	11/08/2007
Analyte							
Nickel by 6010B (mg/kg)							
Nickel	**1.7 J**	**1.9 J**	**2.2 J**	**2.2 J**	**4.3**	**3.1 J**	**5.8**
VOCs by 8260B (µg/kg)							
1,1,1-Trichloroethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,1,2,2-Tetrachloroethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,1,2-Trichloroethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,1-Dichloroethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,1-Dichloroethene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,2,3-Trichlorobenzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,2,4-Trichlorobenzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,2-Dibromo-3-chloropropane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
1,2-Dibromoethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,2-Dichlorobenzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,2-Dichloroethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,2-Dichloropropane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,3-Dichlorobenzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,4-Dichlorobenzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
1,4-Dioxane[1]	410 U	410 U	400 UJ	400 UJ	400 UJ	400 UJ	410 UJ
2-Butanone	20 U	21 U	20 UJ	20 UJ	20 UJ	20 UJ	21 UJ
2-Hexanone	20 U	21 U	20 UJ	20 UJ	20 UJ	20 UJ	21 UJ
4-Methyl-2-Pentanone	20 U	21 U	20 UJ	20 UJ	20 UJ	20 UJ	21 UJ
Acetone	**8.5 J**	21 U	20 UJ	20 UJ	**13 J**	20 UJ	21 UJ
Benzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Bromochloromethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Bromodichloromethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Bromoform	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Bromomethane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	DR-J-Z3 16-18 ft 11/06/2007	DR-K-Z4 30-32 ft 11/05/2007	DR-W-Z1 4-5 ft 11/09/2007	DR-X-Z1 4-6 ft 11/09/2007	DR-X-Z2 8-10 ft 11/09/2007	DR-Y-Z1 4-6 ft 11/08/2007	DR-Y-Z2 10-12 ft 11/08/2007
Carbon disulfide	5.1 U	5.2 UJ	5.0 UJ	**2.3 J**	5.1 UJ	5.0 UJ	5.2 UJ
Carbon tetrachloride	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Chlorobenzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Chloroethane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Chloroform	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Chloromethane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
cis-1,2-Dichloroethene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
cis-1,3-Dichloropropene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Cyclohexane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Dibromochloromethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Dichlorodifluoromethane	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Ethylbenzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Isopropylbenzene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Methyl acetate	10 UJ	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Methylcyclohexane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Methylene chloride	10 U	10 U	**2.7 J**	**9.9 J**	10 UJ	**4.5 J**	**2.9 J**
m-Xylene & p-Xylene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
o-Xylene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Styrene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Tetrachloroethene	**1.7 J**	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Toluene	**0.90 J**	**0.47 J**	**0.62 J**	**0.90 J**	5.1 UJ	**1.0 J**	**1.4 J**
trans-1,2-Dichloroethene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
trans-1,3-Dichloropropene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Trichloroethene	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Trichlorofluoromethane	5.1 U	5.2 U	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ
Vinyl chloride	5.1 U	5.2 UJ	5.0 UJ	5.0 UJ	5.1 UJ	5.0 UJ	5.2 UJ

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	DR-Z-Z1 0-2 ft 11/09/2007	DR-Z-Z1A 6-7 ft 11/15/2007	DRH-A1-Z3 22-24 ft 11/02/2007	DRH-A1-Z4 24-26 ft 11/02/2007	DRH-A2-Z3 20-22 ft 11/06/2007	LPH-A/D-Z1 4-6 ft 10/29/2007	LPH-A/D-Z2 8-10 ft 10/29/2007
Nickel by 6010B (mg/kg)							
Nickel	**10.2**	**4.4 J+**	**19.1**	**13.1**	**3.3 J**	**8.8**	**4.6**
VOCs by 8260B (µg/kg)							
1,1,1-Trichloroethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
1,1,2,2-Tetrachloroethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 UJ
1,1,2-Trichloroethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
1,1-Dichloroethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
1,1-Dichloroethene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
1,2,3-Trichlorobenzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 UJ	5.2 UJ
1,2,4-Trichlorobenzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 UJ	5.2 UJ
1,2-Dibromo-3-chloropropane	11 UR	11 U	10 U	10 U	10 U	11 UJ	10 UJ
1,2-Dibromoethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
1,2-Dichlorobenzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 UJ	5.2 UJ
1,2-Dichloroethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
1,2-Dichloropropane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
1,3-Dichlorobenzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 UJ	5.2 UJ
1,4-Dichlorobenzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 UJ	5.2 UJ
1,4-Dioxane[1]	430 UR	420 U	410 U	410 U	410 U	420 U	420 U
2-Butanone	22 UR	21 U	20 U	20 U	20 U	21 U	21 U
2-Hexanone	22 UR	21 U	20 U	20 U	20 U	21 U	21 U
4-Methyl-2-Pentanone	22 UR	21 U	20 U	20 U	20 U	21 U	21 U
Acetone	22 UR	21 U	20 U	20 U	**19 J**	21 U	21 U
Benzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Bromochloromethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Bromodichloromethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Bromoform	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 UJ	5.2 UJ
Bromomethane	11 UR	11 U	10 U	10 U	10 U	11 UJ	10 UJ

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	DR-Z-Z1 0-2 ft 11/09/2007	DR-Z-Z1A 6-7 ft 11/15/2007	DRH-A1-Z3 22-24 ft 11/02/2007	DRH-A1-Z4 24-26 ft 11/02/2007	DRH-A2-Z3 20-22 ft 11/06/2007	LPH-A/D-Z1 4-6 ft 10/29/2007	LPH-A/D-Z2 8-10 ft 10/29/2007
Carbon disulfide	5.4 UR	5.3 U	5.1 UJ	5.1 UJ	5.1 U	5.3 U	5.2 UJ
Carbon tetrachloride	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Chlorobenzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Chloroethane	11 UR	11 U	10 U	10 U	10 U	11 U	10 U
Chloroform	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Chloromethane	11 UR	11 U	10 U	10 U	10 U	11 U	10 U
cis-1,2-Dichloroethene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
cis-1,3-Dichloropropene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Cyclohexane	11 UR	11 U	10 U	10 U	10 U	11 U	10 U
Dibromochloromethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Dichlorodifluoromethane	11 UR	11 U	10 UJ	10 UJ	10 U	11 U	10 U
Ethylbenzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Isopropylbenzene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Methyl acetate	11 UR	11 U	10 U	10 U	10 UJ	11 U	10 U
Methyl tert-butyl ether	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Methylcyclohexane	11 UR	11 U	10 U	10 U	10 U	11 U	10 U
Methylene chloride	11 UR	11 U	10 U	10 U	10 U	11 U	10 U
m-Xylene & p-Xylene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
o-Xylene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Styrene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Tetrachloroethene	5.4 UR	5.3 U	**3.4 J**	**2.0 J**	5.1 U	**11 J+**	**5.9 J+**
Toluene	5.4 UR	5.3 U	**0.63 J**	**0.54 J**	**0.40 J**	5.3 UJ	5.2 UJ
trans-1,2-Dichloroethene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
trans-1,3-Dichloropropene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Trichloroethene	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	**1.4 J**	5.2 U
Trichlorofluoromethane	5.4 UR	5.3 U	5.1 U	5.1 U	5.1 U	5.3 U	5.2 U
Vinyl chloride	5.4 UR	5.3 U	5.1 UJ	5.1 UJ	5.1 U	5.3 U	5.2 U

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	LPH-A/D-Z3 22-24 ft 10/29/2007	LPH-A/D-Z4 30-32 ft 10/29/2007	LPH-A/D-Z5 36-38 ft 10/29/2007	LPH-A/D-Z6 42-44 ft 10/29/2007	LPH-C/D-Z1 6-8 ft 10/18/2007	LPH-C/D-Z2 8-10 ft 10/18/2007	LPH-C/D-Z3 22-24 ft 10/18/2007
Nickel by 6010B (mg/kg)							
Nickel	**3.0 J**	**1.8 J**	**2.0 J**	**3.1 J**	**4.0**	**6.7**	**3.5 J**
VOCs by 8260B (µg/kg)							
1,1,1-Trichloroethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,1,2,2-Tetrachloroethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2 UJ	5.1 UJ	5.2 UJ	5.2 UJ	13 UJ	11 U	10 U
1,1,2-Trichloroethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,1-Dichloroethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,1-Dichloroethene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,2,3-Trichlorobenzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,2,4-Trichlorobenzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	13 UJ	11 U	10 U
1,2-Dibromoethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,2-Dichlorobenzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,2-Dichloroethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,2-Dichloropropane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,3-Dichlorobenzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,4-Dichlorobenzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
1,4-Dioxane[1]	410 U	410 U	410 U	410 U	--	--	--
2-Butanone	21 U	20 U	21 U	21 U	26 UJ	**1.9 J**	20 UJ
2-Hexanone	21 U	20 U	21 U	21 U	26 UJ	22 UJ	20 UJ
4-Methyl-2-Pentanone	21 U	20 U	21 U	21 U	26 UJ	22 UJ	20 UJ
Acetone	21 U	20 U	21 U	21 U	52 UJ	44 UJ	41 UJ
Benzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Bromochloromethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Bromodichloromethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Bromoform	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Bromomethane	10 UJ	10 UJ	10 UJ	10 UJ	**31 J-**	11 U	10 UJ

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	LPH-A/D-Z3 22-24 ft 10/29/2007	LPH-A/D-Z4 30-32 ft 10/29/2007	LPH-A/D-Z5 36-38 ft 10/29/2007	LPH-A/D-Z6 42-44 ft 10/29/2007	LPH-C/D-Z1 6-8 ft 10/18/2007	LPH-C/D-Z2 8-10 ft 10/18/2007	LPH-C/D-Z3 22-24 ft 10/18/2007
Carbon disulfide	5.2 UJ	5.1 UJ	5.2 UJ	5.2 UJ	6.4 UJ	5.5 UJ	5.1 UJ
Carbon tetrachloride	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Chlorobenzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Chloroethane	10 U	10 U	10 U	10 U	13 UJ	11 U	10 U
Chloroform	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Chloromethane	10 U	10 U	10 U	10 U	13 UJ	11 U	10 U
cis-1,2-Dichloroethene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
cis-1,3-Dichloropropene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Cyclohexane	10 U	10 U	10 U	10 U	6.4 UJ	5.5 U	5.1 U
Dibromochloromethane	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	13 UJ	11 U	10 U
Ethylbenzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Isopropylbenzene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Methyl acetate	10 U	10 U	10 U	10 U	6.4 UJ	5.5 U	5.1 U
Methyl tert-butyl ether	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Methylcyclohexane	10 U	10 U	10 U	10 U	6.4 UJ	5.5 U	5.1 U
Methylene chloride	10 U	10 U	10 U	10 U	6.4 UJ	5.5 UJ	5.1 UJ
m-Xylene & p-Xylene	5.2 U	5.1 U	5.2 U	5.2 U	13 UJ	11 U	10 U
o-Xylene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Styrene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Tetrachloroethene	5.2 UJ	5.1 U	5.2 U	5.2 UJ	6.4 UJ	**1.7 J**	5.1 U
Toluene	5.2 UJ	5.1 UJ	**1.8 J**	5.2 UJ	6.4 UJ	5.5 UJ	5.1 UJ
trans-1,2-Dichloroethene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
trans-1,3-Dichloropropene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	5.5 U	5.1 U
Trichloroethene	5.2 U	5.1 U	5.2 U	5.2 U	6.4 UJ	**0.30 J**	5.1 U
Trichlorofluoromethane	5.2 U	5.1 U	5.2 U	5.2 U	**0.52 J**	**0.62 J**	**0.65 J**
Vinyl chloride	5.2 U	5.1 U	5.2 U	5.2 U	13 UJ	11 U	10 U

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	LPH-C/D-Z4 30-32 ft 10/18/2007	LPH-C/D-Z5 38-40 ft 10/18/2007	LPH-C/D-Z6 46-48 ft 10/19/2007	LPH-C/D-Z7 54-58 ft 10/19/2007	LPH-C/D-Z8 62-64 ft 10/19/2007
Nickel by 6010B (mg/kg)					
Nickel	**2.1 J**	**3.1 J**	**11.5**	**3.0 J**	4 U
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,1,2,2-Tetrachloroethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	11 U	10 U	14 U	12 U	10 U
1,1,2-Trichloroethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,1-Dichloroethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,1-Dichloroethene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,2,3-Trichlorobenzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,2,4-Trichlorobenzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,2-Dibromo-3-chloropropane	11 U	10 U	14 UJ	12 UJ	10 UJ
1,2-Dibromoethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,2-Dichlorobenzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,2-Dichloroethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,2-Dichloropropane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,3-Dichlorobenzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,4-Dichlorobenzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
1,4-Dioxane[1]	--	--	--	--	--
2-Butanone	21 UJ	20 UJ	28 UJ	23 UJ	21 UJ
2-Hexanone	21 UJ	20 UJ	28 UJ	23 UJ	21 UJ
4-Methyl-2-Pentanone	21 UJ	20 UJ	28 UJ	23 UJ	21 UJ
Acetone	42 UJ	41 UJ	56 UJ	46 UJ	41 UJ
Benzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Bromochloromethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Bromodichloromethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Bromoform	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Bromomethane	11 U	10 U	14 U	12 U	10 U

Table 3.3-3g Complete Nickel and VOC Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	LPH-C/D-Z4 30-32 ft 10/18/2007	LPH-C/D-Z5 38-40 ft 10/18/2007	LPH-C/D-Z6 46-48 ft 10/19/2007	LPH-C/D-Z7 54-58 ft 10/19/2007	LPH-C/D-Z8 62-64 ft 10/19/2007
Carbon disulfide	5.3 UJ	5.1 UJ	7.0 UJ	5.8 UJ	5.2 UJ
Carbon tetrachloride	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Chlorobenzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Chloroethane	11 U	10 U	14 UJ	12 UJ	10 UJ
Chloroform	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Chloromethane	11 U	10 U	14 U	12 U	10 U
cis-1,2-Dichloroethene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
cis-1,3-Dichloropropene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Cyclohexane	5.3 U	5.1 U	**0.41 J**	5.8 U	5.2 U
Dibromochloromethane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Dichlorodifluoromethane	11 U	10 U	14 U	12 U	10 U
Ethylbenzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Isopropylbenzene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Methyl acetate	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Methyl tert-butyl ether	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Methylcyclohexane	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Methylene chloride	5.3 UJ	5.1 UJ	**1.1 J**	**0.49 J**	**0.47 J**
m-Xylene & p-Xylene	11 U	10 U	14 U	12 U	10 U
o-Xylene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Styrene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Tetrachloroethene	5.3 U	5.1 U	**1.7 J**	5.8 U	5.2 U
Toluene	5.3 UJ	5.1 UJ	7.0 UJ	5.8 UJ	5.2 U
trans-1,2-Dichloroethene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
trans-1,3-Dichloropropene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Trichloroethene	5.3 U	5.1 U	7.0 U	5.8 U	5.2 U
Trichlorofluoromethane	**0.38 J**	**0.56 J**	**1.3 J**	**0.35 J**	10 U
Vinyl chloride	11 U	10 U	14 U	12 U	10 U

Key for Table 3.3-3g

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	EM-7-SO-01 3 ft 11/14/2007	EM-7-SO-02 4.5 ft 11/14/2007	EM-8-SO-01 3 ft 11/14/2007	EM-8-SO-02 5 ft 11/14/2007	EM-9-SO-01 3 ft 11/14/2007
Nickel by 6010B (mg/kg)					
Nickel	**10.5**	**7.7**	**72.2**	**168**	**33.0**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1,2,2-Tetrachloroethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1,2-Trichloroethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1-Dichloroethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1-Dichloroethene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2,3-Trichlorobenzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2,4-Trichlorobenzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2-Dibromo-3-chloropropane	12 UJ	10 UJ	11 UJ	11 UJ	11 UJ
1,2-Dibromoethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2-Dichlorobenzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2-Dichloroethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2-Dichloropropane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,3-Dichlorobenzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,4-Dichlorobenzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,4-Dioxane[1]	490 UJ	420 UJ	430 UJ	430 UJ	430 UJ
2-Butanone	**37 J-**	21 UJ	22 UJ	21 UJ	21 UJ
2-Hexanone	24 UJ	21 UJ	22 UJ	21 UJ	21 UJ
4-Methyl-2-Pentanone	24 UJ	21 UJ	22 UJ	21 UJ	21 UJ
Acetone	**160 J-**	21 UJ	22 UJ	21 UJ	21 UJ
Benzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Bromochloromethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Bromodichloromethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Bromoform	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Bromomethane	12 UJ	10 UJ	11 UJ	11 UJ	11 UJ

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	EM-7-SO-01 3 ft 11/14/2007	EM-7-SO-02 4.5 ft 11/14/2007	EM-8-SO-01 3 ft 11/14/2007	EM-8-SO-02 5 ft 11/14/2007	EM-9-SO-01 3 ft 11/14/2007
Carbon disulfide	**1.3 J**	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Carbon tetrachloride	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Chlorobenzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Chloroethane	12 UJ	10 UJ	11 UJ	11 UJ	11 UJ
Chloroform	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Chloromethane	12 UJ	10 UJ	11 UJ	11 UJ	11 UJ
cis-1,2-Dichloroethene	**24 J-**	5.2 UJ	5.4 UJ	**2.7 J**	5.3 UJ
cis-1,3-Dichloropropene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Cyclohexane	12 UJ	10 UJ	11 UJ	11 UJ	11 UJ
Dibromochloromethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Dichlorodifluoromethane	12 UJ	10 UJ	11 UJ	11 UJ	11 UJ
Ethylbenzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Isopropylbenzene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Methyl acetate	12 UJ	10 UJ	11 UJ	11 UJ	11 UJ
Methyl tert-butyl ether	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Methylcyclohexane	12 UJ	10 UJ	11 UJ	11 UJ	11 UJ
Methylene chloride	**4.1 J**	10 UJ	**4.2 J**	11 UJ	**6.4 J**
m-Xylene & p-Xylene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
o-Xylene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Styrene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Tetrachloroethene	**2.8 J**	**13 J-**	**160 J-**	**2000 J+**	**180 J-**
Toluene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
trans-1,2-Dichloroethene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
trans-1,3-Dichloropropene	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Trichloroethene	**1.8 J**	**1.6 J**	**2.6 J**	**4.8 J**	**2.7 J**
Trichlorofluoromethane	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Vinyl chloride	6.1 UJ	5.2 UJ	5.4 UJ	5.3 UJ	5.3 UJ

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	EM-9-SO-02 5 ft 11/14/2007	EM-11-SO-01 3 ft 11/13/2007	EM-11-SO-02 10 ft 11/13/2007	EM-13-SO-01 3 ft 11/13/2007	EM-13-SO-02 4 ft 11/13/2007
Nickel by 6010B (mg/kg)					
Nickel	**45.9**	**149 J-**	**5.2 J-**	**231 J-**	**21.8 J-**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,1,2,2-Tetrachloroethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.3 UJ	11 U	10 U	11 U	12 U
1,1,2-Trichloroethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,1-Dichloroethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,1-Dichloroethene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,2,3-Trichlorobenzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,2,4-Trichlorobenzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,2-Dibromo-3-chloropropane	11 UJ	11 U	10 U	11 U	12 U
1,2-Dibromoethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,2-Dichlorobenzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,2-Dichloroethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,2-Dichloropropane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,3-Dichlorobenzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,4-Dichlorobenzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
1,4-Dioxane[1]	420 UJ	--	--	--	--
2-Butanone	21 UJ	23 U	21 U	**12 J**	23 U
2-Hexanone	21 UJ	23 U	21 U	23 U	23 U
4-Methyl-2-Pentanone	21 UJ	23 U	21 U	23 U	23 U
Acetone	21 UJ	46 U	**22 J**	**84**	46 U
Benzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Bromochloromethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Bromodichloromethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Bromoform	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Bromomethane	11 UJ	11 U	10 U	11 UJ	12 UJ

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	EM-9-SO-02 5 ft 11/14/2007	EM-11-SO-01 3 ft 11/13/2007	EM-11-SO-02 10 ft 11/13/2007	EM-13-SO-01 3 ft 11/13/2007	EM-13-SO-02 4 ft 11/13/2007
Carbon disulfide	5.3 UJ	5.7 UJ	5.1 UJ	5.7 UJ	5.8 UJ
Carbon tetrachloride	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Chlorobenzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Chloroethane	11 UJ	11 U	10 U	11 U	12 U
Chloroform	5.3 UJ	5.7 U	**0.58 J**	**0.92 J**	5.8 U
Chloromethane	11 UJ	11 U	10 U	11 U	12 U
cis-1,2-Dichloroethene	5.3 UJ	5.7 U	5.1 U	**0.57 J**	5.8 U
cis-1,3-Dichloropropene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Cyclohexane	11 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Dibromochloromethane	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Dichlorodifluoromethane	11 UJ	11 U	10 U	11 U	12 U
Ethylbenzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Isopropylbenzene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Methyl acetate	11 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Methyl tert-butyl ether	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Methylcyclohexane	11 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Methylene chloride	**4.2 J**	**4.6 J**	**14**	**17**	5.8 UJ
m-Xylene & p-Xylene	5.3 UJ	11 U	**0.77 J**	11 U	12 U
o-Xylene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Styrene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Tetrachloroethene	**38 J-**	**6.1**	5.1 U	**36**	**45**
Toluene	5.3 UJ	5.7 UJ	5.1 UJ	5.7 UJ	5.8 UJ
trans-1,2-Dichloroethene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
trans-1,3-Dichloropropene	5.3 UJ	5.7 U	5.1 U	5.7 U	5.8 U
Trichloroethene	5.3 UJ	5.7 U	5.1 U	**2.0 J**	5.8 U
Trichlorofluoromethane	5.3 UJ	**0.39 J**	**0.42 J**	**0.61 J**	12 U
Vinyl chloride	5.3 UJ	11 U	10 U	11 U	12 U

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	EM-16-SO-01 1 ft 11/13/2007	EM-16-SO-02 4.5 ft 11/13/2007	EM-28-SO-01 9 ft 11/12/2007	EM-28-SO-02 12 ft 11/12/2007	EM-30-SO-01 2 ft 11/15/2007
Nickel by 6010B (mg/kg)					
Nickel	**26.9 J-**	**20.1 J-**	**9.0 J-**	**8.9 J-**	**25.9 J+**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
1,1,2,2-Tetrachloroethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
1,1,2-Trichloro-1,2,2-trifluoroethane	11 U	11 U	5.2 UJ	5.2 UJ	5.4 U
1,1,2-Trichloroethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
1,1-Dichloroethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
1,1-Dichloroethene	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
1,2,3-Trichlorobenzene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
1,2,4-Trichlorobenzene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
1,2-Dibromo-3-chloropropane	11 U	11 U	10 UJ	10 UJ	11 U
1,2-Dibromoethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
1,2-Dichlorobenzene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
1,2-Dichloroethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
1,2-Dichloropropane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
1,3-Dichlorobenzene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
1,4-Dichlorobenzene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
1,4-Dioxane[1]	--	--	410 UJ	410 UJ	440 U
2-Butanone	21 U	22 U	21 UJ	21 UJ	22 U
2-Hexanone	21 U	22 U	21 UJ	21 UJ	22 U
4-Methyl-2-Pentanone	21 U	22 U	21 UJ	21 UJ	22 U
Acetone	42 U	43 U	21 UJ	21 UJ	**27**
Benzene	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Bromochloromethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Bromodichloromethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Bromoform	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Bromomethane	11 UJ	11 U	10 UJ	10 UJ	11 U

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	EM-16-SO-01 1 ft 11/13/2007	EM-16-SO-02 4.5 ft 11/13/2007	EM-28-SO-01 9 ft 11/12/2007	EM-28-SO-02 12 ft 11/12/2007	EM-30-SO-01 2 ft 11/15/2007
Carbon disulfide	5.3 UJ	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
Carbon tetrachloride	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Chlorobenzene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
Chloroethane	11 U	11 U	10 UJ	10 UJ	11 U
Chloroform	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Chloromethane	11 U	11 U	10 UJ	10 UJ	11 U
cis-1,2-Dichloroethene	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
cis-1,3-Dichloropropene	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Cyclohexane	5.3 U	5.4 U	10 UJ	10 UJ	11 U
Dibromochloromethane	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Dichlorodifluoromethane	11 U	11 U	10 UJ	10 UJ	11 U
Ethylbenzene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
Isopropylbenzene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
Methyl acetate	5.3 U	5.4 U	10 UJ	10 UJ	11 U
Methyl tert-butyl ether	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Methylcyclohexane	5.3 U	5.4 U	10 UJ	10 UJ	11 U
Methylene chloride	5.3 UJ	**4.3 J**	**4.4 J**	10 UJ	11 U
m-Xylene & p-Xylene	11 U	11 UJ	5.2 UJ	5.2 UJ	5.4 U
o-Xylene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
Styrene	5.3 U	5.4 UJ	5.2 UJ	5.2 UJ	5.4 U
Tetrachloroethene	**1.2 J**	**3.7 J**	**12 J-**	**4.8 J**	**3.1 J**
Toluene	5.3 UJ	5.4 UJ	**0.44 J**	5.2 UJ	5.4 UJ
trans-1,2-Dichloroethene	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
trans-1,3-Dichloropropene	5.3 U	5.4 U	5.2 UJ	5.2 UJ	5.4 U
Trichloroethene	5.3 U	5.4 U	**13 J-**	**2.5 J**	5.4 U
Trichlorofluoromethane	**0.30 J**	**0.53 J**	5.2 UJ	5.2 UJ	5.4 U
Vinyl chloride	11 U	11 U	5.2 UJ	5.2 UJ	5.4 U

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	EM-30-SO-02 4 ft 11/15/2007	EM-31-SO-01 3 ft 11/14/2007	EM-31-SO-02 5 ft 11/14/2007	EM-34-SO-01 4 ft 11/15/2007	EM-34-SO-02 4.5 ft 11/15/2007
Nickel by 6010B (mg/kg)					
Nickel	**16.5 J+**	**23.1**	**25.6**	**7.1 J+**	**10.7 J+**
VOCs by 8260B (µg/kg)					
1,1,1-Trichloroethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1,2,2-Tetrachloroethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1,2-Trichloroethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1-Dichloroethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,1-Dichloroethene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2,3-Trichlorobenzene	5.4 UJ	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2,4-Trichlorobenzene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2-Dibromo-3-chloropropane	11 U	11 UJ	11 UJ	11 UJ	11 UJ
1,2-Dibromoethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2-Dichlorobenzene	5.4 U	5.4 UJ	5.4 UJ	**0.16 J**	5.3 UJ
1,2-Dichloroethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,2-Dichloropropane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,3-Dichlorobenzene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,4-Dichlorobenzene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
1,4-Dioxane[1]	440 U	430 UJ	430 UJ	420 UJ	430 UJ
2-Butanone	22 U	22 UJ	22 UJ	21 UJ	21 UJ
2-Hexanone	22 U	22 UJ	22 UJ	21 UJ	21 UJ
4-Methyl-2-Pentanone	22 U	22 UJ	22 UJ	21 UJ	21 UJ
Acetone	22 U	22 UJ	22 UJ	21 UJ	21 UJ
Benzene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Bromochloromethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Bromodichloromethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Bromoform	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Bromomethane	11 U	11 UJ	11 UJ	11 UJ	11 UJ

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	EM-30-SO-02 4 ft 11/15/2007	EM-31-SO-01 3 ft 11/14/2007	EM-31-SO-02 5 ft 11/14/2007	EM-34-SO-01 4 ft 11/15/2007	EM-34-SO-02 4.5 ft 11/15/2007
Carbon disulfide	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Carbon tetrachloride	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Chlorobenzene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Chloroethane	11 U	11 UJ	11 UJ	11 UJ	11 UJ
Chloroform	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Chloromethane	11 U	11 UJ	11 UJ	11 UJ	11 UJ
cis-1,2-Dichloroethene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
cis-1,3-Dichloropropene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Cyclohexane	11 U	11 UJ	11 UJ	11 UJ	11 UJ
Dibromochloromethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Dichlorodifluoromethane	11 U	11 UJ	11 UJ	11 UJ	11 UJ
Ethylbenzene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Isopropylbenzene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Methyl acetate	11 U	11 UJ	11 UJ	11 UJ	11 UJ
Methyl tert-butyl ether	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Methylcyclohexane	11 U	11 UJ	11 UJ	11 UJ	11 UJ
Methylene chloride	11 U	11 UJ	11 UJ	11 UJ	11 UJ
m-Xylene & p-Xylene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
o-Xylene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Styrene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Tetrachloroethene	**5.6**	**2.6 J**	**79 J-**	**0.79 J**	5.3 UJ
Toluene	5.4 UJ	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
trans-1,2-Dichloroethene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
trans-1,3-Dichloropropene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Trichloroethene	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Trichlorofluoromethane	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ
Vinyl chloride	5.4 U	5.4 UJ	5.4 UJ	5.3 UJ	5.3 UJ

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: Sample Depth: Sample Date: Analyte	EM-35-SO-01 1 ft 11/12/2007	EM-35-SO-02 7.5 ft 11/12/2007	GPR-C-SO-01 1 ft 11/13/2007	GPR-C-SO-02 6 ft 11/13/2007
Nickel by 6010B (mg/kg)				
Nickel	**12.7 J-**	**8.1 J-**	**4.4 J-**	**8.4 J-**
VOCs by 8260B (µg/kg)				
1,1,1-Trichloroethane	**10 J-**	5.8 UJ	5.4 U	6.0 U
1,1,2,2-Tetrachloroethane	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2 UJ	5.8 UJ	11 U	12 U
1,1,2-Trichloroethane	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,1-Dichloroethane	**1.2 J**	5.8 UJ	5.4 U	6.0 U
1,1-Dichloroethene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,2,3-Trichlorobenzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,2,4-Trichlorobenzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,2-Dibromo-3-chloropropane	10 UJ	12 UJ	11 U	12 U
1,2-Dibromoethane	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,2-Dichlorobenzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,2-Dichloroethane	**2.1 J**	5.8 UJ	5.4 U	6.0 U
1,2-Dichloropropane	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,3-Dichlorobenzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,4-Dichlorobenzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
1,4-Dioxane[1]	420 UJ	460 UJ	--	--
2-Butanone	**5.6 J**	23 UJ	22 U	24 U
2-Hexanone	21 UJ	23 UJ	22 U	24 U
4-Methyl-2-Pentanone	21 UJ	23 UJ	22 U	24 U
Acetone	21 UJ	23 UJ	44 U	48 U
Benzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Bromochloromethane	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Bromodichloromethane	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Bromoform	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Bromomethane	10 UJ	12 UJ	11 U	12 U

Table 3.3-3h Complete Nickel and VOC Results for Test Trench Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

Sample ID: / Sample Depth: / Sample Date: / Analyte	EM-35-SO-01 1 ft 11/12/2007	EM-35-SO-02 7.5 ft 11/12/2007	GPR-C-SO-01 1 ft 11/13/2007	GPR-C-SO-02 6 ft 11/13/2007
Carbon disulfide	5.2 UJ	5.8 UJ	5.4 UJ	6.0 UJ
Carbon tetrachloride	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Chlorobenzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Chloroethane	10 UJ	12 UJ	11 U	12 U
Chloroform	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Chloromethane	10 UJ	12 UJ	11 U	12 U
cis-1,2-Dichloroethene	**35 J-**	5.8 UJ	5.4 U	6.0 U
cis-1,3-Dichloropropene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Cyclohexane	10 UJ	12 UJ	5.4 U	6.0 U
Dibromochloromethane	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Dichlorodifluoromethane	10 UJ	12 UJ	11 U	12 U
Ethylbenzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Isopropylbenzene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Methyl acetate	10 UJ	12 UJ	5.4 U	6.0 U
Methyl tert-butyl ether	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Methylcyclohexane	10 UJ	12 UJ	5.4 U	6.0 U
Methylene chloride	10 UJ	12 UJ	5.4 UJ	6.0 UJ
m-Xylene & p-Xylene	5.2 UJ	5.8 UJ	11 U	12 U
o-Xylene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Styrene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Tetrachloroethene	**8900 J**	**4.8 J**	**2.3 J**	**0.44 J**
Toluene	**0.94 J**	**0.38 J**	5.4 UJ	6.0 UJ
trans-1,2-Dichloroethene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
trans-1,3-Dichloropropene	5.2 UJ	5.8 UJ	5.4 U	6.0 U
Trichloroethene	**29 J-**	5.8 UJ	5.4 U	6.0 U
Trichlorofluoromethane	5.2 UJ	5.8 UJ	**0.31 J**	**0.30 J**
Vinyl chloride	5.2 UJ	5.8 UJ	11 U	12 U

Key for Table 3.3-3h

Key:
U = Not Detected
UJ = Not Detected/Estimated
J = Estimated Value
J+ = Estimated Biased High
J- = Estimated Biased Low
R = Rejected
UR = Not Detected by Lab, Rejected by Validator
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
mg/L = milligram per liter
µg/L = microgram per liter
ft = feet
VOCs = Volatile Organic Compounds
Bolded values represent positive results for target compounds
-- = No Value Reported
1 = Samples analyzed at TA Knoxville were analyzed using a different sample list, not a contaminant of concern

Table 3.3-4a Radiological Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-07/D-Z1	2-3 ft	11/05/2007	0.85 ± 0.16		0.02	0.044 ± 0.031		0.023	0.49 ± 0.11		0.02
140-07/D-Z2	9-10 ft	11/05/2007	0.67 ± 0.13		0.03	0.013 ± 0.017	UJ	0.022	0.420 ± 0.098		0.020
140-07/D-Z3	22-23 ft	11/05/2007	0.158 ± 0.056		0.026	0.006 ± 0.017	U	0.030	0.094 ± 0.044		0.031
140-07/D-Z4	30-31 ft	11/05/2007	0.128 ± 0.050		0.024	0.009 ± 0.015	UJ	0.023	0.136 ± 0.051		0.024
140-07/D-Z5	38-39 ft	11/05/2007	0.136 ± 0.068		0.039	0.021 ± 0.036	UJ	0.054	0.099 ± 0.058		0.039
140-07/D-Z6	43-44 ft	11/06/2007	0.179 ± 0.056		0.023	0.010 ± 0.017	UJ	0.026	0.172 ± 0.056		0.027
140-07/D-Z7	55-56 ft	11/06/2007	0.156 ± 0.053		0.022	0.013 ± 0.017	UJ	0.021	0.156 ± 0.053		0.022
140-07/D-Z8	63-64 ft	11/06/2007	0.067 ± 0.034		0.020	0.006 ± 0.016	U	0.028	0.117 ± 0.046		0.020

Table 3.3-4a Radiological Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-07/D-Z1	2-3 ft	11/05/2007	0.28 ± 0.13		0.10	0.38 ± 0.15		0.08	0.31 ± 0.13		0.08
140-07/D-Z2	9-10 ft	11/05/2007	0.28 ± 0.11		0.07	0.40 ± 0.13		0.04	0.263 ± 0.098		0.035
140-07/D-Z3	22-23 ft	11/05/2007	0.132 ± 0.076		0.065	0.041 ± 0.041		0.022	0.064 ± 0.048		0.037
140-07/D-Z4	30-31 ft	11/05/2007	0.130 ± 0.073		0.060	0.195 ± 0.088		0.058	0.141 ± 0.071		0.036
140-07/D-Z5	38-39 ft	11/05/2007	0.184 ± 0.084		0.051	0.227 ± 0.096		0.061	0.186 ± 0.084		0.047
140-07/D-Z6	43-44 ft	11/06/2007	0.295 ± 0.085		0.036	0.329 ± 0.089		0.023	0.259 ± 0.077		0.025
140-07/D-Z7	55-56 ft	11/06/2007	0.278 ± 0.081		0.039	0.206 ± 0.065		0.018	0.294 ± 0.081		0.018
140-07/D-Z8	63-64 ft	11/06/2007	0.152 ± 0.055		0.031	0.120 ± 0.047		0.011	0.138 ± 0.050		0.018

Table 3.3-4a Radiological Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-07/D-Z1	2-3 ft	11/05/2007	0.40 ± 0.13	J	0.12	0.31 ± 0.20	J	0.27	0.31 ± 0.20	J	0.27
140-07/D-Z2	9-10 ft	11/05/2007	0.22 ± 0.11	J	0.15	0.16 ± 0.12	UJ	0.27	-- ± --	--	--
140-07/D-Z3	22-23 ft	11/05/2007	0.049 ± 0.070	UJ	0.12	0.13 ± 0.13	UJ	0.20	-- ± --	--	--
140-07/D-Z4	30-31 ft	11/05/2007	0.127 ± 0.068	J	0.10	0.13 ± 0.12	UJ	0.19	-- ± --	--	--
140-07/D-Z5	38-39 ft	11/05/2007	0.036 ± 0.096	UJ	0.18	0.09 ± 0.13	UJ	0.22	-- ± --	--	--
140-07/D-Z6	43-44 ft	11/06/2007	0.11 ± 0.12	U	0.20	0.17 ± 0.17	U	0.25	-- ± --	--	--
140-07/D-Z7	55-56 ft	11/06/2007	0.124 ± 0.099	UJ	0.16	0.17 ± 0.23	U	0.38	-- ± --	--	--
140-07/D-Z8	63-64 ft	11/06/2007	0.024 ± 0.059	UJ	0.11	0.062 ± 0.069	UJ	0.10	-- ± --	--	--

Table 3.3-4a Radiological Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-07/D-Z1	2-3 ft	11/05/2007	-- ± --	--	--	0.40 ± 0.13	J	0.12	-- ± --	--	--
140-07/D-Z2	9-10 ft	11/05/2007	-- ± --	--	--	0.22 ± 0.11	J	0.15	-- ± --	--	--
140-07/D-Z3	22-23 ft	11/05/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
140-07/D-Z4	30-31 ft	11/05/2007	-- ± --	--	--	0.127 ± 0.068	J	0.10	-- ± --	--	--
140-07/D-Z5	38-39 ft	11/05/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
140-07/D-Z6	43-44 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
140-07/D-Z7	55-56 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
140-07/D-Z8	63-64 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-4a Radiological Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-07/D-Z1	2-3 ft	11/05/2007	5.0 ± 1.2	J	0.7	-- ± --	--	--	-- ± --	--	--
140-07/D-Z2	9-10 ft	11/05/2007	5.8 ± 1.2	J	0.6	-- ± --	--	--	-- ± --	--	--
140-07/D-Z3	22-23 ft	11/05/2007	4.3 ± 1.1	J	0.9	-- ± --	--	--	-- ± --	--	--
140-07/D-Z4	30-31 ft	11/05/2007	2.12 ± 0.69	J	0.86	-- ± --	--	--	-- ± --	--	--
140-07/D-Z5	38-39 ft	11/05/2007	1.79 ± 0.76	J	0.82	-- ± --	--	--	-- ± --	--	--
140-07/D-Z6	43-44 ft	11/06/2007	1.34 ± 0.91		1.3	-- ± --	--	--	-- ± --	--	--
140-07/D-Z7	55-56 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
140-07/D-Z8	63-64 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-4a Radiological Results for Building 140 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
140-07/D-Z1	2-3 ft	11/05/2007	0.40 ± 0.13	J	0.12	0.268 ± 0.085	J	0.14	0.155 ± 0.062	J	0.077	-- ± --	--	--
140-07/D-Z2	9-10 ft	11/05/2007	0.327 ± 0.083	J	0.073	0.281 ± 0.095	J	0.13	-- ± --	--	--	-- ± --	--	--
140-07/D-Z3	22-23 ft	11/05/2007	0.144 ± 0.058	J	0.068	0.116 ± 0.072	J	0.10	-- ± --	--	--	-- ± --	--	--
140-07/D-Z4	30-31 ft	11/05/2007	0.276 ± 0.075	J	0.077	0.133 ± 0.066	J	0.098	0.130 ± 0.046	J	0.044	1.81 ± 0.43	J	0.86
140-07/D-Z5	38-39 ft	11/05/2007	0.172 ± 0.060	J	0.069	0.134 ± 0.070	J	0.13	-- ± --	--	--	-- ± --	--	--
140-07/D-Z6	43-44 ft	11/06/2007	0.169 ± 0.072		0.085	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
140-07/D-Z7	55-56 ft	11/06/2007	0.369 ± 0.094		0.090	0.199 ± 0.098		0.14	0.131 ± 0.057		0.061	-- ± --	--	--
140-07/D-Z8	63-64 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Key for Table 3.3-4a

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-4b Radiological Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z1	2-4 ft	11/07/2007	3.68 ± 0.52		0.02	0.133 ± 0.052		0.026	2.38 ± 0.36		0.02
100-06/D-Z2	13-14 ft	11/07/2007	1.50 ± 0.25		0.02	0.090 ± 0.044		0.013	1.55 ± 0.25		0.02
100-06/D-Z3	18-19 ft	11/07/2007	1.70 ± 0.27		0.03	0.083 ± 0.042		0.021	1.67 ± 0.27		0.01
100-06/D-Z4	31-32 ft	11/07/2007	1.38 ± 0.22		0.03	0.079 ± 0.039		0.023	1.30 ± 0.21		0.02
100-06/D-Z5	38-40 ft	11/08/2007	0.159 ± 0.061		0.028	0.004 ± 0.013	U	0.027	0.164 ± 0.061		0.028
100-06/D-Z6	47-48 ft	11/08/2007	1.56 ± 0.26		0.02	0.071 ± 0.041		0.029	1.58 ± 0.26		0.02
100-06/D-Z7	51-52 ft	11/08/2007	2.76 ± 0.41		0.02	0.116 ± 0.050		0.013	2.58 ± 0.39		0.02
100-11-Z3	16-18 ft	10/30/2007	11.5 ± 1.6		0.03	0.55 ± 0.13		0.01	11.3 ± 1.6		0.03

Table 3.3-4b Radiological Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z1	2-4 ft	11/07/2007	0.57 ± 0.12		0.04	0.48 ± 0.11		0.03	0.58 ± 0.12		0.01
100-06/D-Z2	13-14 ft	11/07/2007	0.148 ± 0.052		0.022	0.203 ± 0.062		0.01	0.160 ± 0.054		0.017
100-06/D-Z3	18-19 ft	11/07/2007	0.170 ± 0.059		0.029	0.239 ± 0.072		0.027	0.125 ± 0.050		0.029
100-06/D-Z4	31-32 ft	11/07/2007	0.164 ± 0.056		0.031	0.151 ± 0.051		0.016	0.171 ± 0.055		0.019
100-06/D-Z5	38-40 ft	11/08/2007	0.147 ± 0.087		0.076	0.100 ± 0.066	J	0.053	0.147 ± 0.079		0.047
100-06/D-Z6	47-48 ft	11/08/2007	0.094 ± 0.050		0.039	0.109 ± 0.052		0.030	0.106 ± 0.050		0.023
100-06/D-Z7	51-52 ft	11/08/2007	0.36 ± 0.13		0.07	0.29 ± 0.12		0.06	0.188 ± 0.088		0.039
100-11-Z3	16-18 ft	10/30/2007	1.06 ± 0.20		0.03	0.52 ± 0.12		0.02	1.01 ± 0.19		0.02

Table 3.3-4b Radiological Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z1	2-4 ft	11/07/2007	0.59 ± 0.12	J	0.07	0.32 ± 0.15	J	0.26	0.32 ± 0.15	J	0.26
100-06/D-Z2	13-14 ft	11/07/2007	0.046 ± 0.066	UJ	0.12	0.09 ± 0.12	UJ	0.21	-- ± --	--	--
100-06/D-Z3	18-19 ft	11/07/2007	0.16 ± 0.10	J	0.16	0.11 ± 0.14	UJ	0.22	-- ± --	--	--
100-06/D-Z4	31-32 ft	11/07/2007	0.139 ± 0.089	J	0.14	0.12 ± 0.15	UJ	0.24	-- ± --	--	--
100-06/D-Z5	38-40 ft	11/08/2007	0.106 ± 0.069	J	0.10	0.17 ± 0.12	J	0.16	0.17 ± 0.12	J	0.16
100-06/D-Z6	47-48 ft	11/08/2007	0.062 ± 0.069	UJ	0.13	0.02 ± 0.13	UJ	0.24	-- ± --	--	--
100-06/D-Z7	51-52 ft	11/08/2007	0.151 ± 0.092		0.14	0.0 ± 0.25	U	0.46	-- ± --	--	--
100-11-Z3	16-18 ft	10/30/2007	0.51 ± 0.15		0.13	0.58 ± 0.19		0.30	0.58 ± 0.19		0.30

Table 3.3-4b Radiological Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z1	2-4 ft	11/07/2007	-- ± --	--	--	0.59 ± 0.12	J	0.07	-- ± --	--	--
100-06/D-Z2	13-14 ft	11/07/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
100-06/D-Z3	18-19 ft	11/07/2007	-- ± --	--	--	0.16 ± 0.10	J	0.16	-- ± --	--	--
100-06/D-Z4	31-32 ft	11/07/2007	-- ± --	--	--	0.139 ± 0.089	J	0.14	-- ± --	--	--
100-06/D-Z5	38-40 ft	11/08/2007	-- ± --	--	--	0.106 ± 0.069	J	0.10	-- ± --	--	--
100-06/D-Z6	47-48 ft	11/08/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
100-06/D-Z7	51-52 ft	11/08/2007	-- ± --	--	--	0.151 ± 0.092		0.14	-- ± --	--	--
100-11-Z3	16-18 ft	10/30/2007	-- ± --	--	--	0.51 ± 0.15		0.13	-- ± --	--	--

Table 3.3-4b Radiological Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z1	2-4 ft	11/07/2007	9.7 ± 1.4	J	0.3	-- ± --	--	--	-- ± --	--	--
100-06/D-Z2	13-14 ft	11/07/2007	5.47 ± 0.96	J	0.67	-- ± --	--	--	-- ± --	--	--
100-06/D-Z3	18-19 ft	11/07/2007	5.1 ± 1.2	J	0.8	-- ± --	--	--	-- ± --	--	--
100-06/D-Z4	31-32 ft	11/07/2007	2.86 ± 0.95	J	0.88	-- ± --	--	--	-- ± --	--	--
100-06/D-Z5	38-40 ft	11/08/2007	3.03 ± 0.83	J	0.70	-- ± --	--	--	-- ± --	--	--
100-06/D-Z6	47-48 ft	11/08/2007	2.06 ± 0.64	J	0.74	-- ± --	--	--	-- ± --	--	--
100-06/D-Z7	51-52 ft	11/08/2007	2.06 ± 0.92		1.1	-- ± --	--	--	-- ± --	--	--
100-11-Z3	16-18 ft	10/30/2007	6.6 ± 1.4		0.8	-- ± --	--	--	-- ± --	--	--

Table 3.3-4b Radiological Results for Building 100 Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
100-06/D-Z1	2-4 ft	11/07/2007	0.62 ± 0.10	J	0.08	0.51 ± 0.11	J	0.12	0.282 ± 0.066	J	0.042	2.15 ± 0.53	J	1.2
100-06/D-Z2	13-14 ft	11/07/2007	0.212 ± 0.091	J	0.098	-- ± --	--	--	-- ± --	--	--	1.30 ± 0.55	J	1.2
100-06/D-Z3	18-19 ft	11/07/2007	0.275 ± 0.085	J	0.082	0.132 ± 0.084	J	0.13	-- ± --	--	--	1.26 ± 0.47	J	0.91
100-06/D-Z4	31-32 ft	11/07/2007	0.19 ± 0.10	J	0.11	0.176 ± 0.076	J	0.12	-- ± --	--	--	0.90 ± 0.50	UJ	0.90
100-06/D-Z5	38-40 ft	11/08/2007	0.161 ± 0.077	J	0.075	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
100-06/D-Z6	47-48 ft	11/08/2007	0.098 ± 0.046	J	0.072	0.135 ± 0.074	J	0.11	-- ± --	--	--	1.75 ± 0.62	J	1.0
100-06/D-Z7	51-52 ft	11/08/2007	0.28 ± 0.11		0.11	0.190 ± 0.085		0.13	-- ± --	--	--	1.88 ± 0.63		1.1
100-11-Z3	16-18 ft	10/30/2007	0.56 ± 0.12		0.11	0.31 ± 0.10		0.15	0.319 ± 0.083		0.061	6.8 ± 1.6		1.7

Key for Table 3.3-4b

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-4c Radiological Results for Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-02/D-Z1	2.4-3.5 ft	10/22/2007	0.147 ± 0.050		0.021	0.009 ± 0.015	UJ	0.012	0.194 ± 0.059		0.019
SU08-02/D-Z2	12-14 ft	10/22/2007	0.158 ± 0.055		0.024	0.005 ± 0.014	UJ	0.014	0.193 ± 0.062		0.011
SU08-02/D-Z3	16.5-17.5 ft	10/22/2007	0.107 ± 0.041		0.016	0.004 ± 0.012	UJ	0.012	0.130 ± 0.047		0.021
SU08-02/D-Z4	25.6-26 ft	10/22/2007	0.123 ± 0.046		0.01	0.004 ± 0.013	UJ	0.012	0.112 ± 0.043		0.01
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.081 ± 0.036		0.021	-0.0010 ± 0.009	U	0.019	0.107 ± 0.041		0.009
SU08-02/D-Z6	42.5-44 ft	10/22/2007	0.081 ± 0.036		0.018	0.0 ± 0.0	U	0.01	0.103 ± 0.040		0.016
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.234 ± 0.067		0.010	0.016 ± 0.020	UJ	0.025	0.305 ± 0.079		0.022
SU08-11/D-Z2	10-11.3 ft	10/23/2007	1.46 ± 0.23		0.02	0.050 ± 0.031		0.023	1.28 ± 0.21		0.02
SU08-11/D-Z3	18-19 ft	10/23/2007	0.194 ± 0.058		0.020	0.007 ± 0.013	UJ	0.019	0.192 ± 0.057		0.009
SU08-11/D-Z4	28-29 ft	10/23/2007	0.151 ± 0.050		0.018	0.021 ± 0.021		0.011	0.153 ± 0.050		0.020
SU08-11/D-Z5	35-36 ft	10/24/2007	0.110 ± 0.043		0.021	-0.001 ± 0.010	U	0.020	0.137 ± 0.049		0.01
SU08-11/D-Z6	43-44 ft	10/24/2007	0.095 ± 0.039		0.019	0.0 ± 0.0	U	0.01	0.094 ± 0.040		0.021
SU08-11/D-Z7	54.5-55.5 ft	10/24/2007	0.96 ± 0.17		0.02	0.028 ± 0.025		0.013	0.95 ± 0.17		0.02

Table 3.3-4c Radiological Results for Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-02/D-Z1	2.4-3.5 ft	10/22/2007	0.32 ± 0.12		0.07	0.30 ± 0.11	U	0.04	0.179 ± 0.085		0.044
SU08-02/D-Z2	12-14 ft	10/22/2007	0.278 ± 0.094		0.046	0.294 ± 0.095	U	0.026	0.207 ± 0.078		0.037
SU08-02/D-Z3	16.5-17.5 ft	10/22/2007	0.156 ± 0.086		0.072	0.175 ± 0.084	U	0.038	0.103 ± 0.065		0.049
SU08-02/D-Z4	25.6-26 ft	10/22/2007	0.139 ± 0.090		0.083	0.063 ± 0.064	UJ	0.077	0.045 ± 0.063	UJ	0.086
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.105 ± 0.054		0.038	0.088 ± 0.050	U	0.038	0.100 ± 0.051		0.015
SU08-02/D-Z6	42.5-44 ft	10/22/2007	0.104 ± 0.049		0.041	0.092 ± 0.041	U	0.021	0.074 ± 0.036		0.011
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.305 ± 0.078		0.026	0.253 ± 0.069		0.022	0.295 ± 0.075		0.015
SU08-11/D-Z2	10-11.3 ft	10/23/2007	0.323 ± 0.083		0.027	0.305 ± 0.080		0.020	0.327 ± 0.083		0.017
SU08-11/D-Z3	18-19 ft	10/23/2007	0.163 ± 0.056	J	0.028	0.213 ± 0.063		0.017	0.163 ± 0.054		0.019
SU08-11/D-Z4	28-29 ft	10/23/2007	0.181 ± 0.060	J	0.030	0.117 ± 0.045		0.020	0.128 ± 0.047		0.017
SU08-11/D-Z5	35-36 ft	10/24/2007	0.112 ± 0.046		0.028	0.140 ± 0.050		0.017	0.105 ± 0.043		0.020
SU08-11/D-Z6	43-44 ft	10/24/2007	0.154 ± 0.056		0.031	0.176 ± 0.059		0.021	0.191 ± 0.062		0.021
SU08-11/D-Z7	54.5-55.5 ft	10/24/2007	0.82 ± 0.17		0.03	0.81 ± 0.16		0.02	0.80 ± 0.16		0.02

Table 3.3-4c Radiological Results for Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-02/D-Z1	2.4-3.5 ft	10/22/2007	0.061 ± 0.077	UJ	0.14	0.21 ± 0.17	UJ	0.26	-- ± --	--	--
SU08-02/D-Z2	12-14 ft	10/22/2007	0.131 ± 0.091	UJ	0.14	0.10 ± 0.14	UJ	0.24	-- ± --	--	--
SU08-02/D-Z3	16.5-17.5 ft	10/22/2007	0.074 ± 0.085	UJ	0.15	0.02 ± 0.15	UJ	0.28	-- ± --	--	--
SU08-02/D-Z4	25.6-26 ft	10/22/2007	0.127 ± 0.084	UJ	0.13	0.143 ± 0.096		0.11	0.143 ± 0.096		0.11
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.087 ± 0.082	UJ	0.14	-0.04 ± 0.16	UJ	0.16	-- ± --	--	--
SU08-02/D-Z6	42.5-44 ft	10/22/2007	0.232 ± 0.077		0.061	0.18 ± 0.11		0.11	0.18 ± 0.11		0.11
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.237 ± 0.096	J	0.14	0.27 ± 0.13	J	0.22	0.27 ± 0.13	J	0.22
SU08-11/D-Z2	10-11.3 ft	10/23/2007	0.174 ± 0.087	J	0.13	0.27 ± 0.15	J	0.22	0.27 ± 0.15	J	0.22
SU08-11/D-Z3	18-19 ft	10/23/2007	0.136 ± 0.089	UJ	0.14	0.06 ± 0.12	UJ	0.21	-- ± --	--	--
SU08-11/D-Z4	28-29 ft	10/23/2007	-0.003 ± 0.085	UJ	0.15	0.07 ± 0.14	UJ	0.27	-- ± --	--	--
SU08-11/D-Z5	35-36 ft	10/24/2007	0.087 ± 0.091	U	0.16	0.18 ± 0.14	UJ	0.21	-- ± --	--	--
SU08-11/D-Z6	43-44 ft	10/24/2007	0.20 ± 0.11		0.17	0.23 ± 0.21	UJ	0.34	-- ± --	--	--
SU08-11/D-Z7	54.5-55.5 ft	10/24/2007	0.93 ± 0.24		0.21	0.95 ± 0.30		0.45	0.95 ± 0.30		0.45

Table 3.3-4c Radiological Results for Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-02/D-Z1	2.4-3.5 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z2	12-14 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z3	16.5-17.5 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z4	25.6-26 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z5	38.5-40 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z6	42.5-44 ft	10/22/2007	-- ± --	--	--	0.232 ± 0.077		0.061	-- ± --	--	--
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	-- ± --	--	--	0.237 ± 0.096	J	0.14	-- ± --	--	--
SU08-11/D-Z2	10-11.3 ft	10/23/2007	-- ± --	--	--	0.174 ± 0.087	J	0.13	-- ± --	--	--
SU08-11/D-Z3	18-19 ft	10/23/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z4	28-29 ft	10/23/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z5	35-36 ft	10/24/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z6	43-44 ft	10/24/2007	-- ± --	--	--	0.20 ± 0.11		0.17	-- ± --	--	--
SU08-11/D-Z7	54.5-55.5 ft	10/24/2007	-- ± --	--	--	0.93 ± 0.24		0.21	-- ± --	--	--

Table 3.3-4c Radiological Results for Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-02/D-Z1	2.4-3.5 ft	10/22/2007	6.5 ± 1.3	J	0.5	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z2	12-14 ft	10/22/2007	5.8 ± 1.2	J	0.5	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z3	16.5-17.5 ft	10/22/2007	3.78 ± 0.93	J	0.48	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z4	25.6-26 ft	10/22/2007	1.44 ± 0.58		0.55	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z5	38.5-40 ft	10/22/2007	1.22 ± 0.73		0.99	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z6	42.5-44 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	7.0 ± 1.1	J	0.5	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z2	10-11.3 ft	10/23/2007	4.57 ± 0.92	J	0.88	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z3	18-19 ft	10/23/2007	3.65 ± 0.87	J	0.87	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z4	28-29 ft	10/23/2007	2.78 ± 0.96	J	0.99	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z5	35-36 ft	10/24/2007	2.95 ± 0.85		0.91	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z6	43-44 ft	10/24/2007	0.73 ± 0.61	UJ	0.93	2.0 ± 1.2		1.6	-- ± --	--	--
SU08-11/D-Z7	54.5-55.5 ft	10/24/2007	12.0 ± 2.4		1.6	-- ± --	--	--	-- ± --	--	--

Table 3.3-4c Radiological Results for Area Between Buildings 100 and 140 (SU08) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU08-02/D-Z1	2.4-3.5 ft	10/22/2007	0.202 ± 0.069	J	0.076	0.362 ± 0.085	J	0.062	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z2	12-14 ft	10/22/2007	0.200 ± 0.072	J	0.088	0.251 ± 0.095	J	0.12	0.098 ± 0.039	J	0.039	-- ± --	--	--
SU08-02/D-Z3	16.5-17.5 ft	10/22/2007	0.105 ± 0.049	J	0.057	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z4	25.6-26 ft	10/22/2007	0.173 ± 0.057		0.057	0.131 ± 0.068		0.095	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z5	38.5-40 ft	10/22/2007	0.18 ± 0.10		0.11	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-02/D-Z6	42.5-44 ft	10/22/2007	0.184 ± 0.066		0.068	0.108 ± 0.059		0.081	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z1	5.5-6.5 ft	10/23/2007	0.44 ± 0.14	J	0.12	0.283 ± 0.084	J	0.11	0.168 ± 0.043	J	0.042	-- ± --	--	--
SU08-11/D-Z2	10-11.3 ft	10/23/2007	0.263 ± 0.071	J	0.082	0.37 ± 0.10	J	0.11	0.065 ± 0.039	J	0.061	1.22 ± 0.51	J	1.0
SU08-11/D-Z3	18-19 ft	10/23/2007	0.123 ± 0.053	J	0.071	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z4	28-29 ft	10/23/2007	-- ± --	--	--	0.134 ± 0.078	J	0.12	-- ± --	--	--	-- ± --	--	--
SU08-11/D-Z5	35-36 ft	10/24/2007	0.315 ± 0.097		0.099	0.201 ± 0.079		0.13	0.099 ± 0.045		0.055	-- ± --	--	--
SU08-11/D-Z6	43-44 ft	10/24/2007	0.234 ± 0.070		0.077	0.153 ± 0.076		0.13	0.123 ± 0.050		0.057	-- ± --	--	--
SU08-11/D-Z7	54.5-55.5 ft	10/24/2007	1.26 ± 0.25		0.21	1.34 ± 0.27		0.19	0.45 ± 0.12		0.07	-- ± --	--	--

Key for Table 3.3-4c

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-4d Radiological Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-10-Z8	64-66 ft	10/16/2007	0.143 ± 0.050		0.019	0.009 ± 0.016	UJ	0.012	0.124 ± 0.046		0.019
SU13-07/D-Z1	6-8 ft	10/16/2007	0.54 ± 0.12		0.02	0.027 ± 0.027		0.015	0.52 ± 0.12		0.03
SU13-07/D-Z2	14-16 ft	10/16/2007	0.251 ± 0.071		0.023	0.013 ± 0.018	UJ	0.022	0.182 ± 0.059		0.018
SU13-07/D-Z3	22-24 ft	10/16/2007	0.256 ± 0.070		0.017	0.002 ± 0.011	U	0.024	0.229 ± 0.065		0.019
SU13-07/D-Z4	30-32 ft	10/17/2007	0.076 ± 0.033		0.009	0.017 ± 0.019	J	0.012	0.062 ± 0.030		0.009
SU13-07/D-Z5	32-34 ft	10/17/2007	0.108 ± 0.042		0.020	0.009 ± 0.016	UJ	0.013	0.098 ± 0.039		0.017
SU13-07/D-Z6	46-48 ft	10/17/2007	0.142 ± 0.048		0.020	0.009 ± 0.016	UJ	0.013	0.134 ± 0.046		0.020
SU13-07/D-Z7	54-56 ft	10/17/2007	0.075 ± 0.060		0.051	0.0 ± 0.0	U	0.04	0.119 ± 0.082		0.076
SU13-07/D-Z8	62-64 ft	10/17/2007	0.162 ± 0.050		0.022	0.008 ± 0.014	UJ	0.021	0.116 ± 0.042		0.017
SU14-03/D-Z1	7-8 ft	10/25/2007	0.98 ± 0.18		0.02	0.045 ± 0.032		0.014	0.91 ± 0.17		0.02
SU14-03/D-Z2	13-14 ft	10/25/2007	0.59 ± 0.12		0.02	0.048 ± 0.032		0.013	0.63 ± 0.13		0.01
SU14-03/D-Z3	20-21 ft	10/25/2007	0.202 ± 0.061		0.025	0.014 ± 0.018	J	0.012	0.240 ± 0.067		0.019
SU14-03/D-Z4	29-31 ft	10/25/2007	0.282 ± 0.073		0.022	0.022 ± 0.021		0.012	0.264 ± 0.070		0.009
SU14-03/D-Z5	37-38 ft	10/25/2007	0.187 ± 0.059		0.023	0.013 ± 0.017	UJ	0.021	0.139 ± 0.049		0.01
SU14-03/D-Z6	47.5-48.5 ft	10/25/2007	0.210 ± 0.062		0.021	0.009 ± 0.015	UJ	0.012	0.217 ± 0.063		0.021
SU14-03/D-Z7	51.5-52.5 ft	10/25/2007	0.55 ± 0.12		0.02	0.014 ± 0.019	J	0.013	0.56 ± 0.12		0.02
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.319 ± 0.079		0.016	0.0 ± 0.0	U	0.01	0.311 ± 0.078		0.024
SU14-10/D-Z1	4-6 ft	10/17/2007	0.61 ± 0.11		0.03	0.0 ± 0.0	U	0.04	0.55 ± 0.10		0.04
SU14-10/D-Z2	8-10 ft	10/17/2007	0.57 ± 0.11		0.02	0.047 ± 0.031		0.022	0.428 ± 0.096		0.026
SU14-10/D-Z3	22-24 ft	10/17/2007	0.108 ± 0.041		0.016	0.018 ± 0.020	J	0.012	0.097 ± 0.039		0.016
SU14-10/D-Z4	30-32 ft	10/17/2007	0.109 ± 0.045		0.022	-0.001 ± 0.011	U	0.023	0.092 ± 0.041		0.022
SU14-10/D-Z5	36-38 ft	10/17/2007	0.137 ± 0.049		0.017	0.01 ± 0.017	UJ	0.013	0.179 ± 0.057		0.010
SU14-10/D-Z6	46-48 ft	10/18/2007	0.246 ± 0.070		0.020	0.013 ± 0.017	UJ	0.022	0.285 ± 0.077		0.026
SU14-10/D-Z7	54-56 ft	10/18/2007	0.135 ± 0.047		0.016	0.004 ± 0.012	UJ	0.012	0.115 ± 0.043		0.009
SU14-10/D-Z8	62-64 ft	10/18/2007	0.150 ± 0.052		0.010	0.002 ± 0.011	U	0.025	0.113 ± 0.045		0.022

Table 3.3-4d Radiological Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-10-Z8	64-66 ft	10/16/2007	0.241 ± 0.067		0.026	0.161 ± 0.052		0.018	0.193 ± 0.058		0.018
SU13-07/D-Z1	6-8 ft	10/16/2007	0.55 ± 0.13		0.04	0.48 ± 0.12		0.03	0.45 ± 0.11		0.02
SU13-07/D-Z2	14-16 ft	10/16/2007	0.301 ± 0.086		0.043	0.289 ± 0.081		0.022	0.195 ± 0.063		0.019
SU13-07/D-Z3	22-24 ft	10/16/2007	0.241 ± 0.077		0.044	0.287 ± 0.081		0.019	0.300 ± 0.084		0.027
SU13-07/D-Z4	30-32 ft	10/17/2007	0.121 ± 0.056		0.040	0.109 ± 0.050		0.025	0.104 ± 0.048		0.021
SU13-07/D-Z5	32-34 ft	10/17/2007	0.117 ± 0.054		0.035	0.112 ± 0.051	J	0.022	0.172 ± 0.064		0.025
SU13-07/D-Z6	46-48 ft	10/17/2007	0.268 ± 0.081		0.034	0.177 ± 0.063		0.024	0.185 ± 0.065		0.024
SU13-07/D-Z7	54-56 ft	10/17/2007	0.113 ± 0.061		0.048	0.121 ± 0.060		0.032	0.051 ± 0.038		0.028
SU13-07/D-Z8	62-64 ft	10/17/2007	0.251 ± 0.085		0.040	0.261 ± 0.087	J	0.043	0.232 ± 0.081		0.041
SU14-03/D-Z1	7-8 ft	10/25/2007	1.27 ± 0.26		0.06	0.93 ± 0.20		0.03	1.27 ± 0.26		0.02
SU14-03/D-Z2	13-14 ft	10/25/2007	0.83 ± 0.16		0.03	0.67 ± 0.14		0.01	0.82 ± 0.16		0.02
SU14-03/D-Z3	20-21 ft	10/25/2007	0.262 ± 0.071		0.026	0.228 ± 0.064		0.009	0.272 ± 0.071		0.018
SU14-03/D-Z4	29-31 ft	10/25/2007	0.161 ± 0.056		0.029	0.246 ± 0.071		0.020	0.189 ± 0.060		0.017
SU14-03/D-Z5	37-38 ft	10/25/2007	0.178 ± 0.058		0.030	0.172 ± 0.055		0.016	0.163 ± 0.053		0.019
SU14-03/D-Z6	47.5-48.5 ft	10/25/2007	0.377 ± 0.095		0.040	0.182 ± 0.059		0.020	0.365 ± 0.091		0.017
SU14-03/D-Z7	51.5-52.5 ft	10/25/2007	1.13 ± 0.22		0.03	0.63 ± 0.14		0.01	0.99 ± 0.20		0.02
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.75 ± 0.15		0.03	0.306 ± 0.082		0.018	0.84 ± 0.17		0.02
SU14-10/D-Z1	4-6 ft	10/17/2007	0.57 ± 0.13		0.03	0.46 ± 0.11	J	0.02	0.45 ± 0.11		0.03
SU14-10/D-Z2	8-10 ft	10/17/2007	0.70 ± 0.16		0.04	0.59 ± 0.15	J	0.03	0.66 ± 0.16		0.03
SU14-10/D-Z3	22-24 ft	10/17/2007	0.116 ± 0.057		0.042	0.191 ± 0.070		0.023	0.130 ± 0.056		0.023
SU14-10/D-Z4	30-32 ft	10/17/2007	0.225 ± 0.080		0.043	0.111 ± 0.052	J	0.024	0.158 ± 0.064		0.030
SU14-10/D-Z5	36-38 ft	10/17/2007	0.192 ± 0.072		0.040	0.189 ± 0.071		0.037	0.141 ± 0.062		0.041
SU14-10/D-Z6	46-48 ft	10/18/2007	0.146 ± 0.055		0.033	0.299 ± 0.082		0.030	0.136 ± 0.053		0.034
SU14-10/D-Z7	54-56 ft	10/18/2007	0.177 ± 0.064		0.043	0.193 ± 0.063		0.022	0.158 ± 0.056		0.011
SU14-10/D-Z8	62-64 ft	10/18/2007	0.215 ± 0.066		0.031	0.147 ± 0.051		0.01	0.201 ± 0.061		0.017

Table 3.3-4d Radiological Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-10-Z8	64-66 ft	10/16/2007	0.32 ± 0.13		0.17	0.22 ± 0.20	UJ	0.30	-- ± --	--	--
SU13-07/D-Z1	6-8 ft	10/16/2007	0.34 ± 0.14		0.19	0.40 ± 0.16		0.28	0.40 ± 0.16		0.28
SU13-07/D-Z2	14-16 ft	10/16/2007	0.041 ± 0.091	UJ	0.17	0.1 ± 0.15	UJ	0.26	-- ± --	--	--
SU13-07/D-Z3	22-24 ft	10/16/2007	0.111 ± 0.076	UJ	0.12	0.11 ± 0.14	UJ	0.25	-- ± --	--	--
SU13-07/D-Z4	30-32 ft	10/17/2007	0.046 ± 0.079	U	0.15	0.16 ± 0.15	UJ	0.24	-- ± --	--	--
SU13-07/D-Z5	32-34 ft	10/17/2007	-0.04 ± 0.84	UJ	0.16	0.007 ± 0.11	UJ	0.23	-- ± --	--	--
SU13-07/D-Z6	46-48 ft	10/17/2007	0.05 ± 0.11	U	0.21	0.09 ± 0.21	U	0.37	-- ± --	--	--
SU13-07/D-Z7	54-56 ft	10/17/2007	0.152 ± 0.091		0.13	0.17 ± 0.16	UJ	0.24	-- ± --	--	--
SU13-07/D-Z8	62-64 ft	10/17/2007	0.12 ± 0.11	UJ	0.19	0.15 ± 0.20	U	0.34	-- ± --	--	--
SU14-03/D-Z1	7-8 ft	10/25/2007	1.45 ± 0.23		0.08	1.07 ± 0.28		0.42	1.07 ± 0.28		0.42
SU14-03/D-Z2	13-14 ft	10/25/2007	0.48 ± 0.14	J	0.16	0.70 ± 0.23	J	0.27	0.70 ± 0.23	J	0.27
SU14-03/D-Z3	20-21 ft	10/25/2007	0.234 ± 0.092	J	0.13	0.25 ± 0.13	J	0.17	-- ± --	--	--
SU14-03/D-Z4	29-31 ft	10/25/2007	0.073 ± 0.080	U	0.14	0.077 ± 0.083	U	0.14	-- ± --	--	--
SU14-03/D-Z5	37-38 ft	10/25/2007	0.161 ± 0.085	J	0.12	-0.04 ± 1.3	UJ	0.5	-- ± --	--	--
SU14-03/D-Z6	47.5-48.5 ft	10/25/2007	0.72 ± 0.17		0.14	0.41 ± 0.19		0.15	0.41 ± 0.19		0.15
SU14-03/D-Z7	51.5-52.5 ft	10/25/2007	0.84 ± 0.16		0.11	0.62 ± 0.18		0.29	0.62 ± 0.18		0.29
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.33 ± 0.13		0.19	0.61 ± 0.18		0.27	0.61 ± 0.18		0.27
SU14-10/D-Z1	4-6 ft	10/17/2007	0.32 ± 0.10	J	0.14	0.37 ± 0.12	J	0.24	0.37 ± 0.12	J	0.24
SU14-10/D-Z2	8-10 ft	10/17/2007	0.76 ± 0.20		0.16	0.80 ± 0.25		0.19	0.80 ± 0.25		0.19
SU14-10/D-Z3	22-24 ft	10/17/2007	0.043 ± 0.079	UJ	0.15	0.09 ± 0.18	UJ	0.31	-- ± --	--	--
SU14-10/D-Z4	30-32 ft	10/17/2007	0.012 ± 0.074	UJ	0.14	0.13 ± 0.11	UJ	0.19	-- ± --	--	--
SU14-10/D-Z5	36-38 ft	10/17/2007	0.075 ± 0.085	U	0.15	0.12 ± 0.11	UJ	0.18	-- ± --	--	--
SU14-10/D-Z6	46-48 ft	10/18/2007	0.30 ± 0.11		0.11	0.14 ± 0.19	U	0.33	-- ± --	--	--
SU14-10/D-Z7	54-56 ft	10/18/2007	0.26 ± 0.11		0.16	0.41 ± 0.14		0.22	0.41 ± 0.14		0.22
SU14-10/D-Z8	62-64 ft	10/18/2007	0.091 ± 0.077	UJ	0.13	0.17 ± 0.13	UJ	0.20	-- ± --	--	--

Table 3.3-4d Radiological Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-10-Z8	64-66 ft	10/16/2007	-- ± --	--	--	0.32 ± 0.13		0.17	-- ± --	--	--
SU13-07/D-Z1	6-8 ft	10/16/2007	-- ± --	--	--	0.34 ± 0.14		0.19	-- ± --	--	--
SU13-07/D-Z2	14-16 ft	10/16/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z3	22-24 ft	10/16/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z4	30-32 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z5	32-34 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z6	46-48 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z7	54-56 ft	10/17/2007	-- ± --	--	--	0.152 ± 0.091		0.13	-- ± --	--	--
SU13-07/D-Z8	62-64 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z1	7-8 ft	10/25/2007	-- ± --	--	--	1.45 ± 0.23		0.08	-- ± --	--	--
SU14-03/D-Z2	13-14 ft	10/25/2007	-- ± --	--	--	0.48 ± 0.14	J	0.16	-- ± --	--	--
SU14-03/D-Z3	20-21 ft	10/25/2007	-- ± --	--	--	0.234 ± 0.092	J	0.13	-- ± --	--	--
SU14-03/D-Z4	29-31 ft	10/25/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z5	37-38 ft	10/25/2007	-- ± --	--	--	0.161 ± 0.085	J	0.12	-- ± --	--	--
SU14-03/D-Z6	47.5-48.5 ft	10/25/2007	-- ± --	--	--	0.72 ± 0.17		0.14	-- ± --	--	--
SU14-03/D-Z7	51.5-52.5 ft	10/25/2007	-- ± --	--	--	0.84 ± 0.16		0.11	-- ± --	--	--
SU14-03/D-Z8	59.5-61 ft	10/25/2007	-- ± --	--	--	0.33 ± 0.13		0.19	-- ± --	--	--
SU14-10/D-Z1	4-6 ft	10/17/2007	-- ± --	--	--	0.32 ± 0.10	J	0.14	-- ± --	--	--
SU14-10/D-Z2	8-10 ft	10/17/2007	-- ± --	--	--	0.76 ± 0.20		0.16	-- ± --	--	--
SU14-10/D-Z3	22-24 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z4	30-32 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z5	36-38 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z6	46-48 ft	10/18/2007	-- ± --	--	--	0.30 ± 0.11		0.11	-- ± --	--	--
SU14-10/D-Z7	54-56 ft	10/18/2007	-- ± --	--	--	0.26 ± 0.11		0.16	-- ± --	--	--
SU14-10/D-Z8	62-64 ft	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-4d Radiological Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-10-Z8	64-66 ft	10/16/2007	1.56 ± 0.96		1.3	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z1	6-8 ft	10/16/2007	6.6 ± 1.3		0.5	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z2	14-16 ft	10/16/2007	5.1 ± 1.2	J	0.8	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z3	22-24 ft	10/16/2007	3.30 ± 0.95	J	0.74	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z4	30-32 ft	10/17/2007	3.22 ± 0.79		0.79	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z5	32-34 ft	10/17/2007	2.02 ± 0.69	J	0.43	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z6	46-48 ft	10/17/2007	3.5 ± 1.0		0.7	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z7	54-56 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z8	62-64 ft	10/17/2007	0.73 ± 0.65	UJ	1.0	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z1	7-8 ft	10/25/2007	15.6 ± 2.3		0.7	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z2	13-14 ft	10/25/2007	8.2 ± 1.4	J	0.5	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z3	20-21 ft	10/25/2007	3.21 ± 0.78	J	0.81	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z4	29-31 ft	10/25/2007	3.31 ± 0.82		0.76	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z5	37-38 ft	10/25/2007	2.22 ± 0.81	J	0.76	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z6	47.5-48.5 ft	10/25/2007	2.53 ± 0.93		0.77	2.5 ± 1.3		1.8	-- ± --	--	--
SU14-03/D-Z7	51.5-52.5 ft	10/25/2007	5.4 ± 1.2		0.7	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z8	59.5-61 ft	10/25/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z1	4-6 ft	10/17/2007	7.6 ± 1.2	J	0.9	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z2	8-10 ft	10/17/2007	11.2 ± 2.0		0.7	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z3	22-24 ft	10/17/2007	2.77 ± 0.995	J	1.1	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z4	30-32 ft	10/17/2007	2.26 ± 0.70	J	0.87	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z5	36-38 ft	10/17/2007	2.84 ± 0.81		0.89	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z6	46-48 ft	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z7	54-56 ft	10/18/2007	1.60 ± 0.71		1.1	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z8	62-64 ft	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-4d Radiological Results for Exterior of Building 70 (SU09, SU13, and SU14) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU09-10-Z8	64-66 ft	10/16/2007	0.50 ± 0.12		0.10	0.25 ± 0.12		0.20	0.126 ± 0.075		0.10	-- ± --	--	--
SU13-07/D-Z1	6-8 ft	10/16/2007	0.51 ± 0.10		0.09	0.54 ± 0.12		0.12	0.150 ± 0.064		0.084	-- ± --	--	--
SU13-07/D-Z2	14-16 ft	10/16/2007	0.263 ± 0.080	J	0.079	0.174 ± 0.080	J	0.12	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z3	22-24 ft	10/16/2007	0.179 ± 0.068	J	0.079	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z4	30-32 ft	10/17/2007	0.176 ± 0.067		0.087	-- ± --	--	--	-- ± --	--	--	1.41 ± 0.89		1.0
SU13-07/D-Z5	32-34 ft	10/17/2007	0.044 ± 0.051	UJ	0.090	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z6	46-48 ft	10/17/2007	0.127 ± 0.068		0.098	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z7	54-56 ft	10/17/2007	0.369 ± 0.091		0.072	0.127 ± 0.069		0.097	-- ± --	--	--	-- ± --	--	--
SU13-07/D-Z8	62-64 ft	10/17/2007	0.337 ± 0.099		0.097	0.153 ± 0.099		0.15	0.164 ± 0.055		0.046	-- ± --	--	--
SU14-03/D-Z1	7-8 ft	10/25/2007	1.58 ± 0.27		0.20	1.07 ± 0.18		0.18	0.40 ± 0.10		0.09	-- ± --	--	--
SU14-03/D-Z2	13-14 ft	10/25/2007	0.72 ± 0.13	J	0.11	0.43 ± 0.12	J	0.12	0.300 ± 0.079	J	0.060	2.39 ± 0.84	J	1.4
SU14-03/D-Z3	20-21 ft	10/25/2007	0.283 ± 0.077	J	0.087	0.255 ± 0.076	J	0.12	0.086 ± 0.044	J	0.066	-- ± --	--	--
SU14-03/D-Z4	29-31 ft	10/25/2007	0.25 ± 0.10		0.1	0.142 ± 0.076		0.12	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z5	37-38 ft	10/25/2007	0.258 ± 0.081	J	0.080	0.143 ± 0.080	J	0.12	-- ± --	--	--	-- ± --	--	--
SU14-03/D-Z6	47.5-48.5 ft	10/25/2007	0.68 ± 0.13		0.09	0.42 ± 0.12		0.18	0.214 ± 0.078		0.088	-- ± --	--	--
SU14-03/D-Z7	51.5-52.5 ft	10/25/2007	1.06 ± 0.21		0.16	0.61 ± 0.12		0.15	0.376 ± 0.077		0.040	-- ± --	--	--
SU14-03/D-Z8	59.5-61 ft	10/25/2007	0.92 ± 0.17		0.14	0.48 ± 0.13		0.18	0.177 ± 0.072		0.10	-- ± --	--	--
SU14-10/D-Z1	4-6 ft	10/17/2007	0.54 ± 0.15	J	0.13	0.38 ± 0.11	J	0.15	0.107 ± 0.049	J	0.073	-- ± --	--	--
SU14-10/D-Z2	8-10 ft	10/17/2007	0.88 ± 0.16		0.13	0.84 ± 0.17		0.17	0.350 ± 0.082		0.051	-- ± --	--	--
SU14-10/D-Z3	22-24 ft	10/17/2007	0.225 ± 0.085	J	0.080	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z4	30-32 ft	10/17/2007	0.159 ± 0.078	J	0.092	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z5	36-38 ft	10/17/2007	0.19 ± 0.11		0.11	0.169 ± 0.065		0.11	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z6	46-48 ft	10/18/2007	0.186 ± 0.067		0.079	0.223 ± 0.095		0.12	-- ± --	--	--	-- ± --	--	--
SU14-10/D-Z7	54-56 ft	10/18/2007	0.59 ± 0.13		0.12	0.328 ± 0.095		0.14	0.238 ± 0.071		0.067	-- ± --	--	--
SU14-10/D-Z8	62-64 ft	10/18/2007	0.30 ± 0.11		0.10	0.232 ± 0.099		0.13	-- ± --	--	--	-- ± --	--	--

Key for Table 3.3-4d

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-05/D-Z3	22-23 ft	10/26/2007	0.115 ± 0.043		0.020	0.013 ± 0.017	J	0.011	0.114 ± 0.043		0.021
SU11-05/D-Z4	28-29 ft	10/26/2007	0.174 ± 0.059		0.024	0.010 ± 0.018	UJ	0.014	0.105 ± 0.045		0.022
SU11-05/D-Z5	36-37.5 ft	10/29/2007	0.144 ± 0.050		0.020	0.019 ± 0.021	J	0.013	0.163 ± 0.054		0.017
SU11-05/D-Z6	41-42 ft	10/29/2007	0.156 ± 0.051		0.016	0.004 ± 0.012	UJ	0.012	0.170 ± 0.054		0.024
SU11-05/D-Z7	51.5-52.5 ft	10/29/2007	0.094 ± 0.040		0.021	0.012 ± 0.016	UJ	0.020	0.178 ± 0.056		0.016
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.098 ± 0.042		0.018	0.007 ± 0.016	UJ	0.026	0.133 ± 0.050		0.021
SU11-16/D-Z4	31-32 ft	10/30/2007	0.203 ± 0.062		0.010	0.016 ± 0.020	UJ	0.025	0.192 ± 0.060		0.022
SU11-16/D-Z5	32-34 ft	10/30/2007	0.178 ± 0.059		0.030	0.009 ± 0.016	UJ	0.013	0.127 ± 0.049		0.027
SU11-16/D-Z6	40-41 ft	10/30/2007	0.145 ± 0.054		0.024	0.004 ± 0.011	U	0.023	0.123 ± 0.049		0.011
SU11-16/D-Z7	53-54 ft	10/30/2007	0.146 ± 0.051		0.020	0.005 ± 0.013	UJ	0.012	0.122 ± 0.046		0.022
SU11-16/D-Z8	59-60 ft	10/30/2007	0.107 ± 0.045		0.025	0.015 ± 0.020	J	0.013	0.115 ± 0.046		0.011
SU12-01/D-Z1	6-8 ft	11/09/2007	0.79 ± 0.19		0.05	0.025 ± 0.038	UJ	0.053	0.76 ± 0.19		0.05
SU12-01/D-Z2	15-16 ft	11/09/2007	4.72 ± 0.72		0.02	0.26 ± 0.11		0.04	4.36 ± 0.68		0.04
SU12-01/D-Z3	22-24 ft	11/09/2007	2.55 ± 0.43		0.05	0.110 ± 0.067		0.042	1.65 ± 0.31		0.04
SU12-01/D-Z4	30-32 ft	11/09/2007	11.0 ± 1.5		0.05	0.47 ± 0.14		0.04	4.82 ± 0.72		0.04
SU12-01/D-Z5	33-34 ft	11/09/2007	25.0 ± 3.4		0.05	1.09 ± 0.25		0.04	10.9 ± 1.5		0.05
SU12-01/D-Z6	46-48 ft	11/12/2007	3.44 ± 0.51		0.03	0.165 ± 0.062		0.023	1.28 ± 0.22		0.02
SU12-01/D-Z7	53-54 ft	11/12/2007	3.84 ± 0.56		0.03	0.157 ± 0.059		0.022	1.31 ± 0.22		0.02
SU12-01/D-Z8	61-62 ft	11/12/2007	3.95 ± 0.57		0.02	0.180 ± 0.063		0.013	0.91 ± 0.17		0.01
SU12-03/I-Z3	16-18 ft	11/05/2007	63.7 ± 8.5		0.03	3.05 ± 0.48		0.02	9.8 ± 1.4		0.01
SU12-03/I-Z4	24-26 ft	11/05/2007	24.2 ± 3.2		0.03	1.08 ± 0.20		0.02	3.52 ± 0.52		0.02
SU12-04/I-Z1	6-8 ft	11/06/2007	0.77 ± 0.15		0.03	0.042 ± 0.030		0.022	0.86 ± 0.16		0.02
SU12-04/I-Z2	10-12 ft	11/06/2007	0.83 ± 0.15		0.03	0.035 ± 0.026		0.022	0.76 ± 0.14		0.02
SU12-04/I-Z3	18-20 ft	11/06/2007	0.183 ± 0.061		0.028	0.026 ± 0.025		0.014	0.167 ± 0.057		0.019
SU12-04/I-Z4	28-30 ft	11/06/2007	0.160 ± 0.052		0.022	0.002 ± 0.010	U	0.022	0.120 ± 0.044		0.020
SU12-07/D-Z1	5-6 ft	11/01/2007	23.6 ± 3.4		0.04	1.24 ± 0.25		0.04	20.7 ± 3.0		0.03
SU12-07/D-Z2	12.5-14 ft	11/01/2007	2.90 ± 0.43		0.02	0.090 ± 0.044		0.013	2.10 ± 0.33		0.02
SU12-07/D-Z3	17-18 ft	11/01/2007	36.6 ± 4.8		0.02	1.68 ± 0.28		0.01	0.87 ± 0.16		0.02
SU12-07/D-Z4	24-25 ft	11/01/2007	17.1 ± 2.3		0.02	0.74 ± 0.16		0.01	1.83 ± 0.30		0.01

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU12-07/D-Z5	38.5-39.5 ft	11/01/2007	2.09 ± 0.32		0.02	0.060 ± 0.034		0.012	0.187 ± 0.057		0.018
SU12-07/D-Z6	41-43 ft	11/01/2007	2.00 ± 0.31		0.02	0.075 ± 0.039		0.012	0.143 ± 0.050		0.021
SU12-07/D-Z7	53-54 ft	11/01/2007	0.217 ± 0.064		0.01	0.014 ± 0.018	J	0.012	0.114 ± 0.044		0.01
SU12-07/D-Z8	62-63 ft	11/01/2007	0.154 ± 0.051		0.022	-0.0011 ± 0.009	U	0.020	0.077 ± 0.035		0.009
SU12-08/I-Z1	7-8 ft	11/02/2007	1.14 ± 0.20		0.03	0.060 ± 0.036		0.027	0.80 ± 0.15		0.02
SU12-08/I-Z2	13-14 ft	11/02/2007	0.224 ± 0.066		0.021	0.019 ± 0.022	J	0.013	0.145 ± 0.052		0.023
SU12-08/I-Z3	20-21 ft	11/02/2007	0.151 ± 0.054		0.023	0.005 ± 0.014	UJ	0.013	0.122 ± 0.048		0.025
SU12-08/I-Z4	30-31 ft	11/02/2007	0.118 ± 0.046		0.022	0.0 ± 0.0	U	0.01	0.108 ± 0.043		0.020
SU12-11/I-Z1	6-8 ft	11/07/2007	37.6 ± 4.9		0.02	1.57 ± 0.26		0.02	11.3 ± 1.5		0.02
SU12-11/I-Z2	10-12 ft	11/07/2007	41.3 ± 5.4		0.02	1.72 ± 0.29		0.02	5.73 ± 0.80		0.02
SU12-11/I-Z3	22-24 ft	11/07/2007	1.55 ± 0.25		0.03	0.068 ± 0.037		0.021	0.388 ± 0.091		0.020
SU12-11/I-Z4	24-26 ft	11/07/2007	0.332 ± 0.083		0.024	0.010 ± 0.018	UJ	0.027	0.180 ± 0.058		0.028
SU12-12/I-Z2	8-10 ft	11/06/2007	0.246 ± 0.067		0.01	0.012 ± 0.016	UJ	0.020	0.248 ± 0.067		0.019
SU12-12/I-Z3	18-20 ft	11/06/2007	0.175 ± 0.055		0.023	0.016 ± 0.017	UJ	0.019	0.177 ± 0.054		0.018
SU12-12/I-Z4	26-28 ft	11/07/2007	0.137 ± 0.048		0.022	0.020 ± 0.020		0.019	0.119 ± 0.043		0.016
SU12-17/I-Z1	4-6 ft	11/12/2007	0.61 ± 0.15		0.04	0.046 ± 0.041		0.021	0.35 ± 0.11		0.03
SU12-17/I-Z2	13-14 ft	11/13/2007	0.224 ± 0.065		0.023	0.008 ± 0.014	UJ	0.020	0.169 ± 0.054		0.016
SU12-17/I-Z3	21-22 ft	11/13/2007	0.172 ± 0.055		0.024	0.012 ± 0.016	UJ	0.020	0.180 ± 0.055		0.009
SU12-17/I-Z4	25-26 ft	11/13/2007	0.189 ± 0.058		0.019	0.004 ± 0.012	UJ	0.012	0.150 ± 0.050		0.019
SU12-22/D-Z1	3-4 ft	11/13/2007	3.63 ± 0.57		0.03	0.213 ± 0.079		0.028	3.38 ± 0.53		0.03
SU12-22/D-Z2	15-16 ft	11/13/2007	0.355 ± 0.086		0.023	0.010 ± 0.018	UJ	0.027	0.319 ± 0.081		0.028
SU12-22/D-Z3	19-20 ft	11/13/2007	0.224 ± 0.066		0.023	0.008 ± 0.014	U	0.022	0.224 ± 0.066		0.023
SU12-22/D-Z4	27-28 ft	11/13/2007	0.217 ± 0.063		0.019	0.024 ± 0.024	U	0.027	0.133 ± 0.048		0.019
SU12-22/D-Z5	38-39 ft	11/13/2007	0.095 ± 0.040		0.020	0.0 ± 0.0	U	0.01	0.139 ± 0.049		0.020
SU12-22/D-Z6	46-47 ft	11/14/2007	0.105 ± 0.042		0.023	-0.002 ± 0.011	U	0.024	0.131 ± 0.047		0.021
SU12-22/D-Z7	54-55 ft	11/14/2007	0.063 ± 0.033		0.024	0.008 ± 0.013	UJ	0.020	0.073 ± 0.034		0.019
SU12-22/D-Z8	63-64 ft	11/14/2007	0.132 ± 0.050		0.027	0.009 ± 0.015	UJ	0.022	0.10 ± 0.042		0.021

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-05/D-Z3	22-23 ft	10/26/2007	0.163 ± 0.057		0.029	0.131 ± 0.049		0.018	0.129 ± 0.049		0.020
SU11-05/D-Z4	28-29 ft	10/26/2007	0.187 ± 0.064		0.033	0.122 ± 0.049		0.022	0.155 ± 0.056		0.022
SU11-05/D-Z5	36-37.5 ft	10/29/2007	0.189 ± 0.063		0.028	0.157 ± 0.057		0.028	0.153 ± 0.055		0.011
SU11-05/D-Z6	41-42 ft	10/29/2007	0.274 ± 0.080		0.042	0.258 ± 0.074		0.021	0.318 ± 0.085		0.011
SU11-05/D-Z7	51.5-52.5 ft	10/29/2007	0.169 ± 0.059		0.033	0.158 ± 0.055		0.018	0.243 ± 0.070		0.018
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.234 ± 0.071		0.030	0.227 ± 0.069		0.021	0.179 ± 0.059		0.018
SU11-16/D-Z4	31-32 ft	10/30/2007	0.281 ± 0.079		0.039	0.240 ± 0.069		0.017	0.217 ± 0.065		0.024
SU11-16/D-Z5	32-34 ft	10/30/2007	0.199 ± 0.062		0.028	0.202 ± 0.062		0.01	0.180 ± 0.058		0.019
SU11-16/D-Z6	40-41 ft	10/30/2007	0.135 ± 0.049		0.025	0.138 ± 0.049		0.019	0.135 ± 0.048		0.016
SU11-16/D-Z7	53-54 ft	10/30/2007	0.247 ± 0.074		0.029	0.195 ± 0.063		0.019	0.254 ± 0.074		0.022
SU11-16/D-Z8	59-60 ft	10/30/2007	0.153 ± 0.054		0.030	0.152 ± 0.052		0.017	0.119 ± 0.046		0.024
SU12-01/D-Z1	6-8 ft	11/09/2007	0.349 ± 0.092		0.038	0.342 ± 0.089		0.027	0.293 ± 0.080		0.011
SU12-01/D-Z2	15-16 ft	11/09/2007	0.222 ± 0.068		0.023	0.260 ± 0.074		0.011	0.215 ± 0.066		0.018
SU12-01/D-Z3	22-24 ft	11/09/2007	0.140 ± 0.054		0.029	0.141 ± 0.053		0.028	0.087 ± 0.042		0.029
SU12-01/D-Z4	30-32 ft	11/09/2007	0.113 ± 0.047		0.032	0.166 ± 0.055		0.017	0.098 ± 0.041		0.020
SU12-01/D-Z5	33-34 ft	11/09/2007	0.112 ± 0.051		0.036	0.247 ± 0.076		0.012	0.128 ± 0.052		0.020
SU12-01/D-Z6	46-48 ft	11/12/2007	0.216 ± 0.072		0.038	0.150 ± 0.058		0.030	0.189 ± 0.064		0.020
SU12-01/D-Z7	53-54 ft	11/12/2007	0.125 ± 0.054		0.039	0.139 ± 0.055		0.033	0.124 ± 0.051		0.030
SU12-01/D-Z8	61-62 ft	11/12/2007	0.114 ± 0.053		0.040	0.101 ± 0.046		0.021	0.126 ± 0.053		0.027
SU12-03/I-Z3	16-18 ft	11/05/2007	0.38 ± 0.13		0.09	0.40 ± 0.13		0.05	0.33 ± 0.11		0.04
SU12-03/I-Z4	24-26 ft	11/05/2007	0.31 ± 0.12		0.09	0.217 ± 0.091	J	0.022	0.208 ± 0.088		0.022
SU12-04/I-Z1	6-8 ft	11/06/2007	1.03 ± 0.19		0.03	0.95 ± 0.18		0.03	0.89 ± 0.17		0.03
SU12-04/I-Z2	10-12 ft	11/06/2007	0.286 ± 0.080		0.034	0.297 ± 0.081		0.023	0.296 ± 0.080		0.021
SU12-04/I-Z3	18-20 ft	11/06/2007	0.154 ± 0.056		0.030	0.170 ± 0.059		0.024	0.139 ± 0.052		0.018
SU12-04/I-Z4	28-30 ft	11/06/2007	0.215 ± 0.071		0.036	0.147 ± 0.056		0.028	0.201 ± 0.066		0.020
SU12-07/D-Z1	5-6 ft	11/01/2007	0.71 ± 0.15		0.03	0.54 ± 0.12		0.02	0.66 ± 0.14		0.02
SU12-07/D-Z2	12.5-14 ft	11/01/2007	0.51 ± 0.11		0.03	0.47 ± 0.10		0.02	0.47 ± 0.10		0.02
SU12-07/D-Z3	17-18 ft	11/01/2007	0.251 ± 0.072		0.030	0.152 ± 0.053		0.020	0.181 ± 0.058		0.020
SU12-07/D-Z4	24-25 ft	11/01/2007	0.361 ± 0.096		0.035	0.202 ± 0.066		0.025	0.126 ± 0.050		0.019

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU12-07/D-Z5	38.5-39.5 ft	11/01/2007	0.221 ± 0.068		0.031	0.209 ± 0.067		0.035	0.149 ± 0.055		0.032
SU12-07/D-Z6	41-43 ft	11/01/2007	0.149 ± 0.052		0.028	0.148 ± 0.050		0.016	0.092 ± 0.039		0.022
SU12-07/D-Z7	53-54 ft	11/01/2007	0.177 ± 0.061		0.030	0.150 ± 0.054		0.021	0.198 ± 0.063		0.018
SU12-07/D-Z8	62-63 ft	11/01/2007	0.150 ± 0.058		0.036	0.121 ± 0.049		0.019	0.129 ± 0.051		0.019
SU12-08/I-Z1	7-8 ft	11/02/2007	0.151 ± 0.063		0.045	0.232 ± 0.074		0.021	0.166 ± 0.061		0.021
SU12-08/I-Z2	13-14 ft	11/02/2007	0.106 ± 0.048		0.032	0.171 ± 0.061		0.030	0.158 ± 0.057		0.019
SU12-08/I-Z3	20-21 ft	11/02/2007	0.157 ± 0.059		0.029	0.115 ± 0.051		0.032	0.113 ± 0.049		0.026
SU12-08/I-Z4	30-31 ft	11/02/2007	0.125 ± 0.050		0.031	0.101 ± 0.044		0.025	0.143 ± 0.051		0.018
SU12-11/I-Z1	6-8 ft	11/07/2007	0.42 ± 0.10		0.03	0.42 ± 0.10		0.03	0.45 ± 0.11		0.02
SU12-11/I-Z2	10-12 ft	11/07/2007	0.53 ± 0.12		0.03	0.403 ± 0.096		0.024	0.51 ± 0.11		0.02
SU12-11/I-Z3	22-24 ft	11/07/2007	0.150 ± 0.058		0.042	0.142 ± 0.051		0.020	0.119 ± 0.046		0.020
SU12-11/I-Z4	24-26 ft	11/07/2007	0.114 ± 0.052		0.045	0.161 ± 0.056		0.023	0.151 ± 0.054		0.010
SU12-12/I-Z2	8-10 ft	11/06/2007	0.234 ± 0.076		0.039	0.221 ± 0.073		0.031	0.202 ± 0.068		0.021
SU12-12/I-Z3	18-20 ft	11/06/2007	0.277 ± 0.080		0.038	0.234 ± 0.072		0.032	0.247 ± 0.073		0.029
SU12-12/I-Z4	26-28 ft	11/07/2007	0.172 ± 0.059		0.031	0.176 ± 0.059		0.011	0.174 ± 0.058		0.018
SU12-17/I-Z1	4-6 ft	11/12/2007	0.33 ± 0.11		0.06	0.35 ± 0.11		0.03	0.37 ± 0.12		0.03
SU12-17/I-Z2	13-14 ft	11/13/2007	0.157 ± 0.055		0.038	0.228 ± 0.065		0.031	0.207 ± 0.061		0.029
SU12-17/I-Z3	21-22 ft	11/13/2007	0.122 ± 0.046		0.032	0.153 ± 0.050		0.017	0.143 ± 0.048		0.022
SU12-17/I-Z4	25-26 ft	11/13/2007	0.149 ± 0.057		0.033	0.148 ± 0.054		0.019	0.135 ± 0.051		0.019
SU12-22/D-Z1	3-4 ft	11/13/2007	0.82 ± 0.13		0.04	0.66 ± 0.12		0.02	0.74 ± 0.12		0.02
SU12-22/D-Z2	15-16 ft	11/13/2007	0.134 ± 0.051		0.044	0.195 ± 0.057		0.022	0.125 ± 0.045		0.010
SU12-22/D-Z3	19-20 ft	11/13/2007	0.126 ± 0.048		0.037	0.091 ± 0.039	J	0.021	0.076 ± 0.035		0.018
SU12-22/D-Z4	27-28 ft	11/13/2007	0.170 ± 0.058		0.040	0.180 ± 0.058		0.029	0.096 ± 0.041		0.011
SU12-22/D-Z5	38-39 ft	11/13/2007	0.116 ± 0.046		0.022	0.126 ± 0.047		0.010	0.095 ± 0.040		0.017
SU12-22/D-Z6	46-47 ft	11/14/2007	0.113 ± 0.049		0.034	0.182 ± 0.060		0.018	0.132 ± 0.050		0.023
SU12-22/D-Z7	54-55 ft	11/14/2007	0.134 ± 0.053		0.032	0.144 ± 0.055		0.030	0.140 ± 0.052		0.019
SU12-22/D-Z8	63-64 ft	11/14/2007	0.238 ± 0.074		0.033	0.167 ± 0.059		0.027	0.248 ± 0.074		0.019

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-05/D-Z3	22-23 ft	10/26/2007	0.071 ± 0.086	UJ	0.15	0.08 ± 0.12	UJ	0.22	-- ± --	--	--
SU11-05/D-Z4	28-29 ft	10/26/2007	0.091 ± 0.070	UJ	0.12	0.06 ± 0.11	UJ	0.20	-- ± --	--	--
SU11-05/D-Z5	36-37.5 ft	10/29/2007	0.087 ± 0.092	UJ	0.16	0.06 ± 0.10	UJ	0.20	-- ± --	--	--
SU11-05/D-Z6	41-42 ft	10/29/2007	0.149 ± 0.099	UJ	0.16	0.08 ± 0.14	UJ	0.25	-- ± --	--	--
SU11-05/D-Z7	51.5-52.5 ft	10/29/2007	0.076 ± 0.051	J	0.075	0.07 ± 0.13	UJ	0.21	-- ± --	--	--
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.111 ± 0.061	UJ	0.13	0.02 ± 0.12	UJ	0.23	-- ± --	--	--
SU11-16/D-Z4	31-32 ft	10/30/2007	0.162 ± 0.081		0.12	0.13 ± 0.14	UJ	0.22	-- ± --	--	--
SU11-16/D-Z5	32-34 ft	10/30/2007	0.085 ± 0.080	UJ	0.14	0.12 ± 0.12	U	0.20	-- ± --	--	--
SU11-16/D-Z6	40-41 ft	10/30/2007	0.078 ± 0.078	UJ	0.14	0.07 ± 0.12	UJ	0.22	-- ± --	--	--
SU11-16/D-Z7	53-54 ft	10/30/2007	0.20 ± 0.11		0.18	0.37 ± 0.16		0.28	0.37 ± 0.16		0.28
SU11-16/D-Z8	59-60 ft	10/30/2007	0.078 ± 0.078	UJ	0.14	0.08 ± 0.11	UJ	0.20	-- ± --	--	--
SU12-01/D-Z1	6-8 ft	11/09/2007	0.233 ± 0.071		0.047	0.17 ± 0.15	UJ	0.24	-- ± --	--	--
SU12-01/D-Z2	15-16 ft	11/09/2007	0.128 ± 0.090	UJ	0.15	0.12 ± 0.13	UJ	0.22	-- ± --	--	--
SU12-01/D-Z3	22-24 ft	11/09/2007	0.071 ± 0.088	UJ	0.15	0.16 ± 0.17	UJ	0.27	-- ± --	--	--
SU12-01/D-Z4	30-32 ft	11/09/2007	0.168 ± 0.079	J	0.12	0.06 ± 0.12	UJ	0.22	-- ± --	--	--
SU12-01/D-Z5	33-34 ft	11/09/2007	0.281 ± 0.096		0.095	0.16 ± 0.15	UJ	0.23	-- ± --	--	--
SU12-01/D-Z6	46-48 ft	11/12/2007	0.18 ± 0.12	UJ	0.19	0.26 ± 0.18		0.23	0.26 ± 0.18		0.23
SU12-01/D-Z7	53-54 ft	11/12/2007	0.05 ± 0.11	U	0.21	0.0 ± 0.24	U	0.45	-- ± --	--	--
SU12-01/D-Z8	61-62 ft	11/12/2007	0.106 ± 0.081	UJ	0.14	0.04 ± 0.12	UJ	0.23	-- ± --	--	--
SU12-03/I-Z3	16-18 ft	11/05/2007	0.244 ± 0.092	J	0.11	0.29 ± 0.14	J	0.21	0.29 ± 0.14	J	0.21
SU12-03/I-Z4	24-26 ft	11/05/2007	0.124 ± 0.079		0.11	0.25 ± 0.16		0.21	0.25 ± 0.16		0.21
SU12-04/I-Z1	6-8 ft	11/06/2007	0.99 ± 0.23		0.18	0.64 ± 0.21		0.33	0.64 ± 0.21		0.33
SU12-04/I-Z2	10-12 ft	11/06/2007	0.41 ± 0.13	J	0.12	0.08 ± 0.20	UJ	0.35	-- ± --	--	--
SU12-04/I-Z3	18-20 ft	11/06/2007	0.217 ± 0.067	J	0.045	0.08 ± 0.11	UJ	0.18	-- ± --	--	--
SU12-04/I-Z4	28-30 ft	11/06/2007	0.101 ± 0.080	UJ	0.13	-0.02 ± 0.24	UJ	0.25	-- ± --	--	--
SU12-07/D-Z1	5-6 ft	11/01/2007	0.53 ± 0.14		0.17	0.47 ± 0.16		0.30	0.47 ± 0.16		0.30
SU12-07/D-Z2	12.5-14 ft	11/01/2007	0.32 ± 0.13		0.18	0.48 ± 0.22		0.25	0.48 ± 0.22		0.25
SU12-07/D-Z3	17-18 ft	11/01/2007	0.127 ± 0.078	J	0.11	0.0 ± 0.028	UJ	0.10	-- ± --	--	--
SU12-07/D-Z4	24-25 ft	11/01/2007	0.177 ± 0.059	J	0.046	0.077 ± 0.098	UJ	0.16	-- ± --	--	--

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU12-07/D-Z5	38.5-39.5 ft	11/01/2007	0.053 ± 0.072	UJ	0.12	0.078 ± 0.098	UJ	0.16	-- ± --	--	--
SU12-07/D-Z6	41-43 ft	11/01/2007	0.048 ± 0.081	U	0.15	0.06 ± 0.16	U	0.29	-- ± --	--	--
SU12-07/D-Z7	53-54 ft	11/01/2007	0.19 ± 0.10		0.13	0.24 ± 0.20	UJ	0.30	-- ± --	--	--
SU12-07/D-Z8	62-63 ft	11/01/2007	0.114 ± 0.091	UJ	0.16	0.20 ± 0.19	UJ	0.32	-- ± --	--	--
SU12-08/I-Z1	7-8 ft	11/02/2007	0.059 ± 0.079	UJ	0.13	0.15 ± 0.13	UJ	0.19	-- ± --	--	--
SU12-08/I-Z2	13-14 ft	11/02/2007	0.165 ± 0.099		0.15	0.1 ± 0.16	U	0.27	-- ± --	--	--
SU12-08/I-Z3	20-21 ft	11/02/2007	-0.01 ± 0.16	UJ	0.15	0.12 ± 0.17	UJ	0.27	-- ± --	--	--
SU12-08/I-Z4	30-31 ft	11/02/2007	0.12 ± 0.11	UJ	0.17	0.25 ± 0.19	UJ	0.27	-- ± --	--	--
SU12-11/I-Z1	6-8 ft	11/07/2007	0.35 ± 0.13	J	0.16	0.35 ± 0.15	J	0.24	0.35 ± 0.15	J	0.24
SU12-11/I-Z2	10-12 ft	11/07/2007	0.50 ± 0.14	J	0.12	0.32 ± 0.17	J	0.30	0.32 ± 0.17	J	0.30
SU12-11/I-Z3	22-24 ft	11/07/2007	0.223 ± 0.069	J	0.043	0.17 ± 0.11	J	0.15	0.17 ± 0.11	J	0.15
SU12-11/I-Z4	24-26 ft	11/07/2007	0.018 ± 0.076	UJ	0.15	0.08 ± 0.13	UJ	0.23	-- ± --	--	--
SU12-12/I-Z2	8-10 ft	11/06/2007	0.16 ± 0.12	UJ	0.19	0.27 ± 0.16	J	0.19	0.27 ± 0.16	J	0.19
SU12-12/I-Z3	18-20 ft	11/06/2007	0.097 ± 0.083	UJ	0.14	0.03 ± 0.14	UJ	0.25	-- ± --	--	--
SU12-12/I-Z4	26-28 ft	11/07/2007	0.198 ± 0.091		0.13	0.10 ± 0.12	U	0.21	-- ± --	--	--
SU12-17/I-Z1	4-6 ft	11/12/2007	0.286 ± 0.096	J	0.12	0.25 ± 0.16	UJ	0.25	-- ± --	--	--
SU12-17/I-Z2	13-14 ft	11/13/2007	0.19 ± 0.12		0.19	0.18 ± 0.19	UJ	0.31	-- ± --	--	--
SU12-17/I-Z3	21-22 ft	11/13/2007	0.230 ± 0.068	J	0.044	0.08 ± 0.12	UJ	0.20	-- ± --	--	--
SU12-17/I-Z4	25-26 ft	11/13/2007	0.051 ± 0.073	UJ	0.13	-0.04 ± 0.12	UJ	0.22	-- ± --	--	--
SU12-22/D-Z1	3-4 ft	11/13/2007	1.04 ± 0.19		0.12	0.76 ± 0.22		0.31	0.76 ± 0.22		0.31
SU12-22/D-Z2	15-16 ft	11/13/2007	0.216 ± 0.084	J	0.091	0.13 ± 0.16	UJ	0.26	-- ± --	--	--
SU12-22/D-Z3	19-20 ft	11/13/2007	0.043 ± 0.078	UJ	0.14	0.12 ± 0.12	UJ	0.18	-- ± --	--	--
SU12-22/D-Z4	27-28 ft	11/13/2007	0.064 ± 0.064	UJ	0.10	0.05 ± 0.13	UJ	0.22	-- ± --	--	--
SU12-22/D-Z5	38-39 ft	11/13/2007	0.046 ± 0.062	U	0.11	0.01 ± 0.12	U	0.24	-- ± --	--	--
SU12-22/D-Z6	46-47 ft	11/14/2007	0.040 ± 0.070	UJ	0.13	-0.004 ± 0.12	UJ	0.21	-- ± --	--	--
SU12-22/D-Z7	54-55 ft	11/14/2007	0.159 ± 0.089		0.13	0.05 ± 0.10	U	0.19	-- ± --	--	--
SU12-22/D-Z8	63-64 ft	11/14/2007	0.160 ± 0.085		0.14	0.0 ± 0.14	U	0.28	-- ± --	--	--

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-05/D-Z3	22-23 ft	10/26/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z4	28-29 ft	10/26/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z5	36-37.5 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z6	41-42 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z7	51.5-52.5 ft	10/29/2007	-- ± --	--	--	0.076 ± 0.051	J	0.075	-- ± --	--	--
SU11-05/D-Z8	61-62.5 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z4	31-32 ft	10/30/2007	-- ± --	--	--	0.162 ± 0.081		0.12	-- ± --	--	--
SU11-16/D-Z5	32-34 ft	10/30/2007	-- ± --	--	--	0.085 ± 0.080	U	0.14	-- ± --	--	--
SU11-16/D-Z6	40-41 ft	10/30/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z7	53-54 ft	10/30/2007	-- ± --	--	--	0.20 ± 0.11		0.18	-- ± --	--	--
SU11-16/D-Z8	59-60 ft	10/30/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z1	6-8 ft	11/09/2007	-- ± --	--	--	0.233 ± 0.071		0.047	-- ± --	--	--
SU12-01/D-Z2	15-16 ft	11/09/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z3	22-24 ft	11/09/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z4	30-32 ft	11/09/2007	-- ± --	--	--	0.168 ± 0.079	J	0.12	-- ± --	--	--
SU12-01/D-Z5	33-34 ft	11/09/2007	-- ± --	--	--	0.281 ± 0.096		0.095	-- ± --	--	--
SU12-01/D-Z6	46-48 ft	11/12/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z7	53-54 ft	11/12/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z8	61-62 ft	11/12/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-03/I-Z3	16-18 ft	11/05/2007	-- ± --	--	--	0.244 ± 0.092	J	0.11	-- ± --	--	--
SU12-03/I-Z4	24-26 ft	11/05/2007	-- ± --	--	--	0.124 ± 0.079		0.11	-- ± --	--	--
SU12-04/I-Z1	6-8 ft	11/06/2007	-- ± --	--	--	0.99 ± 0.23		0.18	-- ± --	--	--
SU12-04/I-Z2	10-12 ft	11/06/2007	-- ± --	--	--	0.41 ± 0.13	J	0.12	-- ± --	--	--
SU12-04/I-Z3	18-20 ft	11/06/2007	-- ± --	--	--	0.217 ± 0.067	J	0.045	-- ± --	--	--
SU12-04/I-Z4	28-30 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z1	5-6 ft	11/01/2007	-- ± --	--	--	0.53 ± 0.14		0.17	-- ± --	--	--
SU12-07/D-Z2	12.5-14 ft	11/01/2007	-- ± --	--	--	0.32 ± 0.13		0.18	-- ± --	--	--
SU12-07/D-Z3	17-18 ft	11/01/2007	-- ± --	--	--	0.127 ± 0.078	J	0.11	-- ± --	--	--
SU12-07/D-Z4	24-25 ft	11/01/2007	-- ± --	--	--	0.177 ± 0.059	J	0.046	-- ± --	--	--

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU12-07/D-Z5	38.5-39.5 ft	11/01/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z6	41-43 ft	11/01/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z7	53-54 ft	11/01/2007	-- ± --	--	--	0.19 ± 0.10		0.13	-- ± --	--	--
SU12-07/D-Z8	62-63 ft	11/01/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z1	7-8 ft	11/02/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z2	13-14 ft	11/02/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z3	20-21 ft	11/02/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z4	30-31 ft	11/02/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-11/I-Z1	6-8 ft	11/07/2007	-- ± --	--	--	0.35 ± 0.13	J	0.16	-- ± --	--	--
SU12-11/I-Z2	10-12 ft	11/07/2007	-- ± --	--	--	0.50 ± 0.14	J	0.12	-- ± --	--	--
SU12-11/I-Z3	22-24 ft	11/07/2007	-- ± --	--	--	0.223 ± 0.069	J	0.043	-- ± --	--	--
SU12-11/I-Z4	24-26 ft	11/07/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z2	8-10 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z3	18-20 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z4	26-28 ft	11/07/2007	-- ± --	--	--	0.198 ± 0.091		0.13	-- ± --	--	--
SU12-17/I-Z1	4-6 ft	11/12/2007	-- ± --	--	--	0.286 ± 0.096	J	0.12	-- ± --	--	--
SU12-17/I-Z2	13-14 ft	11/13/2007	-- ± --	--	--	0.19 ± 0.12		0.19	-- ± --	--	--
SU12-17/I-Z3	21-22 ft	11/13/2007	-- ± --	--	--	0.230 ± 0.068	J	0.044	-- ± --	--	--
SU12-17/I-Z4	25-26 ft	11/13/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z1	3-4 ft	11/13/2007	-- ± --	--	--	1.04 ± 0.19		0.12	-- ± --	--	--
SU12-22/D-Z2	15-16 ft	11/13/2007	-- ± --	--	--	0.216 ± 0.084	J	0.091	-- ± --	--	--
SU12-22/D-Z3	19-20 ft	11/13/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z4	27-28 ft	11/13/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z5	38-39 ft	11/13/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z6	46-47 ft	11/14/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z7	54-55 ft	11/14/2007	-- ± --	--	--	0.159 ± 0.089		0.13	-- ± --	--	--
SU12-22/D-Z8	63-64 ft	11/14/2007	-- ± --	--	--	0.160 ± 0.085		0.14	-- ± --	--	--

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-05/D-Z3	22-23 ft	10/26/2007	4.9 ± 1.1	J	0.5	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z4	28-29 ft	10/26/2007	1.65 ± 0.60	J	0.81	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z5	36-37.5 ft	10/29/2007	1.97 ± 0.74	J	0.66	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z6	41-42 ft	10/29/2007	2.10 ± 0.88		0.98	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z7	51.5-52.5 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z8	61-62.5 ft	10/29/2007	1.06 ± 0.51	J	0.54	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z4	31-32 ft	10/30/2007	5.3 ± 1.2		0.6	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z5	32-34 ft	10/30/2007	3.20 ± 0.75		0.53	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z6	40-41 ft	10/30/2007	2.03 ± 0.74	J	0.78	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z7	53-54 ft	10/30/2007	1.40 ± 0.67		0.92	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z8	59-60 ft	10/30/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z1	6-8 ft	11/09/2007	6.0 ± 1.1		0.3	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z2	15-16 ft	11/09/2007	3.95 ± 0.90	J	0.89	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z3	22-24 ft	11/09/2007	3.53 ± 0.95	J	0.57	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z4	30-32 ft	11/09/2007	2.37 ± 0.72	J	0.87	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z5	33-34 ft	11/09/2007	3.15 ± 0.99		0.90	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z6	46-48 ft	11/12/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z7	53-54 ft	11/12/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z8	61-62 ft	11/12/2007	0.88 ± 0.52	J	0.85	-- ± --	--	--	-- ± --	--	--
SU12-03/I-Z3	16-18 ft	11/05/2007	4.75 ± 0.95	J	0.32	-- ± --	--	--	-- ± --	--	--
SU12-03/I-Z4	24-26 ft	11/05/2007	2.81 ± 0.82		0.53	-- ± --	--	--	-- ± --	--	--
SU12-04/I-Z1	6-8 ft	11/06/2007	10.7 ± 1.8		0.7	-- ± --	--	--	-- ± --	--	--
SU12-04/I-Z2	10-12 ft	11/06/2007	4.5 ± 1.0	J	0.4	-- ± --	--	--	-- ± --	--	--
SU12-04/I-Z3	18-20 ft	11/06/2007	4.08 ± 0.89	J	0.35	-- ± --	--	--	-- ± --	--	--
SU12-04/I-Z4	28-30 ft	11/06/2007	2.86 ± 0.76	J	0.84	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z1	5-6 ft	11/01/2007	8.8 ± 1.4		1	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z2	12.5-14 ft	11/01/2007	10.1 ± 1.7		0.7	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z3	17-18 ft	11/01/2007	3.12 ± 0.85	J	0.42	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z4	24-25 ft	11/01/2007	2.84 ± 0.77	J	0.66	1.76 ± 0.83	J	0.93	-- ± --	--	--

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU12-07/D-Z5	38.5-39.5 ft	11/01/2007	0.89 ± 0.52	J	0.68	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z6	41-43 ft	11/01/2007	3.9 ± 1.1		0.7	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z7	53-54 ft	11/01/2007	1.18 ± 0.75		1.0	2.9 ± 1.5		1.6	-- ± --	--	--
SU12-07/D-Z8	62-63 ft	11/01/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z1	7-8 ft	11/02/2007	7.8 ± 1.3	J	0.4	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z2	13-14 ft	11/02/2007	5.0 ± 1.2		0.9	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z3	20-21 ft	11/02/2007	3.7 ± 1.0	J	0.8	2.13 ± 0.87	J	1.2	-- ± --	--	--
SU12-08/I-Z4	30-31 ft	11/02/2007	2.45 ± 0.86	J	0.85	-- ± --	--	--	-- ± --	--	--
SU12-11/I-Z1	6-8 ft	11/07/2007	6.1 ± 1.3	J	0.6	-- ± --	--	--	-- ± --	--	--
SU12-11/I-Z2	10-12 ft	11/07/2007	6.1 ± 1.2	J	0.4	-- ± --	--	--	-- ± --	--	--
SU12-11/I-Z3	22-24 ft	11/07/2007	3.59 ± 0.88	J	0.71	-- ± --	--	--	-- ± --	--	--
SU12-11/I-Z4	24-26 ft	11/07/2007	2.47 ± 0.79	J	0.55	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z2	8-10 ft	11/06/2007	4.6 ± 1.1	J	0.8	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z3	18-20 ft	11/06/2007	3.55 ± 0.80	J	0.71	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z4	26-28 ft	11/07/2007	2.19 ± 0.67		0.81	-- ± --	--	--	-- ± --	--	--
SU12-17/I-Z1	4-6 ft	11/12/2007	5.18 ± 0.998	J	0.84	-- ± --	--	--	-- ± --	--	--
SU12-17/I-Z2	13-14 ft	11/13/2007	6.8 ± 1.3		0.5	-- ± --	--	--	-- ± --	--	--
SU12-17/I-Z3	21-22 ft	11/13/2007	4.77 ± 0.94	J	0.31	-- ± --	--	--	-- ± --	--	--
SU12-17/I-Z4	25-26 ft	11/13/2007	4.40 ± 0.96	J	0.46	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z1	3-4 ft	11/13/2007	12.6 ± 1.8		0.9	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z2	15-16 ft	11/13/2007	3.8 ± 1.0	J	0.7	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z3	19-20 ft	11/13/2007	2.38 ± 0.76	J	0.47	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z4	27-28 ft	11/13/2007	2.20 ± 0.72	J	0.68	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z5	38-39 ft	11/13/2007	2.21 ± 0.74		0.62	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z6	46-47 ft	11/14/2007	2.02 ± 0.61	J	0.69	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z7	54-55 ft	11/14/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z8	63-64 ft	11/14/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU11-05/D-Z3	22-23 ft	10/26/2007	0.214 ± 0.074	J	0.071	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z4	28-29 ft	10/26/2007	0.177 ± 0.071	J	0.084	0.119 ± 0.059	J	0.11	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z5	36-37.5 ft	10/29/2007	0.119 ± 0.071	J	0.082	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z6	41-42 ft	10/29/2007	0.273 ± 0.079		0.074	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z7	51.5-52.5 ft	10/29/2007	0.173 ± 0.068	J	0.064	0.142 ± 0.054	J	0.067	-- ± --	--	--	-- ± --	--	--
SU11-05/D-Z8	61-62.5 ft	10/29/2007	0.177 ± 0.058	J	0.060	0.210 ± 0.083	J	0.10	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z4	31-32 ft	10/30/2007	0.242 ± 0.068		0.058	0.176 ± 0.085		0.16	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z5	32-34 ft	10/30/2007	0.31 ± 0.11		0.11	0.098 ± 0.070	U	0.11	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z6	40-41 ft	10/30/2007	0.142 ± 0.072	J	0.080	0.220 ± 0.068	J	0.053	-- ± --	--	--	-- ± --	--	--
SU11-16/D-Z7	53-54 ft	10/30/2007	0.54 ± 0.11		0.10	0.258 ± 0.095		0.15	0.131 ± 0.062		0.094	-- ± --	--	--
SU11-16/D-Z8	59-60 ft	10/30/2007	0.156 ± 0.081	J	0.095	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-01/D-Z1	6-8 ft	11/09/2007	0.395 ± 0.092		0.076	0.256 ± 0.076		0.10	0.085 ± 0.042		0.058	-- ± --	--	--
SU12-01/D-Z2	15-16 ft	11/09/2007	0.154 ± 0.058	J	0.082	0.163 ± 0.068	J	0.12	-- ± --	--	--	2.91 ± 0.80	J	1.2
SU12-01/D-Z3	22-24 ft	11/09/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--	1.12 ± 0.45	J	0.77
SU12-01/D-Z4	30-32 ft	11/09/2007	0.094 ± 0.056	J	0.081	0.136 ± 0.064	J	0.096	-- ± --	--	--	4.00 ± 0.74	J	1.2
SU12-01/D-Z5	33-34 ft	11/09/2007	0.34 ± 0.10		0.1	0.214 ± 0.080		0.14	-- ± --	--	--	6.7 ± 1.6		1.6
SU12-01/D-Z6	46-48 ft	11/12/2007	0.51 ± 0.13		0.12	0.207 ± 0.091		0.16	-- ± --	--	--	1.41 ± 0.69		1.4
SU12-01/D-Z7	53-54 ft	11/12/2007	0.33 ± 0.12		0.11	0.150 ± 0.081		0.15	-- ± --	--	--	1.61 ± 0.56		1.1
SU12-01/D-Z8	61-62 ft	11/12/2007	0.149 ± 0.076	J	0.091	-- ± --	--	--	-- ± --	--	--	0.98 ± 0.44	J	0.88
SU12-03/I-Z3	16-18 ft	11/05/2007	0.309 ± 0.082	J	0.079	0.328 ± 0.083	J	0.084	0.070 ± 0.041	J	0.060	6.3 ± 1.6	J	1.6
SU12-03/I-Z4	24-26 ft	11/05/2007	0.49 ± 0.12		0.10	0.230 ± 0.077		0.12	0.065 ± 0.045		0.064	3.2 ± 1.2		1.4
SU12-04/I-Z1	6-8 ft	11/06/2007	0.86 ± 0.17		0.14	0.61 ± 0.14		0.18	0.410 ± 0.094		0.059	-- ± --	--	--
SU12-04/I-Z2	10-12 ft	11/06/2007	0.212 ± 0.061	J	0.063	0.245 ± 0.091	J	0.13	0.076 ± 0.047	J	0.069	-- ± --	--	--
SU12-04/I-Z3	18-20 ft	11/06/2007	0.143 ± 0.046	J	0.049	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-04/I-Z4	28-30 ft	11/06/2007	0.146 ± 0.069	J	0.085	0.140 ± 0.077	J	0.12	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z1	5-6 ft	11/01/2007	0.80 ± 0.16		0.14	0.58 ± 0.12		0.13	0.309 ± 0.069		0.056	10.1 ± 1.3		1.9
SU12-07/D-Z2	12.5-14 ft	11/01/2007	0.53 ± 0.11		0.10	0.50 ± 0.12		0.17	0.123 ± 0.056		0.071	1.98 ± 0.64		1.2
SU12-07/D-Z3	17-18 ft	11/01/2007	0.174 ± 0.059	J	0.065	0.156 ± 0.084	J	0.12	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z4	24-25 ft	11/01/2007	0.063 ± 0.040	J	0.063	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-4e Radiological Results for Interior of Building 70 (SU11, and SU12) Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
SU12-07/D-Z5	38.5-39.5 ft	11/01/2007	0.138 ± 0.064	J	0.074	-- ± --	--	--	-- ± --	--	--	0.88 ± 0.57	J	0.81
SU12-07/D-Z6	41-43 ft	11/01/2007	0.224 ± 0.082		0.087	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-07/D-Z7	53-54 ft	11/01/2007	0.53 ± 0.15		0.13	0.203 ± 0.090		0.14	0.241 ± 0.066		0.032	-- ± --	--	--
SU12-07/D-Z8	62-63 ft	11/01/2007	0.219 ± 0.085		0.13	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z1	7-8 ft	11/02/2007	0.226 ± 0.092	J	0.085	0.188 ± 0.065	J	0.093	0.043 ± 0.028	J	0.038	1.09 ± 0.60	J	0.78
SU12-08/I-Z2	13-14 ft	11/02/2007	0.266 ± 0.093		0.084	0.158 ± 0.076		0.098	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z3	20-21 ft	11/02/2007	0.186 ± 0.078	J	0.081	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-08/I-Z4	30-31 ft	11/02/2007	0.342 ± 0.090	J	0.078	0.194 ± 0.082	J	0.10	0.090 ± 0.044	J	0.050	-- ± --	--	--
SU12-11/I-Z1	6-8 ft	11/07/2007	0.51 ± 0.11	J	0.1	0.39 ± 0.10	J	0.16	0.088 ± 0.058	J	0.087	6.37 ± 0.97	J	1.4
SU12-11/I-Z2	10-12 ft	11/07/2007	0.432 ± 0.094	J	0.086	0.57 ± 0.14	J	0.13	0.233 ± 0.065	J	0.051	3.56 ± 0.80	J	1.5
SU12-11/I-Z3	22-24 ft	11/07/2007	0.160 ± 0.057	J	0.060	0.104 ± 0.045	J	0.082	0.053 ± 0.034	J	0.050	-- ± --	--	--
SU12-11/I-Z4	24-26 ft	11/07/2007	0.103 ± 0.060	J	0.078	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z2	8-10 ft	11/06/2007	0.233 ± 0.084	J	0.091	0.132 ± 0.078	J	0.12	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z3	18-20 ft	11/06/2007	0.150 ± 0.063	J	0.083	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-12/I-Z4	26-28 ft	11/07/2007	0.202 ± 0.075		0.088	-- ± --	--	--	0.065 ± 0.038		0.059	-- ± --	--	--
SU12-17/I-Z1	4-6 ft	11/12/2007	0.247 ± 0.082	J	0.10	0.247 ± 0.091	J	0.13	0.118 ± 0.053	J	0.059	-- ± --	--	--
SU12-17/I-Z2	13-14 ft	11/13/2007	0.31 ± 0.13		0.13	0.184 ± 0.088		0.14	0.108 ± 0.055		0.075	-- ± --	--	--
SU12-17/I-Z3	21-22 ft	11/13/2007	0.139 ± 0.050	J	0.057	0.097 ± 0.045	J	0.080	-- ± --	--	--	-- ± --	--	--
SU12-17/I-Z4	25-26 ft	11/13/2007	0.125 ± 0.060	J	0.073	0.114 ± 0.062	J	0.082	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z1	3-4 ft	11/13/2007	1.15 ± 0.17		0.13	1.10 ± 0.22		0.17	0.398 ± 0.090		0.066	4.26 ± 0.94		1.6
SU12-22/D-Z2	15-16 ft	11/13/2007	0.163 ± 0.073	J	0.083	0.161 ± 0.083	J	0.12	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z3	19-20 ft	11/13/2007	0.103 ± 0.049	J	0.062	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z4	27-28 ft	11/13/2007	0.110 ± 0.048	J	0.054	0.136 ± 0.050	J	0.082	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z5	38-39 ft	11/13/2007	0.136 ± 0.065		0.074	0.193 ± 0.080		0.097	0.048 ± 0.033		0.043	-- ± --	--	--
SU12-22/D-Z6	46-47 ft	11/14/2007	0.128 ± 0.058	J	0.081	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z7	54-55 ft	11/14/2007	0.274 ± 0.096		0.096	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
SU12-22/D-Z8	63-64 ft	11/14/2007	0.112 ± 0.060		0.089	0.212 ± 0.072		0.069	-- ± --	--	--	-- ± --	--	--

Key for Table 3.3-4e

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C1-01-Z4	30-32 ft	10/31/2007	0.124 ± 0.047		0.028	0.001 ± 0.012	U	0.026	0.076 ± 0.035		0.019
C1-02-Z3	21-23 ft	11/01/2007	9.0 ± 1.3		0.02	0.57 ± 0.13		0.01	9.3 ± 1.3		0.02
C1-03-Z3	23-25 ft	11/01/2007	2.99 ± 0.44		0.02	0.151 ± 0.058		0.013	2.99 ± 0.44		0.02
C2-01-Z4	32-34 ft	10/30/2007	0.131 ± 0.047		0.021	0.004 ± 0.013	UJ	0.012	0.108 ± 0.042		0.01
C2-02-Z5	34-36 ft	10/26/2007	0.88 ± 0.16		0.02	0.054 ± 0.033		0.021	0.76 ± 0.15		0.01
C3-01-Z4	28-30 ft	10/26/2007	1.15 ± 0.20		0.02	0.062 ± 0.036		0.024	1.04 ± 0.18		0.02
C3-02-Z4	30-32 ft	10/30/2007	0.308 ± 0.080		0.023	0.043 ± 0.031		0.013	0.309 ± 0.080		0.020
C4-01/D-Z5	33-35 ft	10/24/2007	4.36 ± 0.64		0.01	0.269 ± 0.083		0.027	4.52 ± 0.66		0.02
C4-01/D-Z6	41-43 ft	10/24/2007	3.14 ± 0.47		0.03	0.130 ± 0.055		0.029	3.01 ± 0.45		0.02
C4-01/D-Z7	55-56 ft	10/25/2007	2.00 ± 0.32		0.03	0.126 ± 0.055		0.031	1.84 ± 0.30		0.02
C4-01/D-Z8	57-58 ft	10/25/2007	2.57 ± 0.37		0.01	0.143 ± 0.052		0.011	2.42 ± 0.36		0.009
C4-02-Z4	30-31 ft	10/22/2007	0.193 ± 0.063		0.031	0.001 ± 0.013	U	0.029	0.155 ± 0.054		0.021
C4-03-Z4	31-32 ft	10/18/2007	0.303 ± 0.078		0.029	0.0 ± 0.0	U	0.04	0.308 ± 0.080		0.034
C5-01-Z4	28-30 ft	11/01/2007	0.275 ± 0.073		0.022	0.005 ± 0.013	UJ	0.012	0.143 ± 0.050		0.022
C5-02-Z4	31-33 ft	10/31/2007	0.062 ± 0.032		0.019	0.002 ± 0.011	U	0.023	0.112 ± 0.043		0.019
C6-01-Z7	54-56 ft	10/31/2007	0.218 ± 0.062		0.016	0.018 ± 0.020	J	0.012	0.239 ± 0.066		0.01
C6-02/D-Z7	50-52 ft	10/25/2007	16.6 ± 2.8		0.1	0.84 ± 0.44		0.27	17.3 ± 2.8		0.2
C6-03/D-Z3	20-22 ft	10/25/2007	0.168 ± 0.055		0.022	0.005 ± 0.013	UJ	0.013	0.190 ± 0.059		0.024
C7-01-Z4	29.5-30 ft	10/17/2007	2.45 ± 0.35		0.01	0.114 ± 0.051		0.027	2.24 ± 0.33		0.02
C7-01-Z5	35-36 ft	10/17/2007	2.54 ± 0.36		0.02	0.130 ± 0.054		0.026	2.65 ± 0.37		0.02
C7-02-Z4	29.5-30 ft	10/17/2007	1.38 ± 0.22		0.03	0.069 ± 0.039		0.029	1.46 ± 0.23		0.02

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C8-01-Z4	28.5-30 ft	10/16/2007	2.81 ± 0.41		0.02	0.154 ± 0.057		0.012	2.76 ± 0.41		0.02
C8-02-Z4	29-30 ft	10/16/2007	5.59 ± 0.80		0.02	0.277 ± 0.085		0.014	4.52 ± 0.66		0.02
C9-01-Z7	48-50 ft	10/22/2007	6.85 ± 0.97		0.02	0.338 ± 0.094		0.023	6.13 ± 0.87		0.01
C9-02/D-Z7	52-53 ft	10/23/2007	8.0 ± 1.1		0.02	0.45 ± 0.11		0.01	7.26 ± 0.99		0.02
C9-02/D-Z8	62-63 ft	10/23/2007	10.2 ± 1.4		0.02	0.54 ± 0.12		0.01	8.9 ± 1.2		0.01
C9-03/D-Z6	45-46 ft	10/24/2007	417 ± 57		1	23.8 ± 5.5		1.0	354 ± 48		1
C9-03/D-Z7	52-53 ft	10/24/2007	80 ± 11		0.4	3.0 ± 1.1		0.4	71 ± 10		0.4
C9-03/D-Z8	60-61 ft	10/24/2007	0.68 ± 0.13		0.02	0.072 ± 0.037		0.020	0.62 ± 0.12		0.02
C9-04/D-Z7	50-52 ft	10/23/2007	7.7 ± 1.1		0.03	0.308 ± 0.088		0.013	6.78 ± 0.94		0.02
C9-04/D-Z8	60-61 ft	10/23/2007	5.64 ± 0.78		0.02	0.335 ± 0.089		0.012	5.48 ± 0.76		0.01
C10-01-Z4	28-30 ft	10/22/2007	4.01 ± 0.58		0.02	0.204 ± 0.068		0.022	3.75 ± 0.55		0.03
C10-02-Z4	28-30 ft	10/22/2007	0.148 ± 0.053		0.021	-0.001 ± 0.011	U	0.022	0.137 ± 0.051		0.027
C11-01-Z7	51-52 ft	10/19/2007	3.28 ± 0.51		0.01	0.154 ± 0.064		0.031	2.91 ± 0.46		0.03
C11-02-Z6	47-48 ft	10/18/2007	0.433 ± 0.099		0.020	0.043 ± 0.031		0.013	0.48 ± 0.11		0.02
C11-02-Z7	51-52 ft	10/18/2007	1.46 ± 0.26		0.03	0.117 ± 0.055		0.027	1.47 ± 0.26		0.03
C12-01-Z5	32-33.5 ft	10/22/2007	0.135 ± 0.049		0.020	0.002 ± 0.011	U	0.024	0.142 ± 0.050		0.020
C12-02-Z4	30-32 ft	10/22/2007	0.74 ± 0.14		0.02	0.045 ± 0.030		0.021	0.67 ± 0.13		0.02
C13-01-Z2	14.5-16 ft	10/16/2007	0.304 ± 0.079		0.024	0.005 ± 0.013	UJ	0.012	0.345 ± 0.085		0.010
C13-02-Z2	14.5-16 ft	10/16/2007	0.164 ± 0.056		0.024	0.008 ± 0.014	UJ	0.022	0.198 ± 0.061		0.010
C13-03-Z2	15.5-16 ft	10/17/2007	0.215 ± 0.063		0.023	0.023 ± 0.022		0.022	0.141 ± 0.050		0.010
C13-03-Z3	23-24 ft	10/17/2007	1.48 ± 0.23		0.02	0.063 ± 0.037		0.013	1.44 ± 0.22		0.02

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C1-01-Z4	30-32 ft	10/31/2007	0.059 ± 0.033		0.028	0.095 ± 0.040		0.01	0.071 ± 0.034		0.019
C1-02-Z3	21-23 ft	11/01/2007	0.105 ± 0.047		0.033	0.111 ± 0.048		0.031	0.079 ± 0.042		0.034
C1-03-Z3	23-25 ft	11/01/2007	0.147 ± 0.054		0.027	0.163 ± 0.057		0.027	0.105 ± 0.044		0.011
C2-01-Z4	32-34 ft	10/30/2007	0.100 ± 0.045		0.032	0.173 ± 0.058		0.023	0.131 ± 0.049		0.018
C2-02-Z5	34-36 ft	10/26/2007	0.174 ± 0.059		0.028	0.136 ± 0.050		0.020	0.212 ± 0.064		0.017
C3-01-Z4	28-30 ft	10/26/2007	0.136 ± 0.052		0.030	0.123 ± 0.049		0.025	0.102 ± 0.043		0.018
C3-02-Z4	30-32 ft	10/30/2007	0.164 ± 0.057		0.030	0.181 ± 0.059		0.020	0.142 ± 0.051		0.020
C4-01/D-Z5	33-35 ft	10/24/2007	0.135 ± 0.051		0.029	0.173 ± 0.058		0.025	0.186 ± 0.060		0.017
C4-01/D-Z6	41-43 ft	10/24/2007	0.167 ± 0.057		0.028	0.218 ± 0.066		0.017	0.128 ± 0.048		0.020
C4-01/D-Z7	55-56 ft	10/25/2007	0.373 ± 0.094		0.031	0.316 ± 0.084		0.021	0.327 ± 0.085		0.021
C4-01/D-Z8	57-58 ft	10/25/2007	0.250 ± 0.073		0.032	0.178 ± 0.059		0.023	0.218 ± 0.066		0.017
C4-02-Z4	30-31 ft	10/22/2007	0.169 ± 0.061		0.036	0.260 ± 0.076		0.030	0.149 ± 0.054		0.022
C4-03-Z4	31-32 ft	10/18/2007	0.378 ± 0.096		0.031	0.304 ± 0.083		0.011	0.45 ± 0.11		0.02
C5-01-Z4	28-30 ft	11/01/2007	0.341 ± 0.098		0.041	0.261 ± 0.081		0.022	0.329 ± 0.094		0.028
C5-02-Z4	31-33 ft	10/31/2007	0.118 ± 0.052		0.041	0.114 ± 0.046		0.018	0.091 ± 0.042		0.025
C6-01-Z7	54-56 ft	10/31/2007	0.50 ± 0.11		0.03	0.208 ± 0.064		0.017	0.47 ± 0.11		0.02
C6-02/D-Z7	50-52 ft	10/25/2007	0.366 ± 0.090		0.030	0.323 ± 0.083		0.022	0.353 ± 0.087		0.017
C6-03/D-Z3	20-22 ft	10/25/2007	0.158 ± 0.056		0.031	0.172 ± 0.058		0.027	0.194 ± 0.061		0.020
C7-01-Z4	29.5-30 ft	10/17/2007	0.210 ± 0.075		0.034	0.310 ± 0.093		0.034	0.203 ± 0.073		0.015
C7-01-Z5	35-36 ft	10/17/2007	0.139 ± 0.067		0.055	0.222 ± 0.079		0.029	0.170 ± 0.068		0.016
C7-02-Z4	29.5-30 ft	10/17/2007	0.147 ± 0.061		0.038	0.136 ± 0.056	J	0.014	0.154 ± 0.059		0.021

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C8-01-Z4	28.5-30 ft	10/16/2007	0.182 ± 0.058		0.027	0.156 ± 0.052	J	0.01	0.171 ± 0.055		0.019
C8-02-Z4	29-30 ft	10/16/2007	0.127 ± 0.050		0.030	0.147 ± 0.053		0.021	0.116 ± 0.046		0.018
C9-01-Z7	48-50 ft	10/22/2007	0.64 ± 0.14		0.04	0.42 ± 0.10		0.02	0.63 ± 0.13		0.02
C9-02/D-Z7	52-53 ft	10/23/2007	0.47 ± 0.11		0.03	0.323 ± 0.089		0.038	0.47 ± 0.11		0.03
C9-02/D-Z8	62-63 ft	10/23/2007	0.191 ± 0.061		0.027	0.106 ± 0.043		0.020	0.183 ± 0.058		0.017
C9-03/D-Z6	45-46 ft	10/24/2007	0.158 ± 0.058		0.035	0.400 ± 0.098		0.028	0.163 ± 0.056		0.021
C9-03/D-Z7	52-53 ft	10/24/2007	0.44 ± 0.11		0.04	0.368 ± 0.091		0.020	0.383 ± 0.093		0.017
C9-03/D-Z8	60-61 ft	10/24/2007	0.221 ± 0.068		0.038	0.143 ± 0.050		0.017	0.166 ± 0.055		0.024
C9-04/D-Z7	50-52 ft	10/23/2007	0.69 ± 0.15		0.03	0.49 ± 0.11		0.02	0.61 ± 0.13		0.02
C9-04/D-Z8	60-61 ft	10/23/2007	0.54 ± 0.12		0.03	0.286 ± 0.077		0.017	0.54 ± 0.12		0.02
C10-01-Z4	28-30 ft	10/22/2007	0.165 ± 0.066		0.035	0.212 ± 0.075		0.035	0.160 ± 0.063		0.014
C10-02-Z4	28-30 ft	10/22/2007	0.067 ± 0.042		0.039	0.180 ± 0.064		0.021	0.100 ± 0.046		0.021
C11-01-Z7	51-52 ft	10/19/2007	0.36 ± 0.11		0.04	0.318 ± 0.098		0.029	0.311 ± 0.096		0.029
C11-02-Z6	47-48 ft	10/18/2007	0.220 ± 0.066		0.028	0.138 ± 0.050		0.024	0.225 ± 0.066		0.017
C11-02-Z7	51-52 ft	10/18/2007	0.87 ± 0.21		0.05	0.59 ± 0.15		0.04	1.08 ± 0.24		0.03
C12-01-Z5	32-33.5 ft	10/22/2007	0.153 ± 0.055		0.029	0.200 ± 0.062		0.020	0.112 ± 0.045		0.020
C12-02-Z4	30-32 ft	10/22/2007	0.131 ± 0.070		0.054	0.097 ± 0.057	J	0.038	0.084 ± 0.052		0.032
C13-01-Z2	14.5-16 ft	10/16/2007	0.182 ± 0.062		0.028	0.144 ± 0.055		0.028	0.194 ± 0.064		0.011
C13-02-Z2	14.5-16 ft	10/16/2007	0.156 ± 0.056		0.033	0.201 ± 0.063		0.010	0.153 ± 0.053		0.017
C13-03-Z2	15.5-16 ft	10/17/2007	0.165 ± 0.069		0.045	0.225 ± 0.078		0.031	0.147 ± 0.061		0.024
C13-03-Z3	23-24 ft	10/17/2007	0.166 ± 0.064		0.034	0.118 ± 0.052	J	0.025	0.123 ± 0.053		0.022

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C1-01-Z4	30-32 ft	10/31/2007	0.155 ± 0.099		0.15	0.11 ± 0.18	U	0.31	-- ± --	--	--
C1-02-Z3	21-23 ft	11/01/2007	0.041 ± 0.057	UJ	0.11	-0.04 ± 0.32	UJ	0.24	-- ± --	--	--
C1-03-Z3	23-25 ft	11/01/2007	0.142 ± 0.079	J	0.11	0.08 ± 0.12	UJ	0.21	-- ± --	--	--
C2-01-Z4	32-34 ft	10/30/2007	0.060 ± 0.069	UJ	0.12	0.04 ± 0.11	UJ	0.20	-- ± --	--	--
C2-02-Z5	34-36 ft	10/26/2007	0.088 ± 0.084	UJ	0.15	0.10 ± 0.14	UJ	0.23	-- ± --	--	--
C3-01-Z4	28-30 ft	10/26/2007	0.042 ± 0.076	UJ	0.14	0.07 ± 0.15	UJ	0.28	-- ± --	--	--
C3-02-Z4	30-32 ft	10/30/2007	0.188 ± 0.077	J	0.099	0.08 ± 0.14	UJ	0.24	-- ± --	--	--
C4-01/D-Z5	33-35 ft	10/24/2007	0.114 ± 0.079	UJ	0.13	0.09 ± 0.12	UJ	0.21	-- ± --	--	--
C4-01/D-Z6	41-43 ft	10/24/2007	0.108 ± 0.070	UJ	0.12	0.05 ± 0.10	UJ	0.19	-- ± --	--	--
C4-01/D-Z7	55-56 ft	10/25/2007	0.29 ± 0.11		0.16	0.26 ± 0.12	UJ	0.27	-- ± --	--	--
C4-01/D-Z8	57-58 ft	10/25/2007	0.221 ± 0.093	J	0.13	0.10 ± 0.11	UJ	0.18	-- ± --	--	--
C4-02-Z4	30-31 ft	10/22/2007	0.34 ± 0.11		0.11	0.10 ± 0.19	U	0.34	-- ± --	--	--
C4-03-Z4	31-32 ft	10/18/2007	0.27 ± 0.10	J	0.14	0.33 ± 0.13	J	0.23	0.33 ± 0.13	J	0.23
C5-01-Z4	28-30 ft	11/01/2007	0.149 ± 0.086	J	0.13	0.19 ± 0.13	UJ	0.20	-- ± --	--	--
C5-02-Z4	31-33 ft	10/31/2007	0.116 ± 0.069		0.095	0.08 ± 0.13	U	0.23	-- ± --	--	--
C6-01-Z7	54-56 ft	10/31/2007	0.11 ± 0.11		0.05	0.39 ± 0.13		0.21	0.39 ± 0.13		0.21
C6-02/D-Z7	50-52 ft	10/25/2007	0.56 ± 0.17		0.14	0.53 ± 0.20		0.36	0.53 ± 0.20		0.36
C6-03/D-Z3	20-22 ft	10/25/2007	0.074 ± 0.078	UJ	0.14	0.11 ± 0.14	UJ	0.22	-- ± --	--	--
C7-01-Z4	29.5-30 ft	10/17/2007	0.15 ± 0.10	UJ	0.16	0.14 ± 0.15	U	0.25	-- ± --	--	--
C7-01-Z5	35-36 ft	10/17/2007	0.061 ± 0.068	U	0.12	0.04 ± 0.10	U	0.19	-- ± --	--	--
C7-02-Z4	29.5-30 ft	10/17/2007	0.110 ± 0.096	UJ	0.16	0.17 ± 0.17	U	0.27	-- ± --	--	--

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C8-01-Z4	28.5-30 ft	10/16/2007	0.068 ± 0.081	UJ	0.15	0.05 ± 0.12	UJ	0.22	-- ± --	--	--
C8-02-Z4	29-30 ft	10/16/2007	0.050 ± 0.064	UJ	0.12	-0.02 ± 0.34	UJ	0.18	-- ± --	--	--
C9-01-Z7	48-50 ft	10/22/2007	0.50 ± 0.14		0.13	0.70 ± 0.20		0.27	0.70 ± 0.20		0.27
C9-02/D-Z7	52-53 ft	10/23/2007	0.47 ± 0.14		0.13	0.27 ± 0.23	UJ	0.36	-- ± --	--	--
C9-02/D-Z8	62-63 ft	10/23/2007	0.103 ± 0.085	UJ	0.13	0.15 ± 0.16	UJ	0.26	-- ± --	--	--
C9-03/D-Z6	45-46 ft	10/24/2007	0.12 ± 0.13	UJ	0.22	0.10 ± 0.18	UJ	0.31	-- ± --	--	--
C9-03/D-Z7	52-53 ft	10/24/2007	0.24 ± 0.11	J	0.16	0.27 ± 0.15	J	0.26	-- ± --	--	--
C9-03/D-Z8	60-61 ft	10/24/2007	0.105 ± 0.091	UJ	0.16	0.10 ± 0.14	U	0.24	-- ± --	--	--
C9-04/D-Z7	50-52 ft	10/23/2007	0.36 ± 0.12	J	0.13	0.56 ± 0.19	J	0.27	0.56 ± 0.19	J	0.27
C9-04/D-Z8	60-61 ft	10/23/2007	0.31 ± 0.10		0.14	0.49 ± 0.16		0.16	0.49 ± 0.16		0.16
C10-01-Z4	28-30 ft	10/22/2007	0.057 ± 0.076	UJ	0.14	0.128 ± 0.095	UJ	0.25	-- ± --	--	--
C10-02-Z4	28-30 ft	10/22/2007	0.059 ± 0.085	UJ	0.15	0.07 ± 0.15	UJ	0.28	-- ± --	--	--
C11-01-Z7	51-52 ft	10/19/2007	0.27 ± 0.11		0.16	0.45 ± 0.14		0.30	0.45 ± 0.14		0.30
C11-02-Z6	47-48 ft	10/18/2007	-0.045 ± 0.998	UJ	0.19	0.16 ± 0.14	UJ	0.22	-- ± --	--	--
C11-02-Z7	51-52 ft	10/18/2007	0.58 ± 0.18		0.15	1.17 ± 0.31		0.43	1.17 ± 0.31		0.43
C12-01-Z5	32-33.5 ft	10/22/2007	-0.02 ± 0.13	UJ	0.12	0.01 ± 0.13	UJ	0.25	-- ± --	--	--
C12-02-Z4	30-32 ft	10/22/2007	0.042 ± 0.053	UJ	0.091	0.0 ± 0.10	UJ	0.19	-- ± --	--	--
C13-01-Z2	14.5-16 ft	10/16/2007	0.086 ± 0.084	UJ	0.15	0.002 ± 0.099	UJ	0.21	-- ± --	--	--
C13-02-Z2	14.5-16 ft	10/16/2007	0.053 ± 0.086	UJ	0.16	0.0 ± 0.18	UJ	0.34	-- ± --	--	--
C13-03-Z2	15.5-16 ft	10/17/2007	0.118 ± 0.098	UJ	0.16	0.06 ± 0.10	U	0.18	-- ± --	--	--
C13-03-Z3	23-24 ft	10/17/2007	0.159 ± 0.057		0.049	0.097 ± 0.097	U	0.15	-- ± --	--	--

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C1-01-Z4	30-32 ft	10/31/2007	-- ± --	--	--	0.155 ± 0.099		0.15	-- ± --	--	--
C1-02-Z3	21-23 ft	11/01/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C1-03-Z3	23-25 ft	11/01/2007	-- ± --	--	--	0.142 ± 0.079	J	0.11	-- ± --	--	--
C2-01-Z4	32-34 ft	10/30/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C2-02-Z5	34-36 ft	10/26/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C3-01-Z4	28-30 ft	10/26/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C3-02-Z4	30-32 ft	10/30/2007	-- ± --	--	--	0.188 ± 0.077	J	0.099	-- ± --	--	--
C4-01/D-Z5	33-35 ft	10/24/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C4-01/D-Z6	41-43 ft	10/24/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C4-01/D-Z7	55-56 ft	10/25/2007	-- ± --	--	--	0.29 ± 0.11		0.16	-- ± --	--	--
C4-01/D-Z8	57-58 ft	10/25/2007	-- ± --	--	--	0.221 ± 0.093	J	0.13	-- ± --	--	--
C4-02-Z4	30-31 ft	10/22/2007	-- ± --	--	--	0.34 ± 0.11		0.11	-- ± --	--	--
C4-03-Z4	31-32 ft	10/18/2007	-- ± --	--	--	0.27 ± 0.10	J	0.14	-- ± --	--	--
C5-01-Z4	28-30 ft	11/01/2007	-- ± --	--	--	0.149 ± 0.086	J	0.13	-- ± --	--	--
C5-02-Z4	31-33 ft	10/31/2007	-- ± --	--	--	0.116 ± 0.069		0.095	-- ± --	--	--
C6-01-Z7	54-56 ft	10/31/2007	-- ± --	--	--	0.51 ± 0.11		0.05	-- ± --	--	--
C6-02/D-Z7	50-52 ft	10/25/2007	-- ± --	--	--	0.56 ± 0.17		0.14	-- ± --	--	--
C6-03/D-Z3	20-22 ft	10/25/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C7-01-Z4	29.5-30 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C7-01-Z5	35-36 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C7-02-Z4	29.5-30 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C8-01-Z4	28.5-30 ft	10/16/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C8-02-Z4	29-30 ft	10/16/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C9-01-Z7	48-50 ft	10/22/2007	-- ± --	--	--	0.50 ± 0.14		0.13	-- ± --	--	--
C9-02/D-Z7	52-53 ft	10/23/2007	-- ± --	--	--	0.47 ± 0.14		0.13	-- ± --	--	--
C9-02/D-Z8	62-63 ft	10/23/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C9-03/D-Z6	45-46 ft	10/24/2007	1.84 ± 0.70	J	0.99	-- ± --	--	--	-- ± --	--	--
C9-03/D-Z7	52-53 ft	10/24/2007	-- ± --	--	--	0.24 ± 0.11	J	0.16	-- ± --	--	--
C9-03/D-Z8	60-61 ft	10/24/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C9-04/D-Z7	50-52 ft	10/23/2007	-- ± --	--	--	0.36 ± 0.12	J	0.13	-- ± --	--	--
C9-04/D-Z8	60-61 ft	10/23/2007	-- ± --	--	--	0.31 ± 0.10		0.14	-- ± --	--	--
C10-01-Z4	28-30 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C10-02-Z4	28-30 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C11-01-Z7	51-52 ft	10/19/2007	-- ± --	--	--	0.27 ± 0.11		0.16	-- ± --	--	--
C11-02-Z6	47-48 ft	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C11-02-Z7	51-52 ft	10/18/2007	-- ± --	--	--	0.58 ± 0.18		0.15	-- ± --	--	--
C12-01-Z5	32-33.5 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C12-02-Z4	30-32 ft	10/22/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C13-01-Z2	14.5-16 ft	10/16/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C13-02-Z2	14.5-16 ft	10/16/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C13-03-Z2	15.5-16 ft	10/17/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C13-03-Z3	23-24 ft	10/17/2007	-- ± --	--	--	0.159 ± 0.057		0.049	-- ± --	--	--

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C1-01-Z4	30-32 ft	10/31/2007	1.83 ± 0.89		1.1	-- ± --	--	--	-- ± --	--	--
C1-02-Z3	21-23 ft	11/01/2007	3.16 ± 0.76	J	0.63	-- ± --	--	--	-- ± --	--	--
C1-03-Z3	23-25 ft	11/01/2007	3.57 ± 0.98	J	0.71	1.5 ± 1.1	J	1.3	-- ± --	--	--
C2-01-Z4	32-34 ft	10/30/2007	2.01 ± 0.66	J	0.64	-- ± --	--	--	-- ± --	--	--
C2-02-Z5	34-36 ft	10/26/2007	2.40 ± 0.91	J	1.0	-- ± --	--	--	-- ± --	--	--
C3-01-Z4	28-30 ft	10/26/2007	2.52 ± 0.83	J	0.60	-- ± --	--	--	-- ± --	--	--
C3-02-Z4	30-32 ft	10/30/2007	1.38 ± 0.61	J	0.63	-- ± --	--	--	-- ± --	--	--
C4-01/D-Z5	33-35 ft	10/24/2007	2.99 ± 0.80	J	0.91	-- ± --	--	--	-- ± --	--	--
C4-01/D-Z6	41-43 ft	10/24/2007	3.06 ± 0.76	J	0.78	-- ± --	--	--	-- ± --	--	--
C4-01/D-Z7	55-56 ft	10/25/2007	4.09 ± 0.88		0.78	-- ± --	--	--	-- ± --	--	--
C4-01/D-Z8	57-58 ft	10/25/2007	2.02 ± 0.68	J	0.80	1.7 ± 1.3	J	1.6	-- ± --	--	--
C4-02-Z4	30-31 ft	10/22/2007	3.17 ± 0.98		0.68	-- ± --	--	--	-- ± --	--	--
C4-03-Z4	31-32 ft	10/18/2007	3.72 ± 0.88	J	0.89	-- ± --	--	--	-- ± --	--	--
C5-01-Z4	28-30 ft	11/01/2007	3.31 ± 0.75	J	0.68	-- ± --	--	--	-- ± --	--	--
C5-02-Z4	31-33 ft	10/31/2007	3.06 ± 0.84		0.45	-- ± --	--	--	-- ± --	--	--
C6-01-Z7	54-56 ft	10/31/2007	1.08 ± 0.58		0.76	-- ± --	--	--	-- ± --	--	--
C6-02/D-Z7	50-52 ft	10/25/2007	7.3 ± 1.5		0.7	-- ± --	--	--	-- ± --	--	--
C6-03/D-Z3	20-22 ft	10/25/2007	4.3 ± 1.0	J	0.5	-- ± --	--	--	-- ± --	--	--
C7-01-Z4	29.5-30 ft	10/17/2007	1.87 ± 0.74		0.70	-- ± --	--	--	-- ± --	--	--
C7-01-Z5	35-36 ft	10/17/2007	3.78 ± 0.92		0.94	-- ± --	--	--	-- ± --	--	--
C7-02-Z4	29.5-30 ft	10/17/2007	2.46 ± 0.89		0.82	-- ± --	--	--	-- ± --	--	--

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C8-01-Z4	28.5-30 ft	10/16/2007	2.42 ± 0.74	J	0.51	-- ± --	--	--	-- ± --	--	--
C8-02-Z4	29-30 ft	10/16/2007	3.25 ± 0.73	J	0.49	-- ± --	--	--	-- ± --	--	--
C9-01-Z7	48-50 ft	10/22/2007	4.0 ± 1.2		1.1	-- ± --	--	--	-- ± --	--	--
C9-02/D-Z7	52-53 ft	10/23/2007	1.34 ± 0.74		0.97	-- ± --	--	--	-- ± --	--	--
C9-02/D-Z8	62-63 ft	10/23/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C9-03/D-Z6	45-46 ft	10/24/2007	2.08 ± 0.69	J	0.87	-- ± --	--	--	454 ± 37	J	8
C9-03/D-Z7	52-53 ft	10/24/2007	3.66 ± 0.88	J	0.95	-- ± --	--	--	60.4 ± 9.9	J	2.7
C9-03/D-Z8	60-61 ft	10/24/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C9-04/D-Z7	50-52 ft	10/23/2007	2.04 ± 0.72	J	0.68	-- ± --	--	--	-- ± --	--	--
C9-04/D-Z8	60-61 ft	10/23/2007	1.72 ± 0.71		0.95	-- ± --	--	--	-- ± --	--	--
C10-01-Z4	28-30 ft	10/22/2007	2.52 ± 0.85	J	0.89	-- ± --	--	--	-- ± --	--	--
C10-02-Z4	28-30 ft	10/22/2007	2.85 ± 0.85	J	0.46	-- ± --	--	--	-- ± --	--	--
C11-01-Z7	51-52 ft	10/19/2007	5.9 ± 1.1		0.5	-- ± --	--	--	-- ± --	--	--
C11-02-Z6	47-48 ft	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C11-02-Z7	51-52 ft	10/18/2007	6.7 ± 1.5		0.6	-- ± --	--	--	-- ± --	--	--
C12-01-Z5	32-33.5 ft	10/22/2007	3.20 ± 0.83	J	0.50	-- ± --	--	--	-- ± --	--	--
C12-02-Z4	30-32 ft	10/22/2007	2.47 ± 0.69	J	0.49	-- ± --	--	--	-- ± --	--	--
C13-01-Z2	14.5-16 ft	10/16/2007	3.81 ± 0.90	J	0.38	-- ± --	--	--	-- ± --	--	--
C13-02-Z2	14.5-16 ft	10/16/2007	3.9 ± 1.0	J	0.8	-- ± --	--	--	-- ± --	--	--
C13-03-Z2	15.5-16 ft	10/17/2007	3.45 ± 0.99		0.86	-- ± --	--	--	-- ± --	--	--
C13-03-Z3	23-24 ft	10/17/2007	3.78 ± 0.85		0.42	-- ± --	--	--	-- ± --	--	--

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C1-01-Z4	30-32 ft	10/31/2007	0.297 ± 0.093		0.088	0.24 ± 0.10		0.13	-- ± --	--	--	-- ± --	--	--
C1-02-Z3	21-23 ft	11/01/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--	5.6 ± 1.0	J	1.4
C1-03-Z3	23-25 ft	11/01/2007	0.096 ± 0.048	J	0.062	0.166 ± 0.079	J	0.10	-- ± --	--	--	2.15 ± 0.93	J	1.1
C2-01-Z4	32-34 ft	10/30/2007	0.156 ± 0.052	J	0.052	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C2-02-Z5	34-36 ft	10/26/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C3-01-Z4	28-30 ft	10/26/2007	0.107 ± 0.067	UJ	0.11	0.145 ± 0.080	J	0.12	-- ± --	--	--	1.21 ± 0.44	J	0.78
C3-02-Z4	30-32 ft	10/30/2007	0.144 ± 0.056	J	0.063	0.202 ± 0.067	J	0.066	-- ± --	--	--	-- ± --	--	--
C4-01/D-Z5	33-35 ft	10/24/2007	0.249 ± 0.093	J	0.10	0.115 ± 0.071	J	0.11	-- ± --	--	--	3.30 ± 0.69	J	1.3
C4-01/D-Z6	41-43 ft	10/24/2007	0.192 ± 0.093	J	0.10	0.123 ± 0.073	J	0.12	-- ± --	--	--	2.20 ± 0.69	J	1.2
C4-01/D-Z7	55-56 ft	10/25/2007	0.42 ± 0.12		0.12	0.258 ± 0.089		0.12	0.168 ± 0.053		0.052	1.97 ± 0.65		1.3
C4-01/D-Z8	57-58 ft	10/25/2007	0.242 ± 0.070	J	0.079	0.150 ± 0.073	J	0.11	-- ± --	--	--	2.50 ± 0.65	J	1.2
C4-02-Z4	30-31 ft	10/22/2007	0.32 ± 0.12		0.11	0.264 ± 0.083		0.076	-- ± --	--	--	-- ± --	--	--
C4-03-Z4	31-32 ft	10/18/2007	0.59 ± 0.12	J	0.1	0.286 ± 0.083	J	0.11	0.071 ± 0.044	J	0.070	-- ± --	--	--
C5-01-Z4	28-30 ft	11/01/2007	0.210 ± 0.071	J	0.086	0.165 ± 0.077	J	0.13	0.10 ± 0.040	J	0.045	-- ± --	--	--
C5-02-Z4	31-33 ft	10/31/2007	0.111 ± 0.062		0.095	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C6-01-Z7	54-56 ft	10/31/2007	0.54 ± 0.11		0.09	0.407 ± 0.090		0.053	0.213 ± 0.050		0.020	-- ± --	--	--
C6-02/D-Z7	50-52 ft	10/25/2007	0.54 ± 0.11		0.11	0.50 ± 0.13		0.19	0.233 ± 0.075		0.070	16.2 ± 2.2		2.6
C6-03/D-Z3	20-22 ft	10/25/2007	0.147 ± 0.074	J	0.080	0.105 ± 0.067	J	0.10	-- ± --	--	--	-- ± --	--	--
C7-01-Z4	29.5-30 ft	10/17/2007	0.27 ± 0.10		0.1	0.146 ± 0.078		0.11	-- ± --	--	--	1.65 ± 0.58		0.96
C7-01-Z5	35-36 ft	10/17/2007	0.272 ± 0.090		0.088	0.156 ± 0.062		0.10	-- ± --	--	--	2.12 ± 0.59		1.0
C7-02-Z4	29.5-30 ft	10/17/2007	0.275 ± 0.088		0.086	-- ± --	--	--	-- ± --	--	--	1.41 ± 0.48		0.95

Table 3.3-4f Radiological Results for Confirmatory Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
C8-01-Z4	28.5-30 ft	10/16/2007	0.155 ± 0.081	J	0.085	-- ± --	--	--	-- ± --	--	--	2.66 ± 0.60	J	0.94
C8-02-Z4	29-30 ft	10/16/2007	0.087 ± 0.049	J	0.072	0.124 ± 0.064	J	0.095	-- ± --	--	--	3.30 ± 0.71	J	1.1
C9-01-Z7	48-50 ft	10/22/2007	0.60 ± 0.13		0.12	0.54 ± 0.15		0.19	0.325 ± 0.085		0.051	5.1 ± 1.1		2.0
C9-02/D-Z7	52-53 ft	10/23/2007	0.53 ± 0.12		0.1	0.29 ± 0.10		0.15	0.167 ± 0.063		0.073	6.6 ± 1.0		1.5
C9-02/D-Z8	62-63 ft	10/23/2007	0.224 ± 0.071		0.076	0.128 ± 0.064		0.11	-- ± --	--	--	9.4 ± 1.2		1.4
C9-03/D-Z6	45-46 ft	10/24/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--	292 ± 22	J	8
C9-03/D-Z7	52-53 ft	10/24/2007	0.348 ± 0.088	J	0.10	0.26 ± 0.10	J	0.16	0.207 ± 0.062	J	0.058	38.5 ± 3.4	J	3.1
C9-03/D-Z8	60-61 ft	10/24/2007	0.40 ± 0.11		0.11	-- ± --	--	--	0.079 ± 0.041		0.057	-- ± --	--	--
C9-04/D-Z7	50-52 ft	10/23/2007	0.70 ± 0.14	J	0.12	0.53 ± 0.12	J	0.08	0.291 ± 0.071	J	0.050	5.0 ± 1.0	J	1.7
C9-04/D-Z8	60-61 ft	10/23/2007	0.68 ± 0.12		0.10	0.61 ± 0.11		0.07	0.250 ± 0.056		0.049	4.36 ± 0.87		1.4
C10-01-Z4	28-30 ft	10/22/2007	0.229 ± 0.083	J	0.085	0.165 ± 0.080	J	0.11	-- ± --	--	--	3.76 ± 0.71	J	1.1
C10-02-Z4	28-30 ft	10/22/2007	0.192 ± 0.080	J	0.086	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C11-01-Z7	51-52 ft	10/19/2007	0.68 ± 0.17		0.15	0.410 ± 0.098		0.14	0.190 ± 0.056		0.060	3.71 ± 0.96		1.4
C11-02-Z6	47-48 ft	10/18/2007	0.41 ± 0.12		0.11	0.095 ± 0.072	UJ	0.11	-- ± --	--	--	1.46 ± 0.61		1.2
C11-02-Z7	51-52 ft	10/18/2007	1.45 ± 0.22		0.16	0.48 ± 0.14		0.18	0.378 ± 0.093		0.067	2.8 ± 1.0		2.0
C12-01-Z5	32-33.5 ft	10/22/2007	0.108 ± 0.051	J	0.063	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C12-02-Z4	30-32 ft	10/22/2007	0.122 ± 0.044	J	0.046	0.099 ± 0.059	J	0.085	-- ± --	--	--	-- ± --	--	--
C13-01-Z2	14.5-16 ft	10/16/2007	0.111 ± 0.059	J	0.088	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
C13-02-Z2	14.5-16 ft	10/16/2007	0.252 ± 0.067	J	0.056	0.252 ± 0.090	J	0.11	-- ± --	--	--	-- ± --	--	--
C13-03-Z2	15.5-16 ft	10/17/2007	0.186 ± 0.070		0.072	0.127 ± 0.082	UJ	0.13	-- ± --	--	--	-- ± --	--	--
C13-03-Z3	23-24 ft	10/17/2007	0.162 ± 0.074		0.071	-- ± --	--	--	-- ± --	--	--	1.15 ± 0.35		0.64

Key for Table 3.3-4f

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-AA-Z1	4-6 ft	11/09/2007	1.18 ± 0.24		0.04	0.057 ± 0.051		0.026	1.14 ± 0.24		0.04
DR-AA-Z2	10-12 ft	11/09/2007	0.66 ± 0.17		0.06	0.024 ± 0.036	UJ	0.050	0.67 ± 0.17		0.04
DR-BB-1/2-Z1	4-6 ft	11/08/2007	0.42 ± 0.10		0.01	0.015 ± 0.020	UJ	0.025	0.43 ± 0.10		0.02
DR-BB-1/2-Z2	8-10 ft	11/08/2007	0.313 ± 0.081		0.026	0.032 ± 0.026		0.021	0.330 ± 0.083		0.020
DR-CC-Z1	2-4 ft	11/08/2007	0.59 ± 0.13		0.03	0.042 ± 0.032		0.025	0.60 ± 0.13		0.02
DR-CC-Z2	10-12 ft	11/08/2007	0.322 ± 0.086		0.028	0.010 ± 0.018	UJ	0.014	0.384 ± 0.095		0.019
DR-D-Z2	13-14 ft	10/31/2007	0.259 ± 0.071		0.020	0.003 ± 0.010	U	0.021	0.255 ± 0.070		0.020
DRH-A1-Z3	22-24 ft	11/02/2007	3.40 ± 0.50		0.02	0.181 ± 0.064		0.013	2.89 ± 0.43		0.01
DRH-A1-Z4	24-26 ft	11/02/2007	7.9 ± 1.1		0.03	0.41 ± 0.10		0.01	7.15 ± 0.998		0.021
DRH-A2-Z3	20-22 ft	11/06/2007	0.165 ± 0.053		0.023	0.008 ± 0.013	UJ	0.019	0.168 ± 0.053		0.016
DR-J-Z3	16-18 ft	11/06/2007	8.0 ± 1.1		0.02	0.365 ± 0.095		0.024	1.53 ± 0.25		0.02
DR-K-Z4	30-32 ft	11/05/2007	7.7 ± 1.0		0.02	0.375 ± 0.094		0.012	1.85 ± 0.29		0.02
DR-W-Z1	4-5 ft	11/09/2007	0.187 ± 0.083		0.052	0.0 ± 0.0	U	0.03	0.270 ± 0.098		0.034
DR-X-Z1	4-6 ft	11/09/2007	0.48 ± 0.14		0.05	0.027 ± 0.035	UJ	0.044	0.34 ± 0.11		0.04
DR-X-Z2	8-10 ft	11/09/2007	0.37 ± 0.11		0.04	0.006 ± 0.019	U	0.039	0.252 ± 0.090		0.031
DR-Y-Z1	4-6 ft	11/08/2007	0.306 ± 0.080		0.024	0.012 ± 0.018	UJ	0.025	0.325 ± 0.083		0.022
DR-Y-Z2	10-12 ft	11/08/2007	0.66 ± 0.14		0.03	0.048 ± 0.033		0.027	0.67 ± 0.14		0.02

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-Z-Z1	0-2 ft	11/09/2007	2.46 ± 0.42		0.05	0.140 ± 0.076		0.048	1.99 ± 0.35		0.04
DR-Z-Z1A	6-7 ft	11/15/2007	0.71 ± 0.14		0.02	0.048 ± 0.031		0.020	0.54 ± 0.11		0.02
LPH-A/D-Z1	4-6 ft	10/29/2007	2.73 ± 0.45		0.03	0.131 ± 0.061		0.029	2.36 ± 0.39		0.03
LPH-A/D-Z2	8-10 ft	10/29/2007	1.52 ± 0.29		0.03	0.066 ± 0.047		0.020	1.31 ± 0.26		0.03
LPH-A/D-Z3	22-24 ft	10/29/2007	0.191 ± 0.075		0.032	0.013 ± 0.023	U	0.034	0.252 ± 0.087		0.032
LPH-A/D-Z4	30-32 ft	10/29/2007	0.111 ± 0.044		0.017	0.005 ± 0.013	UJ	0.013	0.134 ± 0.049		0.010
LPH-A/D-Z5	36-38 ft	10/29/2007	0.163 ± 0.055		0.011	0.002 ± 0.012	U	0.026	0.133 ± 0.050		0.023
LPH-A/D-Z6	42-44 ft	10/29/2007	0.164 ± 0.058		0.032	0.0 ± 0.0	U	0.01	0.157 ± 0.057		0.029
LPH-C/D-Z1	6-8 ft	10/18/2007	0.335 ± 0.093		0.037	0.012 ± 0.020	UJ	0.016	0.379 ± 0.099		0.034
LPH-C/D-Z2	8-10 ft	10/18/2007	0.65 ± 0.15		0.03	0.051 ± 0.041		0.036	0.68 ± 0.16		0.03
LPH-C/D-Z3	22-24 ft	10/18/2007	0.131 ± 0.054		0.035	0.001 ± 0.014	U	0.032	0.199 ± 0.065		0.023
LPH-C/D-Z4	30-32 ft	10/18/2007	0.133 ± 0.049		0.022	0.008 ± 0.014	UJ	0.021	0.087 ± 0.039		0.010
LPH-C/D-Z5	38-40 ft	10/18/2007	0.189 ± 0.062		0.022	0.0 ± 0.0	U	0.01	0.125 ± 0.050		0.024
LPH-C/D-Z6	46-48 ft	10/19/2007	0.85 ± 0.16		0.02	0.066 ± 0.039		0.014	0.92 ± 0.17		0.02
LPH-C/D-Z7	54-58 ft	10/19/2007	0.303 ± 0.095		0.031	0.041 ± 0.036		0.033	0.221 ± 0.079		0.031
LPH-C/D-Z8	62-64 ft	10/19/2007	0.061 ± 0.031		0.016	0.009 ± 0.016	UJ	0.012	0.065 ± 0.033		0.01

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-AA-Z1	4-6 ft	11/09/2007	1.33 ± 0.24		0.03	1.27 ± 0.23		0.02	1.35 ± 0.24		0.02
DR-AA-Z2	10-12 ft	11/09/2007	0.83 ± 0.16		0.02	0.73 ± 0.15		0.01	0.61 ± 0.13		0.02
DR-BB-1/2-Z1	4-6 ft	11/08/2007	0.66 ± 0.15		0.04	0.57 ± 0.13		0.03	0.59 ± 0.14		0.03
DR-BB-1/2-Z2	8-10 ft	11/08/2007	0.38 ± 0.11		0.05	0.329 ± 0.094		0.022	0.41 ± 0.11		0.02
DR-CC-Z1	2-4 ft	11/08/2007	1.03 ± 0.22		0.03	0.76 ± 0.17		0.01	0.90 ± 0.20		0.02
DR-CC-Z2	10-12 ft	11/08/2007	0.328 ± 0.091		0.032	0.290 ± 0.084		0.030	0.305 ± 0.087		0.032
DR-D-Z2	13-14 ft	10/31/2007	0.173 ± 0.060		0.030	0.254 ± 0.074		0.021	0.126 ± 0.049		0.018
DRH-A1-Z3	22-24 ft	11/02/2007	0.212 ± 0.073		0.047	0.231 ± 0.072		0.025	0.243 ± 0.074		0.022
DRH-A1-Z4	24-26 ft	11/02/2007	0.248 ± 0.081		0.051	0.324 ± 0.089		0.023	0.276 ± 0.081		0.012
DRH-A2-Z3	20-22 ft	11/06/2007	0.195 ± 0.064		0.026	0.218 ± 0.069		0.030	0.117 ± 0.048		0.024
DR-J-Z3	16-18 ft	11/06/2007	0.211 ± 0.071		0.033	0.179 ± 0.063		0.024	0.156 ± 0.058		0.024
DR-K-Z4	30-32 ft	11/05/2007	0.22 ± 0.11		0.08	0.29 ± 0.12		0.06	0.35 ± 0.13		0.05
DR-W-Z1	4-5 ft	11/09/2007	0.304 ± 0.087		0.047	0.231 ± 0.070		0.024	0.261 ± 0.076		0.011
DR-X-Z1	4-6 ft	11/09/2007	0.196 ± 0.063		0.027	0.281 ± 0.077		0.026	0.233 ± 0.069		0.027
DR-X-Z2	8-10 ft	11/09/2007	0.359 ± 0.096		0.036	0.377 ± 0.097		0.019	0.315 ± 0.086		0.022
DR-Y-Z1	4-6 ft	11/08/2007	0.45 ± 0.11		0.04	0.40 ± 0.10		0.02	0.53 ± 0.13		0.02
DR-Y-Z2	10-12 ft	11/08/2007	1.09 ± 0.22		0.04	0.85 ± 0.18		0.04	1.27 ± 0.24		0.03

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-Z-Z1	0-2 ft	11/09/2007	1.11 ± 0.21		0.04	0.44 ± 0.10		0.02	1.14 ± 0.21		0.02
DR-Z-Z1A	6-7 ft	11/15/2007	0.57 ± 0.13		0.04	0.53 ± 0.12		0.02	0.67 ± 0.14		0.02
LPH-A/D-Z1	4-6 ft	10/29/2007	0.80 ± 0.17		0.04	0.54 ± 0.13		0.03	0.83 ± 0.17		0.02
LPH-A/D-Z2	8-10 ft	10/29/2007	0.58 ± 0.14		0.05	0.47 ± 0.12		0.03	0.59 ± 0.14		0.02
LPH-A/D-Z3	22-24 ft	10/29/2007	0.325 ± 0.097		0.049	0.196 ± 0.068		0.022	0.253 ± 0.080		0.031
LPH-A/D-Z4	30-32 ft	10/29/2007	0.042 ± 0.029		0.028	0.118 ± 0.046		0.010	0.087 ± 0.038		0.020
LPH-A/D-Z5	36-38 ft	10/29/2007	0.166 ± 0.056		0.028	0.194 ± 0.061		0.023	0.156 ± 0.053		0.017
LPH-A/D-Z6	42-44 ft	10/29/2007	0.254 ± 0.076		0.035	0.174 ± 0.059		0.024	0.279 ± 0.078		0.018
LPH-C/D-Z1	6-8 ft	10/18/2007	0.329 ± 0.091		0.038	0.291 ± 0.083		0.023	0.257 ± 0.076		0.020
LPH-C/D-Z2	8-10 ft	10/18/2007	0.61 ± 0.15		0.04	0.44 ± 0.12		0.03	0.50 ± 0.13		0.02
LPH-C/D-Z3	22-24 ft	10/18/2007	0.164 ± 0.060		0.032	0.225 ± 0.070		0.023	0.172 ± 0.060		0.023
LPH-C/D-Z4	30-32 ft	10/18/2007	0.149 ± 0.057		0.036	0.105 ± 0.046		0.030	0.104 ± 0.045		0.022
LPH-C/D-Z5	38-40 ft	10/18/2007	0.160 ± 0.061		0.043	0.249 ± 0.073		0.022	0.176 ± 0.059		0.018
LPH-C/D-Z6	46-48 ft	10/19/2007	1.23 ± 0.24		0.04	0.94 ± 0.20		0.03	1.13 ± 0.23		0.02
LPH-C/D-Z7	54-58 ft	10/19/2007	0.52 ± 0.15		0.05	0.30 ± 0.10		0.03	0.63 ± 0.17		0.04
LPH-C/D-Z8	62-64 ft	10/19/2007	0.153 ± 0.055		0.029	0.109 ± 0.044		0.017	0.127 ± 0.048		0.020

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-AA-Z1	4-6 ft	11/09/2007	1.51 ± 0.29		0.22	1.40 ± 0.29		0.29	1.40 ± 0.29		0.29
DR-AA-Z2	10-12 ft	11/09/2007	1.03 ± 0.22		0.15	0.81 ± 0.26		0.43	0.81 ± 0.26		0.43
DR-BB-1/2-Z1	4-6 ft	11/08/2007	0.28 ± 0.10	J	0.14	0.20 ± 0.15	UJ	0.24	-- ± --	--	--
DR-BB-1/2-Z2	8-10 ft	11/08/2007	0.066 ± 0.090	UJ	0.16	0.13 ± 0.14	UJ	0.22	-- ± --	--	--
DR-CC-Z1	2-4 ft	11/08/2007	0.463 ± 0.096	J	0.043	0.35 ± 0.12	J	0.20	0.35 ± 0.12	J	0.20
DR-CC-Z2	10-12 ft	11/08/2007	0.300 ± 0.094	J	0.086	0.23 ± 0.16	J	0.22	0.23 ± 0.16	J	0.22
DR-D-Z2	13-14 ft	10/31/2007	0.094 ± 0.076	UJ	0.12	0.06 ± 0.16	UJ	0.28	-- ± --	--	--
DRH-A1-Z3	22-24 ft	11/02/2007	0.199 ± 0.080	J	0.071	0.092 ± 0.062	UJ	0.14	-- ± --	--	--
DRH-A1-Z4	24-26 ft	11/02/2007	0.137 ± 0.099	UJ	0.15	0.20 ± 0.11	J	0.20	0.20 ± 0.11	J	0.20
DRH-A2-Z3	20-22 ft	11/06/2007	0.050 ± 0.071	UJ	0.13	0.06 ± 0.16	UJ	0.29	-- ± --	--	--
DR-J-Z3	16-18 ft	11/06/2007	0.122 ± 0.090	UJ	0.14	0.1 ± 0.13	UJ	0.20	-- ± --	--	--
DR-K-Z4	30-32 ft	11/05/2007	0.059 ± 0.085	U	0.16	0.08 ± 0.15	U	0.26	-- ± --	--	--
DR-W-Z1	4-5 ft	11/09/2007	0.161 ± 0.081	J	0.10	0.12 ± 0.15	UJ	0.25	-- ± --	--	--
DR-X-Z1	4-6 ft	11/09/2007	0.39 ± 0.14	J	0.10	0.23 ± 0.12	UJ	0.25	-- ± --	--	--
DR-X-Z2	8-10 ft	11/09/2007	0.113 ± 0.090	UJ	0.15	0.21 ± 0.14	UJ	0.22	-- ± --	--	--
DR-Y-Z1	4-6 ft	11/08/2007	0.24 ± 0.11	J	0.15	0.31 ± 0.14	J	0.25	0.31 ± 0.14	J	0.25
DR-Y-Z2	10-12 ft	11/08/2007	0.65 ± 0.12	J	0.07	0.90 ± 0.20	J	0.25	0.90 ± 0.20	J	0.25

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-Z-Z1	0-2 ft	11/09/2007	0.60 ± 0.14		0.1	0.63 ± 0.20		0.40	0.63 ± 0.20		0.40
DR-Z-Z1A	6-7 ft	11/15/2007	0.171 ± 0.092	J	0.14	0.37 ± 0.16	J	0.21	0.37 ± 0.16	J	0.21
LPH-A/D-Z1	4-6 ft	10/29/2007	0.55 ± 0.15		0.13	0.44 ± 0.16		0.26	0.44 ± 0.16		0.26
LPH-A/D-Z2	8-10 ft	10/29/2007	0.45 ± 0.12		0.11	0.42 ± 0.21		0.26	0.42 ± 0.21		0.26
LPH-A/D-Z3	22-24 ft	10/29/2007	0.072 ± 0.073	UJ	0.12	0.13 ± 0.15	UJ	0.24	-- ± --	--	--
LPH-A/D-Z4	30-32 ft	10/29/2007	0.043 ± 0.068	UJ	0.13	0.02 ± 0.11	UJ	0.22	-- ± --	--	--
LPH-A/D-Z5	36-38 ft	10/29/2007	0.060 ± 0.073	UJ	0.13	0.063 ± 0.096	UJ	0.17	-- ± --	--	--
LPH-A/D-Z6	42-44 ft	10/29/2007	0.060 ± 0.064	UJ	0.12	0.12 ± 0.13	UJ	0.21	-- ± --	--	--
LPH-C/D-Z1	6-8 ft	10/18/2007	0.21 ± 0.11	J	0.13	0.14 ± 0.16	UJ	0.25	-- ± --	--	--
LPH-C/D-Z2	8-10 ft	10/18/2007	0.64 ± 0.14		0.09	0.43 ± 0.16		0.28	0.43 ± 0.16		0.28
LPH-C/D-Z3	22-24 ft	10/18/2007	0.028 ± 0.073	UJ	0.14	0.07 ± 0.14	UJ	0.24	-- ± --	--	--
LPH-C/D-Z4	30-32 ft	10/18/2007	0.24 ± 0.12		0.16	0.06 ± 0.21	U	0.40	-- ± --	--	--
LPH-C/D-Z5	38-40 ft	10/18/2007	0.250 ± 0.087	J	0.10	0.1 ± 0.12	UJ	0.20	-- ± --	--	--
LPH-C/D-Z6	46-48 ft	10/19/2007	1.37 ± 0.27		0.18	0.93 ± 0.34		0.54	0.93 ± 0.34		0.54
LPH-C/D-Z7	54-58 ft	10/19/2007	0.64 ± 0.14		0.07	0.57 ± 0.18		0.26	0.57 ± 0.18		0.26
LPH-C/D-Z8	62-64 ft	10/19/2007	0.176 ± 0.091		0.14	0.17 ± 0.14	UJ	0.22	-- ± --	--	--

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-AA-Z1	4-6 ft	11/09/2007	-- ± --	--	--	1.51 ± 0.29		0.22	-- ± --	--	--
DR-AA-Z2	10-12 ft	11/09/2007	-- ± --	--	--	1.03 ± 0.22		0.15	-- ± --	--	--
DR-BB-1/2-Z1	4-6 ft	11/08/2007	-- ± --	--	--	0.28 ± 0.10	J	0.14	-- ± --	--	--
DR-BB-1/2-Z2	8-10 ft	11/08/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
DR-CC-Z1	2-4 ft	11/08/2007	-- ± --	--	--	0.463 ± 0.096	J	0.043	-- ± --	--	--
DR-CC-Z2	10-12 ft	11/08/2007	-- ± --	--	--	0.300 ± 0.094	J	0.086	-- ± --	--	--
DR-D-Z2	13-14 ft	10/31/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
DRH-A1-Z3	22-24 ft	11/02/2007	-- ± --	--	--	0.199 ± 0.080	J	0.071	-- ± --	--	--
DRH-A1-Z4	24-26 ft	11/02/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
DRH-A2-Z3	20-22 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
DR-J-Z3	16-18 ft	11/06/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
DR-K-Z4	30-32 ft	11/05/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
DR-W-Z1	4-5 ft	11/09/2007	-- ± --	--	--	0.161 ± 0.081	J	0.10	-- ± --	--	--
DR-X-Z1	4-6 ft	11/09/2007	-- ± --	--	--	0.39 ± 0.14	J	0.10	-- ± --	--	--
DR-X-Z2	8-10 ft	11/09/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
DR-Y-Z1	4-6 ft	11/08/2007	-- ± --	--	--	0.24 ± 0.11	J	0.15	-- ± --	--	--
DR-Y-Z2	10-12 ft	11/08/2007	0.53 ± 0.34	J	0.50	0.65 ± 0.12	J	0.07	-- ± --	--	--

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-Z-Z1	0-2 ft	11/09/2007	-- ± --	--	--	0.60 ± 0.14		0.1	-- ± --	--	--
DR-Z-Z1A	6-7 ft	11/15/2007	-- ± --	--	--	0.171 ± 0.092	J	0.14	-- ± --	--	--
LPH-A/D-Z1	4-6 ft	10/29/2007	-- ± --	--	--	0.55 ± 0.15		0.13	-- ± --	--	--
LPH-A/D-Z2	8-10 ft	10/29/2007	-- ± --	--	--	0.45 ± 0.12		0.11	-- ± --	--	--
LPH-A/D-Z3	22-24 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z4	30-32 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z5	36-38 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z6	42-44 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z1	6-8 ft	10/18/2007	-- ± --	--	--	0.21 ± 0.11	J	0.13	-- ± --	--	--
LPH-C/D-Z2	8-10 ft	10/18/2007	-- ± --	--	--	0.64 ± 0.14		0.09	-- ± --	--	--
LPH-C/D-Z3	22-24 ft	10/18/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z4	30-32 ft	10/18/2007	-- ± --	--	--	0.24 ± 0.12		0.16	-- ± --	--	--
LPH-C/D-Z5	38-40 ft	10/18/2007	-- ± --	--	--	0.250 ± 0.087	J	0.10	-- ± --	--	--
LPH-C/D-Z6	46-48 ft	10/19/2007	-- ± --	--	--	1.37 ± 0.27		0.18	-- ± --	--	--
LPH-C/D-Z7	54-58 ft	10/19/2007	-- ± --	--	--	0.64 ± 0.14		0.07	-- ± --	--	--
LPH-C/D-Z8	62-64 ft	10/19/2007	-- ± --	--	--	0.176 ± 0.091		0.14	-- ± --	--	--

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-AA-Z1	4-6 ft	11/09/2007	15.6 ± 2.2		1.4	-- ± --	--	--	-- ± --	--	--
DR-AA-Z2	10-12 ft	11/09/2007	12.4 ± 2.1		0.8	-- ± --	--	--	-- ± --	--	--
DR-BB-1/2-Z1	4-6 ft	11/08/2007	7.2 ± 1.1	J	0.7	-- ± --	--	--	-- ± --	--	--
DR-BB-1/2-Z2	8-10 ft	11/08/2007	4.2 ± 1.1	J	0.6	-- ± --	--	--	-- ± --	--	--
DR-CC-Z1	2-4 ft	11/08/2007	6.7 ± 1.1	J	0.3	-- ± --	--	--	-- ± --	--	--
DR-CC-Z2	10-12 ft	11/08/2007	5.5 ± 1.2	J	0.8	-- ± --	--	--	-- ± --	--	--
DR-D-Z2	13-14 ft	10/31/2007	6.9 ± 1.3	J	0.6	-- ± --	--	--	-- ± --	--	--
DRH-A1-Z3	22-24 ft	11/02/2007	5.19 ± 0.99	J	0.41	2.1 ± 1.1	J	1.1	-- ± --	--	--
DRH-A1-Z4	24-26 ft	11/02/2007	5.3 ± 1.1	J	0.6	-- ± --	--	--	-- ± --	--	--
DRH-A2-Z3	20-22 ft	11/06/2007	3.57 ± 0.95	J	0.50	-- ± --	--	--	-- ± --	--	--
DR-J-Z3	16-18 ft	11/06/2007	3.27 ± 0.95	J	0.70	-- ± --	--	--	-- ± --	--	--
DR-K-Z4	30-32 ft	11/05/2007	3.7 ± 1.3		1.3	-- ± --	--	--	-- ± --	--	--
DR-W-Z1	4-5 ft	11/09/2007	6.0 ± 1.3	J	0.9	-- ± --	--	--	-- ± --	--	--
DR-X-Z1	4-6 ft	11/09/2007	7.1 ± 1.2	J	0.3	-- ± --	--	--	-- ± --	--	--
DR-X-Z2	8-10 ft	11/09/2007	7.4 ± 1.2	J	0.7	-- ± --	--	--	-- ± --	--	--
DR-Y-Z1	4-6 ft	11/08/2007	9.2 ± 1.5	J	0.4	-- ± --	--	--	-- ± --	--	--
DR-Y-Z2	10-12 ft	11/08/2007	9.5 ± 1.4	J	0.3	-- ± --	--	--	-- ± --	--	--

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-Z-Z1	0-2 ft	11/09/2007	7.9 ± 1.5		1.0	-- ± --	--	--	-- ± --	--	--
DR-Z-Z1A	6-7 ft	11/15/2007	8.5 ± 1.2	J	0.6	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z1	4-6 ft	10/29/2007	9.7 ± 1.7		0.5	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z2	8-10 ft	10/29/2007	6.9 ± 1.4		0.7	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z3	22-24 ft	10/29/2007	5.0 ± 1.0		0.5	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z4	30-32 ft	10/29/2007	3.39 ± 0.88	J	0.52	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z5	36-38 ft	10/29/2007	3.04 ± 0.80	J	0.85	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z6	42-44 ft	10/29/2007	1.03 ± 0.66	J	0.92	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z1	6-8 ft	10/18/2007	7.2 ± 1.4	J	0.9	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z2	8-10 ft	10/18/2007	7.3 ± 1.4		1.1	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z3	22-24 ft	10/18/2007	4.85 ± 0.99	J	0.94	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z4	30-32 ft	10/18/2007	4.5 ± 1.2		0.8	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z5	38-40 ft	10/18/2007	2.34 ± 0.84	J	0.91	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z6	46-48 ft	10/19/2007	13.7 ± 2.6		1.7	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z7	54-58 ft	10/19/2007	3.6 ± 1.0		0.8	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z8	62-64 ft	10/19/2007	1.53 ± 0.57		0.78	-- ± --	--	--	-- ± --	--	--

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-AA-Z1	4-6 ft	11/09/2007	1.59 ± 0.20		0.16	1.75 ± 0.28		0.22	0.55 ± 0.12		0.09	2.2 ± 1.9	UJ	2.3
DR-AA-Z2	10-12 ft	11/09/2007	0.93 ± 0.19		0.17	0.80 ± 0.19		0.20	0.401 ± 0.087		0.041	-- ± --	--	--
DR-BB-1/2-Z1	4-6 ft	11/08/2007	0.353 ± 0.085	J	0.096	0.335 ± 0.089	J	0.12	0.169 ± 0.062	J	0.057	-- ± --	--	--
DR-BB-1/2-Z2	8-10 ft	11/08/2007	0.282 ± 0.070	J	0.061	0.143 ± 0.071	J	0.13	0.085 ± 0.037	J	0.034	-- ± --	--	--
DR-CC-Z1	2-4 ft	11/08/2007	0.62 ± 0.11	J	0.08	0.323 ± 0.081	J	0.084	0.116 ± 0.047	J	0.062	-- ± --	--	--
DR-CC-Z2	10-12 ft	11/08/2007	0.32 ± 0.10	J	0.09	0.160 ± 0.089	J	0.13	0.175 ± 0.051	J	0.032	-- ± --	--	--
DR-D-Z2	13-14 ft	10/31/2007	0.101 ± 0.058	J	0.074	0.146 ± 0.088	J	0.13	-- ± --	--	--	-- ± --	--	--
DRH-A1-Z3	22-24 ft	11/02/2007	0.166 ± 0.052	J	0.055	0.185 ± 0.062	J	0.086	0.098 ± 0.031	J	0.018	-- ± --	--	--
DRH-A1-Z4	24-26 ft	11/02/2007	0.198 ± 0.066	J	0.076	0.143 ± 0.066	J	0.12	-- ± --	--	--	4.12 ± 0.82	J	1.2
DRH-A2-Z3	20-22 ft	11/06/2007	0.164 ± 0.063	J	0.073	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
DR-J-Z3	16-18 ft	11/06/2007	0.170 ± 0.075	J	0.081	0.127 ± 0.063	J	0.11	-- ± --	--	--	1.27 ± 0.41	J	0.80
DR-K-Z4	30-32 ft	11/05/2007	0.26 ± 0.11		0.11	0.19 ± 0.10		0.15	-- ± --	--	--	-- ± --	--	--
DR-W-Z1	4-5 ft	11/09/2007	0.217 ± 0.064	J	0.065	0.179 ± 0.080	J	0.11	-- ± --	--	--	-- ± --	--	--
DR-X-Z1	4-6 ft	11/09/2007	0.350 ± 0.069	J	0.058	0.347 ± 0.083	J	0.060	0.157 ± 0.042	J	0.026	-- ± --	--	--
DR-X-Z2	8-10 ft	11/09/2007	0.280 ± 0.079	J	0.089	0.249 ± 0.093	J	0.13	0.080 ± 0.050	J	0.079	-- ± --	--	--
DR-Y-Z1	4-6 ft	11/08/2007	0.431 ± 0.096	J	0.077	0.232 ± 0.078	J	0.12	-- ± --	--	--	-- ± --	--	--
DR-Y-Z2	10-12 ft	11/08/2007	1.09 ± 0.16	J	0.11	0.71 ± 0.11	J	0.13	0.341 ± 0.083	J	0.058	-- ± --	--	--

Table 3.3-4g Summary of Radiological Results for Leach Pool/Drain/ Drywell/Sump Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
DR-Z-Z1	0-2 ft	11/09/2007	0.92 ± 0.17		0.14	0.54 ± 0.14		0.13	0.356 ± 0.084		0.063	2.26 ± 0.79		1.3
DR-Z-Z1A	6-7 ft	11/15/2007	0.69 ± 0.12	J	0.09	0.295 ± 0.078	J	0.12	0.189 ± 0.056	J	0.050	-- ± --	--	--
LPH-A/D-Z1	4-6 ft	10/29/2007	0.63 ± 0.15		0.13	0.59 ± 0.14		0.12	0.245 ± 0.074		0.060	1.78 ± 0.79		1.5
LPH-A/D-Z2	8-10 ft	10/29/2007	0.41 ± 0.12		0.10	0.33 ± 0.10		0.15	0.161 ± 0.049		0.027	-- ± --	--	--
LPH-A/D-Z3	22-24 ft	10/29/2007	0.240 ± 0.075		0.068	0.112 ± 0.058		0.098	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z4	30-32 ft	10/29/2007	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z5	36-38 ft	10/29/2007	0.104 ± 0.060	J	0.097	-- ± --	--	--	-- ± --	--	--	-- ± --	--	--
LPH-A/D-Z6	42-44 ft	10/29/2007	0.324 ± 0.074	J	0.062	0.165 ± 0.074	J	0.12	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z1	6-8 ft	10/18/2007	0.293 ± 0.094	J	0.090	-- ± --	--	--	0.155 ± 0.048	J	0.026	-- ± --	--	--
LPH-C/D-Z2	8-10 ft	10/18/2007	0.62 ± 0.12		0.10	0.45 ± 0.11		0.13	0.170 ± 0.068		0.092	-- ± --	--	--
LPH-C/D-Z3	22-24 ft	10/18/2007	0.130 ± 0.054	J	0.076	0.140 ± 0.077	J	0.12	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z4	30-32 ft	10/18/2007	0.41 ± 0.11		0.10	0.35 ± 0.11		0.11	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z5	38-40 ft	10/18/2007	0.130 ± 0.070	J	0.078	0.113 ± 0.071	J	0.11	-- ± --	--	--	-- ± --	--	--
LPH-C/D-Z6	46-48 ft	10/19/2007	1.42 ± 0.25		0.19	1.69 ± 0.28		0.25	0.72 ± 0.14		0.04	-- ± --	--	--
LPH-C/D-Z7	54-58 ft	10/19/2007	0.80 ± 0.15		0.12	0.50 ± 0.12		0.16	0.179 ± 0.064		0.079	-- ± --	--	--
LPH-C/D-Z8	62-64 ft	10/19/2007	0.257 ± 0.082		0.091	0.149 ± 0.080		0.12	-- ± --	--	--	-- ± --	--	--

Key forTable 3.3-4g

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

Table 3.3-4h Radiological Results for Test Pit Soil Samples,
RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Uranium 233/234			Uranium 235/236			Uranium-238		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
EM-7-SO-01	3 ft	11/14/2007	1.16 ± 0.20		0.02	0.076 ± 0.040		0.024	1.15 ± 0.20		0.02
EM-7-SO-02	4.5 ft	11/14/2007	0.60 ± 0.12		0.02	0.021 ± 0.022	UJ	0.025	0.55 ± 0.12		0.02
EM-8-SO-01	3 ft	11/14/2007	48.4 ± 6.9		0.03	2.63 ± 0.46		0.03	48.1 ± 6.9		0.04
EM-8-SO-02	5 ft	11/14/2007	21.8 ± 3.0		0.03	1.20 ± 0.22		0.03	21.2 ± 2.9		0.03
EM-9-SO-01	3 ft	11/14/2007	13.6 ± 1.8		0.02	0.70 ± 0.15		0.02	14.1 ± 1.9		0.02
EM-9-SO-02	5 ft	11/14/2007	14.7 ± 2.0		0.03	0.80 ± 0.16		0.01	14.2 ± 1.9		0.02
EM-11-SO-01	3 ft	11/13/2007	63.3 ± 9.8		0.8	4.8 ± 1.8		0.6	61.3 ± 9.6		0.6
EM-11-SO-02	10 ft	11/13/2007	0.44 ± 0.10		0.02	0.074 ± 0.040		0.023	0.47 ± 0.11		0.02
EM-13-SO-01	3 ft	11/13/2007	63 ± 11		1	3.3 ± 1.9		1.2	62 ± 11		1
EM-13-SO-02	4 ft	11/13/2007	12.6 ± 1.8		0.03	0.79 ± 0.18		0.03	11.9 ± 1.8		0.02
EM-16-SO-01	1 ft	11/13/2007	3.08 ± 0.47		0.03	0.142 ± 0.057		0.023	2.71 ± 0.42		0.02
EM-16-SO-02	4.5 ft	11/13/2007	4.79 ± 0.72		0.03	0.268 ± 0.087		0.015	4.70 ± 0.70		0.02
EM-28-SO-01	9 ft	11/12/2007	95 ± 15		0.8	5.8 ± 2.4		1	41.9 ± 7.6		0.8
EM-28-SO-02	12 ft	11/12/2007	69 ± 14		2	3.3 ± 2.6		2.2	3.6 ± 2.6	UJ	2.3
EM-30-SO-01	2 ft	11/15/2007	5.41 ± 0.78		0.03	0.339 ± 0.095		0.030	5.47 ± 0.78		0.03
EM-30-SO-02	4 ft	11/15/2007	5.16 ± 0.74		0.03	0.245 ± 0.078		0.027	5.10 ± 0.73		0.02
EM-31-SO-01	3 ft	11/14/2007	7.7 ± 1.1		0.01	0.40 ± 0.11		0.02	7.6 ± 1.1		0.02
EM-31-SO-02	5 ft	11/14/2007	6.90 ± 0.96		0.03	0.321 ± 0.089		0.022	6.91 ± 0.96		0.02
EM-34-SO-01	4 ft	11/15/2007	0.61 ± 0.13		0.02	0.042 ± 0.030		0.022	0.68 ± 0.14		0.02
EM-34-SO-02	4.5 ft	11/15/2007	0.75 ± 0.15		0.03	0.025 ± 0.025		0.014	0.79 ± 0.15		0.02
EM-35-SO-01	1 ft	11/12/2007	9.8 ± 1.3		0.02	0.48 ± 0.11		0.02	4.36 ± 0.62		0.02
EM-35-SO-02	7.5 ft	11/12/2007	0.61 ± 0.12		0.02	0.014 ± 0.018	J	0.012	0.70 ± 0.14		0.02
GPR-C-SO-01	1 ft	11/13/2007	0.67 ± 0.14		0.03	0.044 ± 0.033		0.026	0.81 ± 0.16		0.01
GPR-C-SO-02	6 ft	11/13/2007	0.68 ± 0.15		0.04	0.042 ± 0.036		0.034	0.73 ± 0.16		0.03

Table 3.3-4h Radiological Results for Test Pit Soil Samples,
RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Thorium-228			Thorium-230			Thorium-232		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
EM-7-SO-01	3 ft	11/14/2007	1.03 ± 0.20		0.02	1.01 ± 0.19		0.01	0.96 ± 0.19		0.02
EM-7-SO-02	4.5 ft	11/14/2007	0.93 ± 0.19		0.03	0.91 ± 0.19		0.03	0.91 ± 0.19		0.03
EM-8-SO-01	3 ft	11/14/2007	3.09 ± 0.50		0.05	0.98 ± 0.19		0.03	3.09 ± 0.50		0.02
EM-8-SO-02	5 ft	11/14/2007	1.79 ± 0.32		0.05	0.70 ± 0.15		0.02	1.58 ± 0.28		0.01
EM-9-SO-01	3 ft	11/14/2007	0.92 ± 0.18		0.02	0.52 ± 0.12		0.01	0.84 ± 0.17		0.02
EM-9-SO-02	5 ft	11/14/2007	0.97 ± 0.19		0.04	0.51 ± 0.12		0.02	1.08 ± 0.21		0.02
EM-11-SO-01	3 ft	11/13/2007	0.117 ± 0.050		0.035	0.110 ± 0.046		0.019	0.112 ± 0.047		0.022
EM-11-SO-02	10 ft	11/13/2007	0.154 ± 0.056		0.024	0.099 ± 0.044		0.011	0.094 ± 0.042		0.019
EM-13-SO-01	3 ft	11/13/2007	0.87 ± 0.19	J	0.04	0.93 ± 0.20	J	0.02	0.95 ± 0.20	J	0.03
EM-13-SO-02	4 ft	11/13/2007	0.142 ± 0.054		0.030	0.131 ± 0.052		0.028	0.129 ± 0.052		0.030
EM-16-SO-01	1 ft	11/13/2007	0.221 ± 0.073		0.041	0.213 ± 0.068		0.023	0.200 ± 0.065		0.019
EM-16-SO-02	4.5 ft	11/13/2007	0.221 ± 0.071		0.034	0.280 ± 0.080		0.011	0.168 ± 0.059		0.019
EM-28-SO-01	9 ft	11/12/2007	0.360 ± 0.090		0.030	0.387 ± 0.093		0.024	0.274 ± 0.074		0.017
EM-28-SO-02	12 ft	11/12/2007	0.284 ± 0.079		0.028	0.284 ± 0.078		0.021	0.322 ± 0.084		0.020
EM-30-SO-01	2 ft	11/15/2007	0.69 ± 0.12		0.03	0.508 ± 0.099		0.027	0.54 ± 0.10		0.02
EM-30-SO-02	4 ft	11/15/2007	0.48 ± 0.11		0.02	0.50 ± 0.11		0.01	0.44 ± 0.10		0.02
EM-31-SO-01	3 ft	11/14/2007	0.62 ± 0.14		0.04	0.58 ± 0.14		0.02	0.48 ± 0.12		0.03
EM-31-SO-02	5 ft	11/14/2007	0.63 ± 0.14		0.04	0.51 ± 0.12		0.02	0.56 ± 0.12		0.02
EM-34-SO-01	4 ft	11/15/2007	0.44 ± 0.11		0.03	0.378 ± 0.095		0.019	0.48 ± 0.11		0.02
EM-34-SO-02	4.5 ft	11/15/2007	1.10 ± 0.21		0.03	0.86 ± 0.17		0.02	0.99 ± 0.19		0.02
EM-35-SO-01	1 ft	11/12/2007	0.41 ± 0.11		0.04	0.40 ± 0.10		0.03	0.280 ± 0.081		0.023
EM-35-SO-02	7.5 ft	11/12/2007	0.92 ± 0.18		0.03	0.77 ± 0.16		0.02	0.89 ± 0.17		0.02
GPR-C-SO-01	1 ft	11/13/2007	0.224 ± 0.072		0.043	0.211 ± 0.065		0.023	0.276 ± 0.077		0.021
GPR-C-SO-02	6 ft	11/13/2007	0.172 ± 0.065		0.048	0.185 ± 0.062		0.022	0.153 ± 0.056		0.011

Table 3.3-4h Radiological Results for Test Pit Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Radium-226[1]			Radium-228[2]			Actinium-228		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
EM-7-SO-01	3 ft	11/14/2007	1.47 ± 0.30		0.21	1.16 ± 0.33		0.19	1.16 ± 0.33		0.19
EM-7-SO-02	4.5 ft	11/14/2007	0.70 ± 0.15		0.10	0.70 ± 0.19		0.25	0.70 ± 0.19		0.25
EM-8-SO-01	3 ft	11/14/2007	0.46 ± 0.14		0.18	1.72 ± 0.28		0.36	1.72 ± 0.28		0.36
EM-8-SO-02	5 ft	11/14/2007	0.55 ± 0.14	J	0.11	1.28 ± 0.20	J	0.1	1.28 ± 0.20	J	0.1
EM-9-SO-01	3 ft	11/14/2007	0.38 ± 0.12		0.16	0.63 ± 0.18		0.25	0.63 ± 0.18		0.25
EM-9-SO-02	5 ft	11/14/2007	0.52 ± 0.15	J	0.13	0.68 ± 0.18	J	0.26	0.68 ± 0.18	J	0.26
EM-11-SO-01	3 ft	11/13/2007	0.48 ± 0.13		0.17	0.84 ± 0.19		0.30	0.84 ± 0.19		0.30
EM-11-SO-02	10 ft	11/13/2007	0.196 ± 0.084	J	0.12	0.1 ± 0.13	UJ	0.22	-- ± --	--	--
EM-13-SO-01	3 ft	11/13/2007	0.66 ± 0.20		0.20	0.98 ± 0.26		0.33	0.98 ± 0.26		0.33
EM-13-SO-02	4 ft	11/13/2007	0.58 ± 0.14		0.10	0.65 ± 0.22		0.31	0.65 ± 0.22		0.31
EM-16-SO-01	1 ft	11/13/2007	0.182 ± 0.084	J	0.12	0.27 ± 0.12	J	0.22	0.27 ± 0.12	J	0.22
EM-16-SO-02	4.5 ft	11/13/2007	0.49 ± 0.13		0.09	0.44 ± 0.19		0.27	0.44 ± 0.19		0.27
EM-28-SO-01	9 ft	11/12/2007	0.20 ± 0.11	J	0.16	0.26 ± 0.16	J	0.20	0.26 ± 0.16	J	0.20
EM-28-SO-02	12 ft	11/12/2007	0.38 ± 0.12	J	0.11	0.18 ± 0.18	UJ	0.28	-- ± --	--	--
EM-30-SO-01	2 ft	11/15/2007	0.51 ± 0.15		0.17	0.38 ± 0.19		0.37	0.38 ± 0.19		0.37
EM-30-SO-02	4 ft	11/15/2007	0.55 ± 0.14		0.11	0.35 ± 0.27	UJ	0.41	0.35 ± 0.27	UJ	0.41
EM-31-SO-01	3 ft	11/14/2007	0.27 ± 0.13		0.18	0.40 ± 0.18		0.22	0.40 ± 0.18		0.22
EM-31-SO-02	5 ft	11/14/2007	0.45 ± 0.14		0.19	0.65 ± 0.21		0.32	0.65 ± 0.21		0.32
EM-34-SO-01	4 ft	11/15/2007	0.257 ± 0.088	J	0.071	0.09 ± 0.16	UJ	0.26	-- ± --	--	--
EM-34-SO-02	4.5 ft	11/15/2007	0.60 ± 0.18		0.20	0.61 ± 0.22		0.38	0.61 ± 0.22		0.38
EM-35-SO-01	1 ft	11/12/2007	0.175 ± 0.091	J	0.14	0.20 ± 0.11	UJ	0.23	-- ± --	--	--
EM-35-SO-02	7.5 ft	11/12/2007	1.11 ± 0.21		0.16	1.24 ± 0.30		0.19	1.24 ± 0.30		0.19
GPR-C-SO-01	1 ft	11/13/2007	0.41 ± 0.10	J	0.09	0.25 ± 0.12	J	0.23	0.25 ± 0.12	J	0.23
GPR-C-SO-02	6 ft	11/13/2007	1.0 ± 0.23		0.18	0.91 ± 0.27		0.38	0.91 ± 0.27		0.38

Table 3.3-4h Radiological Results for Test Pit Soil Samples,
RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Bismuth-212			Bismuth-214			Cesium-137		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
EM-7-SO-01	3 ft	11/14/2007	-- ± --	--	--	1.47 ± 0.30		0.21	-- ± --	--	--
EM-7-SO-02	4.5 ft	11/14/2007	-- ± --	--	--	0.70 ± 0.15		0.10	-- ± --	--	--
EM-8-SO-01	3 ft	11/14/2007	1.93 ± 0.56		0.36	0.46 ± 0.14		0.18	-- ± --	--	--
EM-8-SO-02	5 ft	11/14/2007	-- ± --	--	--	0.55 ± 0.14	J	0.11	-- ± --	--	--
EM-9-SO-01	3 ft	11/14/2007	0.48 ± 0.32		0.47	0.38 ± 0.12		0.16	-- ± --	--	--
EM-9-SO-02	5 ft	11/14/2007	-- ± --	--	--	0.52 ± 0.15	J	0.13	-- ± --	--	--
EM-11-SO-01	3 ft	11/13/2007	-- ± --	--	--	0.48 ± 0.13		0.17	0.085 ± 0.047		0.049
EM-11-SO-02	10 ft	11/13/2007	-- ± --	--	--	0.196 ± 0.084	J	0.12	-- ± --	--	--
EM-13-SO-01	3 ft	11/13/2007	-- ± --	--	--	0.66 ± 0.20		0.20	0.171 ± 0.094		0.14
EM-13-SO-02	4 ft	11/13/2007	-- ± --	--	--	0.58 ± 0.14		0.10	-- ± --	--	--
EM-16-SO-01	1 ft	11/13/2007	-- ± --	--	--	0.182 ± 0.084	J	0.12	-- ± --	--	--
EM-16-SO-02	4.5 ft	11/13/2007	-- ± --	--	--	0.49 ± 0.13		0.09	-- ± --	--	--
EM-28-SO-01	9 ft	11/12/2007	-- ± --	--	--	0.20 ± 0.11	J	0.16	-- ± --	--	--
EM-28-SO-02	12 ft	11/12/2007	-- ± --	--	--	0.38 ± 0.12	J	0.11	-- ± --	--	--
EM-30-SO-01	2 ft	11/15/2007	-- ± --	--	--	0.51 ± 0.15		0.17	-- ± --	--	--
EM-30-SO-02	4 ft	11/15/2007	-- ± --	--	--	0.55 ± 0.14		0.11	-- ± --	--	--
EM-31-SO-01	3 ft	11/14/2007	-- ± --	--	--	0.27 ± 0.13		0.18	-- ± --	--	--
EM-31-SO-02	5 ft	11/14/2007	-- ± --	--	--	0.45 ± 0.14		0.19	-- ± --	--	--
EM-34-SO-01	4 ft	11/15/2007	-- ± --	--	--	0.257 ± 0.088	J	0.071	-- ± --	--	--
EM-34-SO-02	4.5 ft	11/15/2007	-- ± --	--	--	0.60 ± 0.18		0.20	-- ± --	--	--
EM-35-SO-01	1 ft	11/12/2007	-- ± --	--	--	0.175 ± 0.091	J	0.14	-- ± --	--	--
EM-35-SO-02	7.5 ft	11/12/2007	-- ± --	--	--	1.11 ± 0.21		0.16	-- ± --	--	--
GPR-C-SO-01	1 ft	11/13/2007	-- ± --	--	--	0.41 ± 0.10	J	0.09	-- ± --	--	--
GPR-C-SO-02	6 ft	11/13/2007	-- ± --	--	--	1.0 ± 0.23		0.18	-- ± --	--	--

Table 3.3-4h Radiological Results for Test Pit Soil Samples, RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Potassium-40			Lead 210			Protactinium-234m		
		Units:	pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
EM-7-SO-01	3 ft	11/14/2007	10.2 ± 2.3		1.7	-- ± --	--	--	-- ± --	--	--
EM-7-SO-02	4.5 ft	11/14/2007	11.3 ± 1.7		0.4	-- ± --	--	--	-- ± --	--	--
EM-8-SO-01	3 ft	11/14/2007	10.7 ± 1.6	J	0.4	-- ± --	--	--	-- ± --	--	--
EM-8-SO-02	5 ft	11/14/2007	9.1 ± 1.5	J	0.5	-- ± --	--	--	-- ± --	--	--
EM-9-SO-01	3 ft	11/14/2007	7.3 ± 1.2		0.7	-- ± --	--	--	13.7 ± 6.5		8.7
EM-9-SO-02	5 ft	11/14/2007	5.2 ± 1.2	J	0.8	-- ± --	--	--	-- ± --	--	--
EM-11-SO-01	3 ft	11/13/2007	6.2 ± 1.2		1.1	-- ± --	--	--	56 ± 10	J	3
EM-11-SO-02	10 ft	11/13/2007	5.53 ± 0.97	J	0.65	-- ± --	--	--	-- ± --	--	--
EM-13-SO-01	3 ft	11/13/2007	5.9 ± 1.5		1.2	-- ± --	--	--	64 ± 16	J	15
EM-13-SO-02	4 ft	11/13/2007	7.7 ± 1.5		0.7	-- ± --	--	--	-- ± --	--	--
EM-16-SO-01	1 ft	11/13/2007	6.7 ± 1.1	J	0.7	-- ± --	--	--	-- ± --	--	--
EM-16-SO-02	4.5 ft	11/13/2007	6.1 ± 1.4		0.9	-- ± --	--	--	-- ± --	--	--
EM-28-SO-01	9 ft	11/12/2007	5.5 ± 1.2	J	0.6	-- ± --	--	--	-- ± --	--	--
EM-28-SO-02	12 ft	11/12/2007	4.6 ± 1.1	J	1.0	-- ± --	--	--	-- ± --	--	--
EM-30-SO-01	2 ft	11/15/2007	9.9 ± 1.8		0.8	-- ± --	--	--	-- ± --	--	--
EM-30-SO-02	4 ft	11/15/2007	5.5 ± 1.3		0.6	-- ± --	--	--	-- ± --	--	--
EM-31-SO-01	3 ft	11/14/2007	8.2 ± 1.5		0.5	-- ± --	--	--	-- ± --	--	--
EM-31-SO-02	5 ft	11/14/2007	8.3 ± 1.4		0.9	-- ± --	--	--	-- ± --	--	--
EM-34-SO-01	4 ft	11/15/2007	6.5 ± 1.2	J	0.6	-- ± --	--	--	-- ± --	--	--
EM-34-SO-02	4.5 ft	11/15/2007	8.7 ± 1.7		0.7	-- ± --	--	--	-- ± --	--	--
EM-35-SO-01	1 ft	11/12/2007	7.7 ± 1.2	J	0.8	-- ± --	--	--	-- ± --	--	--
EM-35-SO-02	7.5 ft	11/12/2007	13.7 ± 1.9		1	-- ± --	--	--	-- ± --	--	--
GPR-C-SO-01	1 ft	11/13/2007	7.7 ± 1.2	J	0.7	-- ± --	--	--	-- ± --	--	--
GPR-C-SO-02	6 ft	11/13/2007	11.8 ± 2.1		0.8	-- ± --	--	--	-- ± --	--	--

Table 3.3-4h Radiological Results for Test Pit Soil Samples,
RI Phase IIb, Sylvania Corning FUSRAP Site

		Analyte:	Lead-212			Lead-214			Thallium-208			Thorium-234		
		Units:	pCi/g			pCi/g			pCi/g			pCi/g		
Sample ID	Sample Depth	Sample Date	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC	Result	Qual	MDC
EM-7-SO-01	3 ft	11/14/2007	1.31 ± 0.23		0.19	1.29 ± 0.26		0.18	0.53 ± 0.12		0.07	-- ± --	--	--
EM-7-SO-02	4.5 ft	11/14/2007	0.91 ± 0.17		0.14	0.78 ± 0.15		0.1	0.252 ± 0.063		0.043	1.17 ± 0.53		1.1
EM-8-SO-01	3 ft	11/14/2007	2.20 ± 0.26		0.16	0.56 ± 0.13		0.17	0.72 ± 0.11		0.06	27.9 ± 3.6		2.6
EM-8-SO-02	5 ft	11/14/2007	1.21 ± 0.24	J	0.19	0.35 ± 0.12	J	0.15	0.474 ± 0.091	J	0.050	9.6 ± 1.5	J	2.6
EM-9-SO-01	3 ft	11/14/2007	0.94 ± 0.16		0.12	0.312 ± 0.087		0.13	0.323 ± 0.073		0.058	-- ± --	--	--
EM-9-SO-02	5 ft	11/14/2007	0.74 ± 0.14	J	0.12	0.36 ± 0.12	J	0.15	0.233 ± 0.061	J	0.035	7.8 ± 1.4	J	1.8
EM-11-SO-01	3 ft	11/13/2007	0.81 ± 0.12		0.11	0.49 ± 0.13		0.14	0.335 ± 0.087		0.072	32.5 ± 2.9		2.7
EM-11-SO-02	10 ft	11/13/2007	0.335 ± 0.094	J	0.093	0.220 ± 0.077	J	0.11	-- ± --	--	--	-- ± --	--	--
EM-13-SO-01	3 ft	11/13/2007	1.44 ± 0.29		0.23	0.61 ± 0.16		0.24	0.44 ± 0.12		0.14	45.2 ± 4.2		4.2
EM-13-SO-02	4 ft	11/13/2007	0.60 ± 0.14		0.12	0.54 ± 0.13		0.16	0.292 ± 0.090		0.072	5.5 ± 1.5		1.7
EM-16-SO-01	1 ft	11/13/2007	0.47 ± 0.16	J	0.14	0.269 ± 0.078	J	0.12	0.179 ± 0.050	J	0.044	1.69 ± 0.54	J	0.90
EM-16-SO-02	4.5 ft	11/13/2007	0.54 ± 0.12		0.11	0.52 ± 0.13		0.13	0.130 ± 0.057		0.072	3.25 ± 0.82		1.5
EM-28-SO-01	9 ft	11/12/2007	0.41 ± 0.12	J	0.11	0.38 ± 0.11	J	0.09	0.067 ± 0.044	J	0.065	22.0 ± 2.2	J	2.4
EM-28-SO-02	12 ft	11/12/2007	0.272 ± 0.081	J	0.082	0.268 ± 0.091	J	0.12	0.089 ± 0.045	J	0.062	6.1 ± 1.7	J	1.7
EM-30-SO-01	2 ft	11/15/2007	0.76 ± 0.16		0.13	0.50 ± 0.14		0.18	0.279 ± 0.071		0.040	4.34 ± 0.97		1.6
EM-30-SO-02	4 ft	11/15/2007	0.52 ± 0.10		0.09	0.41 ± 0.11		0.16	0.227 ± 0.070		0.060	3.95 ± 0.92		1.4
EM-31-SO-01	3 ft	11/14/2007	0.51 ± 0.14		0.14	0.42 ± 0.13		0.17	0.175 ± 0.061		0.065	4.9 ± 1.1		1.6
EM-31-SO-02	5 ft	11/14/2007	0.65 ± 0.12		0.12	0.77 ± 0.19		0.17	0.327 ± 0.094		0.075	4.82 ± 0.92		1.5
EM-34-SO-01	4 ft	11/15/2007	0.53 ± 0.11	J	0.09	0.279 ± 0.070	J	0.11	0.162 ± 0.050	J	0.039	-- ± --	--	--
EM-34-SO-02	4.5 ft	11/15/2007	0.91 ± 0.19		0.16	0.76 ± 0.18		0.18	0.267 ± 0.085		0.092	2.0 ± 1.0		1.9
EM-35-SO-01	1 ft	11/12/2007	0.265 ± 0.088	J	0.10	0.206 ± 0.080	J	0.12	0.175 ± 0.054	J	0.048	2.68 ± 0.73	J	1.2
EM-35-SO-02	7.5 ft	11/12/2007	1.49 ± 0.23		0.18	1.31 ± 0.22		0.18	0.51 ± 0.11		0.08	-- ± --	--	--
GPR-C-SO-01	1 ft	11/13/2007	0.348 ± 0.085	J	0.095	0.227 ± 0.087	J	0.12	0.129 ± 0.051	J	0.072	1.23 ± 0.65	J	1.1
GPR-C-SO-02	6 ft	11/13/2007	1.28 ± 0.23		0.18	0.87 ± 0.21		0.22	0.42 ± 0.11		0.08	-- ± --	--	--

Key for Table 3.3-4h

Key:
-- = No Data Reported
J = Estimated
U = Not Detected
UJ = Not Detected/Estimated
pCi/g = picocuries per gram
pCi/L = picocuries per liter
Unc. = Uncertainty
Qual = Qualifier
MDC = Minimum Detectable Concentration
ft = feet
Alpha Spectroscopy
Uranium 233/234, 235/236, 238- DOE-A-01-R
Thorium 228, 230, 232- DOE-A-01-R
Gamma Spectroscopy
All other Radionuclides- DOE-GA-01-R

Notes:

[1]Radium-226 was identified and quantified using the Bismuth-214 peak.

[2]Radium-228 was identified and quantified using the Actinium-228 peak.

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4 System Audits

Audits were scheduled for the sampling phase for this project. Audits are summarized in Table 4-1 and included in Appendix C. In addition to the field audits, a laboratory site visit was performed for the Phase IIa activities. A follow-up laboratory audit was conducted on October 30, 2007. A copy of the audit plan is provided in Appendix C.

Table 4-1 Summary of System Audits

Audit Dates	Company	Scope of Audit and Summary of Findings
9/12-13/2006	E & E	Audit of Phase I field investigations. Minor deviations from the WP were noted and corrected.
5/16-17/07	E & E	Audit of Phase IIa field investigations. Minor deviations from the WP were noted and corrected. Rinsate samples were added due to small section of the macro-core sampler that was non-dedicated equipment and corrections made to the chemical preservatives in the QAPP.
5/21/07	E & E	Onsite visit and review of project specific operations at TestAmerica Laboratories, Inc. (formerly STL St. Louis) in St. Louis, Missouri. Immediate corrective actions for analysis of soil volatile organic compounds (VOCs) to ensure the samples were not opened. A small sample was used for the nickel sample so the aliquot was taken from the homogenized sample for radiological analysis. Clarifications for project work were documented in an internal memo.
10/30/07	E & E	Follow-up audit at TestAmerica Laboratories, Inc., in St. Louis, Missouri. Evaluate laboratory implementation of Phase IIb required actions in response to Phase IIa non-conformance issues. A copy of the audit summary memo, including responses from TestAmerica St. Louis, is provided in Appendix C.
10/18-19/07	E & E	Audit of Phase IIb field investigations. Minor deviations from the WP were noted and corrected. Decontamination procedures were modified and noted. Field teams instructed to label sample jar lids with ID numbers and to ensure use of plastic or other clean material when handling samples.
11/5/08	E & E	Laboratory audit of American Analytical Laboratories, Inc. The changes in sample preservation for VOCs and metals were reviewed and the appropriate laboratory SOPs put into practice (VOCs unpreserved, 7-day hold time; dissolved metals, sample filtration, no digestion). The laboratory modified VOC MDLs now comply with low level standard per NELAC; QAPP will be updated. Low trend for trihalomethanes examined; blind PE samples within limits; no further action needed. Clarifications to SOPs were recommended. Improvements in sample courier delivery were recommended.

Table 4-1 Summary of System Audits

Audit Dates	Company	Scope of Audit and Summary of Findings
11/5-6/08	E & E	Field audit of Phase IIIa field investigations, rotosonic drilling. Sample handling procedure modifications determined necessary due to sample matrix effects were made to the work plan documents and put into practice (stop acid preservation of VOC and metals samples due to effervescence in contact with acid). Minor deviations from the WP were noted and corrected. Field team was instructed to provide rinsate samples of equipment using King Lubricant and to record description of type of sampler on drill rig for each well. Field team instructed to record tracking numbers on COC and sample log. Cabrera SOPs were requested for verification because they were not on site; SOPs were provided and reviewed; updates need to be included in QAPP. Instrument calibration criteria and log sheet for pH, ORP, and turbidity need review and possible revision in QAPP.
11/12/08	E & E	Laboratory audit of GEL Laboratories, LLC. The changes in sample preservation for VOCs and metals were reviewed and the appropriate laboratory SOPs put into practice (VOCs unpreserved, 7-day hold time; dissolved metals, sample filtration, no digestion). Sample filtration for radium analyses required – drinking water methods are being used. Specific SOPs for radiological analyses were reviewed and clarification was made as to which SOPs would be used; the QAPP will be updated to include the appropriate SOPs. The laboratory energy and efficiency calibration deviation form the USACE KC guidance was reviewed and approved and the QAPP will be updated. Where laboratory acceptance limits differ from the USACE KC guidance, the laboratory will use project-specific requirements. Gamma spec soil density correction has been verified for samples within a range of 55-190 g; the laboratory will notify E & E if any sample weights are outside of the range. Recently updated laboratory MDLs have no impact on data usability and the QAPP will be updated.

5 Data Completeness and QA/QC Problems

This section summarizes the degree to which the analytical systems met or failed the data quality objectives (DQOs) listed in the QAPP. A discussion is provided for each phase of fieldwork.

5.1 Phase I Data Completeness

5.1.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.1-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.1. Data points that were qualified as estimated are considered usable for the purposes of this project. A total of 93 sample points were rejected for air analysis concerns which were a small percentage of the overall data. A total of 96% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.1-1 Qualified Data and Data Completeness for RI Phase I, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	J	J-	U	UJ	R	Total	Rejected
Air	TO-15	124	26	1	1370	28	51	1600	3%
	TO-15 LOW	205	15	20	292	14	42	588	7%
SO	8082	9			33			42	0%
Totals		**338**	**41**	**21**	**1695**	**42**	**93**	**2230**	**4%**

5.1.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- **Soil gas variability.** The passive soil gas had high variability that may be indicative of the methodology used. The purpose of the sampling program

was to identify hot spots and data are usable. Other data uses should be evaluated closely.

- **Suspected air canister leaks.** Canisters for samples B100-IA-03 and B70-SSA-092 (field duplicate of sample B70-SSA-015) were received under positive pressure indicating that the canisters may have leaked. Field duplicate results did not compare to the parent sample. Results were rejected.

5.2 Phase IIa Data Completeness

5.2.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.2-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.2. Data points that were qualified as estimated are considered usable for the purposes of this project. A total of 253 sample points were rejected for analysis concerns with the VOC analysis. No other sample results were rejected. Due to the significant problems with VOCs, a small percentage of the overall data was rejected and 99.1% of the data are useable. The completeness goals for the project were met based on this percentage.

Table 5.2-1 Qualified Data and Data Completeness for RI Phase IIa, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	J	JN	J+	J-	U	UJ	J	Total	Rejected
Water	6010B						18			18	0.0%
	8260B	15	19	1		2	1276	39		1352	0.0%
	DOE A-01-R Th	2	6				28	18		54	0.0%
Water	DOE A-01-R Ur	2					40	12		54	0.0%
	9315 MOD	1					13	4		18	0.0%
	RA-06-RC MOD						12	6		18	0.0%
Soil	6010B	212	182				3	4		401	0.0%
	8260B	17	299	9	43		17150	3237	253	21008	1.2%
	8082	3					58	2		63	0.0%
Soil or Concrete	DOE A-01-R Th	1102	101				7	2		1212	0.0%
	DOE A-01-R Ur	932	57		3		64	156		1212	0.0%
	DOE GA-01-R	2239	370	30			135	204		2978	0.0%
Concrete	9315 MOD	1								1	0.0%
	9320 MOD		1							1	0.0%
Totals		**4526**	**1035**	**40**	**46**	**2**	**18804**	**3684**	**253**	**28390**	**0.9%**

5.2.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures except for the concentration of acetone found in the some of the equipment blanks. The recommended changes to procedures are as follows:

- Source water for equipment rinsates should be obtained from a verifiable source. Water was provided by the laboratory for this event. Use of a higher

quality grade of water or verification prior to shipment by the laboratory should be considered by analysis of sample before use.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Hold time exceedance. The laboratory initial analyzed samples closed to the hold time limit. If the samples required reanalysis, the re-analysis was run outside of holding time. The time lag between initial analysis and reanalysis was significant, reflecting capacity or data management difficulties. When possible, samples were re-collected in the field.

- Matrix effects were significant. There are no recommended changes for problems based on sample matrix.

- Toluene was consistently detected in the laboratory method blanks at concentrations above the MDL but below the reporting limit. Toluene is not considered a common laboratory contaminant. Concentrations detected in the field samples were consistent with the method blank levels. The laboratory should consider verification of the water source or other options to eliminate toluene. None of the affected levels were above the PQL, and therefore should not impact data usability significantly.

- The laboratory is performing manual data entry as indicated by a number of inconsistencies between reporting forms used for summary and final reports and between hardcopy and EDD reports. The laboratory consistently had errors in reporting cyclohexane, dibromochloromethane and 1,1,2,2-tetrachloroethane. The laboratory was also inconsistent in reporting all matrix spike results.

- There were several instances of Th-230 MB contamination, which caused qualification of some low level samples. It is recommended that the laboratory investigate the source of the Th-230 and eliminate it, if possible.

- Some high MS/MSD and tracer recoveries occurred in soil sample alpha analysis, which was attributed to the sample matrix effect. There are no recommended changes since the problems are due to sample matrix.

- The lab raw data printout is in Bq/sample and a conversion calculation is done to derive the results in pCi/g, which are the required reporting limits. It is recommended that the laboratory investigate the possibility of their gamma spectroscopy computer system having the conversion factors entered upon sample counting and print the results in pCi/g, so that no further calculation is required.

- The alpha spectroscopy tracer recoveries were checked manually by the validator. It would be helpful if the tracer recoveries could be entered in the EDD and evaluated by ADR.

- The laboratory reported relative error ratio (RER) results for their laboratory duplicates in the EDD instead of relative percent difference (RPD). The RER is typically lower than the RPD for a given sample pair and has lower acceptance limits. This allowed results that were outside of the limits to pass through ADR without being addressed. The validator manually reviewed the RPDs and then calculated the RER for those that were questionable. It is recommended that the laboratory either include RPDs only in their EDD or, that they calculate RERs and report those for method duplicates. RER is roughly equivalent to the normalized absolute difference used in the data validation guidance.

- The laboratory qualified results that were greater than the MDC and less than the reporting limit with a "J." That is a chemical convention and is not commonly used for radiochemical data. It is recommended that the laboratory stop qualifying data this way.

5.3 Phase IIb Data Completeness

5.3.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.3-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.3. Data points that were qualified as estimated are considered useable for the purposes of this project. A total of 58 sample points were rejected for volatile and Ra-228 analysis concerns which were a small percentage of the overall data. One data point was rejected for Ra-228 analysis because of a large negative value. Fifty-seven data points were rejected for volatile analysis of one soil sample based on surrogate spike recovery. A total of 99.7% of the data are useable. The completeness goals for the project were met based on this percentage.

Table 5.3-1 Qualified Data and Data Completeness for RI Phase IIb, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	J	JN	J+	J-	U	UJ	R	Total	Rejected
Water	6010B					3	17			20	0.0%
	8260B	16	43	1		2	1666	88		1816	0.0%
	DOE A-01-R Th	4	11				27	18		60	0.0%
	DOE A-01-R Ur	9	2				36	13		60	0.0%
	9315 MOD	1					18	2		21	0.0%
	RA-06-RC MOD	1					14	3	1	19	5.3%
Soil	6010B	60	112		5	21	19	12		229	0.0%
	8260B	42	381		4	27	8308	2863	57	11682	0.5%
	8260B-Ext	3	1		2	1		1		8	0.0%
	DOE A-01-R Th	656	22				6	3		687	0.0%
	DOE A-01-R Ur	575	13		3		42	57		690	0.0%
	DOE GA-01-R	655	585				49	211		1500	0.0%

Table 5.3-1 Qualified Data and Data Completeness for RI Phase IIb, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	J	JN	J+	J-	U	UJ	R	Total	Rejected
	Totals	2022	1170	1	14	54	10202	3271	58	16792	0.3%

5.3.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures except for:

- The concentrations of benzene and chlorobenzene that were found in one of the equipment blanks. Field personnel were interviewed and field logbook entries reviewed. No source of the contaminants at the site could be identified. The split-spoons that were rinsed were purchased by the drilling company and were used for the first time on this site. The same water source was used for all equipment blanks generated during this sampling phase. A laboratory investigation did not reveal any problems, but a potential sample switch at the lab with a sample from another project is suspected. Rinsate water will be monitored in the field with a PID to ensure the water is not switched.

- The failure of the field team to notify the laboratory of suspected high concentration samples at C4 resulted in analytical problems (e.g., carry-over see below). Field team members were instructed to add a note to the laboratory on PID readings.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Matrix effects were significant for volatile analysis. There are no recommended changes for problems based on sample matrix. Matrix effects are related to high concentrations of target compounds; therefore, the impact was predominantly on compounds that are not of concern.

- Initial analysis of samples C9-03/D-Z7, C9-03/D-Z8, C4-01/D-Z6, SU08-11/D-Z5, SU08-11/D-Z6, and SU08-11/D-Z7 show evidence of tetrachloroethene (PCE) carryover from sample C4-01/D-Z5. No sample available for reanalysis of SU08-11/D-Z6 and SU08-11/D-Z7; therefore, PCE results for these samples are qualified as suspect. SU08-11/D-Z5 was reanalyzed at 50-fold dilution resulting in elevated reporting limits. Therefore, results of the initial analysis of sample SU08-11/D-Z5 are reported with the PCE results qualified as suspect.

- The boring at DR-Z was advanced only to 2 feet BGS on November 9, 2007, and the 0 to 2 foot interval was sent for lab analysis. Due to the PID hit, a second sample was collected from the Z1 interval to evaluate this boring (DR-Z-Z1A). Results from both analyses are reported with non-detect results for

sample DR-Z-Z1 qualified "UR" as rejected due to <10% recovery of two surrogate compounds. Reanalysis was completed after hold time expired.

- For samples for VOCs, the analysis was split between Test America St. Louis and Test America Knoxville. The laboratories did not have the exact same compound list. Test America Knoxville did not analyze the sample for 1,4-dioxane. Both laboratories were inconsistent in the compound lists reported for the field blanks. Seven of the eleven field blank samples were not analyzed for cyclohexane, methylcyclohexane, 1,1,2,2-tetrachloroethane, and 1,2-dibromo-3-chloropropane. None of these compounds were compounds of concern at the site. The compounds were not detected in the samples.

- The number of volatile compounds detected in the Test America Knoxville laboratory blanks at concentrations above the MDL, but below the reporting limit, was significant. Many of the compounds are not considered common laboratory contaminants. The laboratory should consider verification of the water source or review instrument conditions to minimize method blanks detections. The detected levels did not impact data usability.

- There were a few instances where the laboratory decided that they needed to perform a reanalysis of rinsate blank samples. Some of the reanalyses were due to sample volumes being recorded by the analyst incorrectly and the laboratory was unable to determine the true volume used for analysis. Other instances were due to extremely low tracer recoveries, indicating the possibility that the tracer was inadvertently not added to the samples. In these cases, the rinsate blank sample volume that remained for reanalysis was inadequate for the laboratory to meet the required detection limits. The laboratory should consider the use of checklists to help the analyst be certain that the correct sample and tracer volumes have been used for analysis. Supplying the laboratory with a larger volume of rinsate blank could be considered for future events.

5.3.3 Effectiveness of Corrective Actions from Phase IIa

Gamma Spectroscopy Calibration Standard Density

The gamma spectroscopy calibration standard used to analyze the soil samples from Phases IIa and IIb had a density of 1.5 g/cc. The USACE data validation guidance directs the validator to qualify all gamma spec results if the sample density is not within 70 to 130% of the standard density. The laboratory acquisition and implementation of a gamma spec calibration standard with a density of 2.0 g/cc was not completed until after all the Phase IIb samples had been analyzed. Approximately 55% of the Phase IIb samples were J qualified on this basis. Soil samples were selected for reanalysis against the new standard to evaluate the differences in the results, if any. The selection was based on the sample density and the ratio of U-238 to Th-234 in the analytical results.

The evaluation of the results is presented in Section 2.3. The results do not indicate any systematic bias that would warrant correction of the existing data. The results of Pb-214 and Th-234 demonstrate a trend to higher concentrations in the re-calibrated results, but the bias is within generally within the analytical uncertainty.

5.3.4 VOC Sample Hold Times

The VOC samples were not always analyzed within their hold times during Phase IIa. There was an error within "Client Requirements Memorandum #4A" that allowed sample repreparation and/or reanalysis to be performed within 2 times the hold time, which is not applicable to this project. Sample repreparation and/or reanalysis are required to be performed within the sample hold time. The corrective action directed TestAmerica to evaluate their analytical capacity earlier in the process, and, if necessary, send samples to TestAmerica Knoxville for analysis within the holding time, which was effective. Missed hold times for VOC samples in Phase IIb were associated with reanalyses. All initial VOC analyses were within hold times. The corrective action is considered effective.

5.3.5 Alpha Spectroscopy Tracer Recoveries

The laboratory alpha spectroscopy tracer recovery acceptance limits are 30 to 110%. The QAPP and USACE guidance specify limits of 50 to 100%, however, the USACE guidance also allows for the use of laboratory derived limits. In most cases the recoveries were within 50 to 100% and no results were qualified on this basis. The addition of the tracer recoveries to the EDD was not implemented in time for use in Phase IIb due to illness of the laboratory programmer assigned to the task. Manual review of the tracer recoveries continued into Phase IIb.

5.3.6 Laboratory Reporting of Duplicate RPD in EDD

The laboratory corrected its EDD software program during Phase IIb to report the sample duplicate RPD instead of the RER, which allowed ADR to evaluate the duplicates in the EDDs correctly. The equation that was used to calculate the RER for TestAmerica's RadCapture program was corrected to match the E & E normalized absolute difference, which eliminated the need for E & E to calculate the RER to evaluate duplicates where the RPD was not applicable.

5.3.7 Laboratory Method Blank Contamination

The contamination of laboratory method blanks with Th-230 was investigated and found to be related to Th-229 tracer peak tailing and acceptance of blank results that are greater than half the reporting limit. "Client Requirements Memorandum #4A" was updated to include the acceptance criterion that the result must be less than half the reporting limit. The tracer peak tailing continued as an issue in Phase IIb.

Low levels of Th-230 in the samples and blanks could be suspect due to tailing. The results are significantly below background levels and are not impacting data usability.

5.4 Phase IIIa Data Completeness

5.4.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.4-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.4. Data points that were qualified as estimated are considered usable for the purposes of this project. A total of 99.1% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.4-1 Qualified Data and Data Completeness for RI Phase IIIa, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	<	>	H	J	J+	J-	U	UJ	R	Total	Rejected
Water	1010A	2										2	0.0%
	6010B	277				59	2		125	4	1	468	0.2%
	7.3.3	1								1		2	0.0%
	7470	8						1	11	2		22	0.0%
	8081A	18				2		12	14	7		53	0.0%
	8082	11						7	7	7		32	0.0%
	8151A	3						6	2			11	0.0%
	8260B	323				70	2	28	968	7		1398	0.0%
	8270C	48						36	24			108	0.0%
	9040	2										2	0.0%
	9315 MOD	54				5			19	7	1	86	1.2%
	ASTM D 5174	11				1			5	7		24	0.0%
	Chpt. 7.3.4-TIT	1							1			2	0.0%
	DOE A-01-R Th	138							144	41	6	329	1.8%
	DOE A-01-R Ur	198				18			99	40	2	357	0.6%
	EPA 900.0	40				3			10	10		63	0.0%
	EPA 901.1	2							347	325	37	711	5.2%
	EPA 903.1	8				6			5	5	1	25	4.0%
	EPA 904.0/ EPA 9320	21							6	3		30	0.0%
	RA-06-RC MOD	60				9			20	14		103	0.0%
Soil	1010A			1								1	0.0%
	6010B	303				62	39	20	46	2		472	0.0%
	7.3.3		1									1	0.0%
	7470	4				1			2			7	0.0%
	7471	15				4		3	6			28	0.0%
	8081A	32							14			46	0.0%
	8082	18				2			14			34	0.0%
	8151A	6				2			4			12	0.0%
	8260B	227				36		37	480	254	2	1036	0.2%
	8270C	84							24			108	0.0%
	9045C/9045D				1							1	0.0%
	Chpt. 7.3.4-TIT		1									1	0.0%
	DOE A-01-R Th	55				5			7	7		74	0.0%
	DOE A-01-R Ur	57				7			9	7		80	0.0%

Table 5.4-1 Qualified Data and Data Completeness for RI Phase IIIa, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	<	>	H	J	J+	J-	U	UJ	R	Total	Rejected
	DOE GA-01-R	118							72	41	1	232	0.4%
	Totals	**2145**	**2**	**1**	**1**	**292**	**43**	**150**	**2485**	**791**	**51**	**5961**	**0.9%**

5.4.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures except for:

- Two volatiles sample bottles were broken during shipment, however, the lab salvaged and analyzed the samples.

- A one-liter sample container was broken during shipment, however, there was sufficient volume of that sample in the other containers to perform all the requested analyses.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Ethyl acetate was not included in the matrix spike and laboratory control sample spike solutions associated with vertical profile water samples analyzed by AAL. This compound was not included in the target compound list for samples collected from 11/4/08 through 11/18/08. All reported ethyl acetate results are considered estimated.

- Volatile analysis hold time violations were documented. Samples RI-SB29-NS and RI-SB30-NS were analyzed two days after hold time expired due to a scheduling oversight. Sample RI-SB-15-NS was reanalyzed after hold time expired due to poor internal standard area responses. The reanalysis results were reported. Sample RI-SB-05-NS was reanalyzed at a dilution after hold time expired due to detections that exceeded the instrument's calibrated range. Sample RI-SB-27-NS was reanalyzed due to low surrogate recovery after hold time had expired; initial results were confirmed and reported with qualification of J as estimated. Hold time violations resulted in reported values qualified as estimated. Although the hold time violations do not appear to be indicative of a major laboratory problem, the laboratory failed to notify of the problems prior to final data submission. It is recommended that GEL project manager forward non-conformance reports as soon as possible to project manager or project chemist.

- Bromoform and 1,1,2-trichloroethane results for samples RI-SB-05-NS, RI-SB-25-NS, and RI-SB-22-NS were rejected based on MS recovery less than 10%.

- The laboratory did not initially report aluminum or antimony with the other TAL metals due to an inadvertent omission from their reporting template, however, they later reported all aluminum and antimony results that had been requested using the original data (the data had been acquired initially).

- GEL Laboratories' IDL study for method 6010B was performed more than one year before the analyses. No results were qualified on this basis.

- The laboratory elected to perform metals and mercury MS/MSD analyses on samples that were not designated for MS/MSD analyses on the COC, and when the MS/MSD results were not within acceptance limits, there was not sufficient sample to perform a repeat analysis.

- Some volatile compounds were not included in the LCSD. Some volatile compounds were analyzed with low area counts.

- Methylene chloride detected in trip blanks resulted in qualification of several sample results with U as not detected for methylene chloride.

- Continuing calibration criteria were not met for bromomethane, 2-butanone, and 2-hexanone, therefore these sample results were qualified with a UJ as estimated.

- Metals were detected in some of the calibration blanks, however, they were at low levels that did not require qualification of sample results.

- Antimony, mercury, sodium, and zinc were detected in some of the method blanks, resulting in qualification of some sample results as U, not detected.

- Metals MS/MSD RPDs were above the acceptance limit indicating sample nonhomogeneity, therefore sample results for antimony, calcium, iron, magnesium, and potassium were qualified with a J as estimated. MS recovery was below the acceptance limit for manganese and potassium, therefore sample results were qualified with a J as estimated. Aluminum spike recovery was above acceptance limits, therefore sample results were qualified with a J as estimated. Aluminum sample concentrations for samples spiked with aluminum were too high for the spike amount added, therefore the spike recoveries were not meaningful.

- Serial dilution recoveries for chromium and nickel did not meet acceptance criteria, therefore sample results were qualified with a J as estimated.

- Several PQLs reported for groundwater volatile analysis by GEL Laboratories exceeded those in the QAPP. MDLs were sufficiently low to meet all project targets. Efforts to improve communication between GEL project manager and E & E project chemists should be made.

- Th-230 and Th-232 were detected in method blanks above the MDC and 1-sigma uncertainty. Some sample results were qualified with a J as estimated on this basis.

- U-238 matrix spike and matrix spike duplicate results were below acceptance limits; samples were reprepared and reanalyzed with similar results, indicating a matrix interference, and sample results were qualified with a J as estimated.

- The RPD or NAD for U-235/236 for a field duplicate sample pair was above the acceptance limit, therefore the results were qualified with a J as estimated.

- The RPD or NAD for the matrix duplicate analysis for U-233/234 was above the acceptance limit, therefore the results were qualified with a UJ as estimated. The RPD or NAD for the matrix duplicate analysis for Ra-228 was above the acceptance limit, therefore the results were qualified with a J as estimated.

- The RPD for the MS/MSD analysis for radium-226 in drinking water was above the acceptance limit, therefore the results were qualified with a J as estimated.

- The MS/MSD accuracy for gross alpha were below acceptance limits, therefore the sample results for that batch were qualified with a J as estimated.

- Sample MW-18S-GW was reanalyzed for total uranium at E & E's request because the result did not agree with the alpha spectroscopy results for uranium. There appears to have been cross contamination from a high uranium sample that was analyzed immediately before MW-18S-GW in the instrument batch. The reanalysis result agreed with the alpha spec results and was reported without qualification.

- Sample MW-32D-GW was reanalyzed for gross alpha at E & E's request because the result did not agree with the alpha spectroscopy results. The laboratory noted elevated levels of sediment in the sample container, indicating non-homogeneity between the sample aliquots used for gross alpha and alpha spec analysis. The reanalysis result agreed with the alpha spec results and was reported qualified with a J as estimated because the gross alpha spike recovery was not within acceptance limits.

- Sample results for calcium, cobalt, lead, nickel, and tetrachloroethylene for sample RI-SB-16-NS were qualified with a J as estimated due to high RPDs for the field duplicate sample pair.

- Sample results for barium, cobalt, iron, manganese, nickel, potassium, and sodium for sample MW-30-D-GW were qualified with a J as estimated due to high RPDs for the field duplicate sample pair.

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6 References

Ecology and Environment Inc. (E & E), 2007, Work Plan, Health and Safety Plan, and Quality Assurance Project Plan, Remedial Investigation for Sylvania Corning FUSRAP Site.

_____, 2007, Quality Control Plan, Remedial Investigation for Sylvania Corning FUSRAP Site.

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A Data Validation Memoranda

Provided on attached DVD.

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B Analytical Data

Available only by request.

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C Sample Collection Documentation

Provided on attached DVD.

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D

GTEOSI Data Validation and Management Summary Report

Provided on attached DVD.

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E CDM Data Usability Assessment Report

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DATA USABILITY ASSESSMENT REPORT

REMEDIAL INVESTIGATION (PHASE IIIb)
SYLVANIA CORNING FUSRAP SITE
HICKSVILLE, NASSAU COUNTY, NEW YORK

Contract No. W912DQ-08-D0018
Task Order 011

June 2010

Prepared for:
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Kansas City District

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Appendices

Appendix A – Data Validation Reports

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Acronyms and Abbreviations

CDM	CDM Federal Programs Corporation
COC	contaminant of concern
CRI	reporting limit check standards
%D	percent differences
DOE	Department of Energy
DQI	data quality indicator
DQO	data quality objective
DSR	data summary report
DUAR	data usability assessment review
FUSRAP	Formerly Utilized Sites Remedial Action Program
ICP AES	inductively coupled plasma atomic emission spectroscopy
ICP MS	inductively coupled plasma mass spectrometry
J	Estimated data because of exceeded quality control criteria
LCS	laboratory control sample
MCL	maximum contaminant level
MDA	minimum detectable activity
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
NYSDEC	New York State Department of Environmental Conservation
PARCCS	precision, accuracy, representativeness, comparability, completeness and sensitivity
QA	quality assurance
QAPP	quality assurance project plan
QC	quality control
QL	quantitation limit
RAD	radionuclide
%R	percent recoveries
R	Data rejected because of exceeded quality control criteria
RI	remedial investigation
RL	reporting limit
RPD	relative percent difference
RRF	relative response factor
SDG	sample delivery group
SOP	standard operating procedure
SOW	statement of work
U	Compound was analyzed for but not detected. The associated numerical value is the sample quantitation limit.
VOC	volatile organic compound

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Section 1
Data Usability and Assessment Review

The U.S. Army Corps of Engineers tasked CDM Federal Programs Corporation (CDM) to perform a Remedial Investigation (RI) (Phase IIIb) for the Sylvania Corning FUSRAP Site Hicksville, Nassau County, New York. Specific details of the site and the investigation are discussed in the Data Summary Report (DSR) Phase IIIb, Sylvania-Corning FUSRAP Site, Hicksville, New York (CDM 2010). Samples were collected in March and April 2010.

The purpose of this data usability and assessment review (DUAR) is to summarize the data validation performed on the round 2 monitoring well samples and to determine whether the sample results meet the data quality objectives (DQOs) outlined in the Project-Specific Quality Assurance Project Plan (QAPP) for the Remedial Investigation (Phase IIIb) Sylvania Corning FUSRAP Site, Hicksville, Nassau County, New York (CDM 2009). Two hundred and eighty samples (plus field quality control samples) were also collected for screening level purposes to guide ongoing field activities. These sample results were not validated.

1.1 Usability Summary

For this DUAR, five data packages were reviewed for volatile organic compounds (VOCs) and metals and eight packages for radionuclide (RAD) analytes as required in the QAPP (CDM 2009). The VOCs and metal analyses were completed by H2M Labs, Inc., Melville, New York and the RAD analyses was completed by Eberline Services/Oak Ridge Laboratory, Oak Ridge, Tennessee.

Samples were collected and analyzed in accordance with the QAPP (CDM 2009). Some deviations were encountered during the field investigation. Deviations are discussed in the DSR (CDM 2010). These deviations did not have an adverse impact on the project objectives.

The majority of the data collected during this site investigation and validated for this DUAR are usable as reported with the data validation qualifiers added. Seventy-six VOCs results, four metal results, and 104 RAD results were rejected because of various associated quality control measures exceeded criteria. These rejected results are described in detail in this report. These results are not usable for project purposes. The data rejected during validation were generally related to laboratory reported undetected or "U" qualified data, or data detected below the project action limit and therefore minimally impact the data set.

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Section 2
Quality Assurance Objectives

Quality assurance (QA) objectives for measurement data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The QA objectives provide a mechanism for ongoing quality control (QC) and evaluating and measuring data quality throughout the project.

A review of the collected data is necessary in order to identify if data measurement objectives established in the QAPP have been meet. In general the following data measurement objectives were considered:

- Specification of particular analytical method and reporting detection limit requirements
- Identification of the appropriate laboratory analytical QC requirements
- Verification if appropriate levels of other PARCCS criteria for the data have been met
- Delineation of specific sample-handling issues or other project-specific issues

The data validation review of the QA objectives verifies that the collected data are of sufficient quality to support their intended use.

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Section 3
Summary of Field and Laboratory QA Activities

CDM completed sampling activities in accordance with the approved QAPP (CDM 2009). The RI included collection of 349 water samples which were analyzed for VOCs, metals, and RAD analytes. Two hundred and eighty samples were designated for screening purposes and not subject to be validated because these data were used to help guide daily field activities. A summary of all the samples collected for this RI and the analyses performed are presented in Table 1. Samples were collected and shipped to H2M Labs, Inc., Melville, New York for VOCs and metals analyses and to Eberline Services/Oak Ridge Laboratory, Oak Ridge, Tennessee for RAD analyses. The QAPP (CDM 2009) defined the procedures to be followed and the data quality requirements for the field program.

3.1 Deviations from Field Procedures

Because of conditions encountered in the field, some deviations were made from the QAPP (CDM 2010) during the fieldwork portion of the RI. The deviations are discussed in the DSR (CDM 2010).

These deviations from the QAPP were minimal and did not impact DQOs for the project.

3.2 Field Quality QA/QC

Field QC samples such as matrix spike/matrix spike duplicates (MS/MSDs), field duplicates, field rinsates and trip blanks were to be collected at the frequencies defined in the QAPP (CDM 2009) which are one per 20 samples (5 percent) for MS/MSDs; one per 10 samples (10 percent) for field duplicates; one per boring or one per decontamination event or day for field rinsates; and one per cooler for trip blanks. For the validated samples, four MS/MSDs, eight field duplicates, one field rinsate sample and six trip blanks were collected. MS/MSD samples were collected at a frequency of 5.8 percent, field duplicates were collected at a frequency of 11.5 percent and trip blanks were collected with each cooler meeting the criteria defined in the QAPP (CDM 2009). One field rinsate sample was collected on the day non-dedicated sampling equipment was used. All other sampling was conducted with dedicated sampling equipment. The number of MS/MSDs, field duplicates, field rinsates and trip blank samples collected satisfies the total requirements in the QAPP (CDM 2009). Temperature blanks were included with each shipment of samples.

Field QA/QC objectives were accomplished through the use of appropriate sampling techniques and collection of field duplicates and field rinsates. Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCSs), MSs, calibration recoveries, serial dilutions, laboratory duplicates, surrogate

recoveries, internal standards, tuning criteria, tracer criteria, carrier criteria, laboratory replicates and standards controls.

3.3 Laboratory Methods

The samples were analyzed using the following methods:

- SW-846 8260B – VOCs
- SW-846 3010A/6010B – metals
- SW-846 6020 - metals
- SW-846 7470A – mercury
- Method DOE-A-01-R Modified – isotopic uranium
- Method DOE-A-01-R Modified – isotopic thorium
- Method 9315 Modified – Radium-226
- Method 9320 Modified – Radium-228
- Method 9310 Modified – Gross Alpha/Beta
- Method 901.1 Modified – Gamma Spectroscopy/total uranium

All the methods used for this remedial investigation sampling event met project objectives.

Section 4
Data Validation Procedures

Data were validated and reviewed by qualified CDM data validators not associated with the sampling activities of this project. The data validation was performed in accordance with the following guidelines:

VOCs

- USEPA Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260 B – October 2006 – SOP # HW-24
- DoD Quality Systems Manual – Version 3 Final – Appendix D – June 2003
- Project-Specific Quality Assurance Project Plan for the Remedial Investigation (Phase IIIb) Sylvania Corning FUSRAP Site Hicksville, Nassau County, New York, August 2009

Metals

- Validation of Metals (Standard Operating Procedure [SOP] Revision 13) September 2006 – SOP #HW-2
- DoD Quality Systems Manual – Version 3 Final – Table B-6 and D18 – June 2003
- Project-Specific Quality Assurance Project Plan for the Remedial Investigation (Phase IIIb) Sylvania Corning FUSRAP Site Hicksville, Nassau County, New York, August 2009

RAD

- USACE Kansas City and St. Louis District Radionuclide Data Quality Evaluation Guidance for Alpha and Gamma Spectroscopy, Revision 01, June 2004
- DoD Quality Systems Manual – Version 3 Final – Appendix D – June 2003
- Project-Specific Quality Assurance Project Plan for the Remedial Investigation (Phase IIIb) Sylvania Corning FUSRAP Site Hicksville, Nassau County, New York, August 2009

Thirteen data packages were validated, five for VOCs and metals and eight for RAD as discussed in Section 3.

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Section 5
Data Quality Indicators

This section summarizes the validation performed and the overall quality of the data based on the PARCCS parameters. Individual sample delivery group (SDG) validation reports with specific sample detail are provided in Appendix A.

Achievement of the DQOs was determined by the use of data quality indicators (DQIs). DQI criteria was established in the QAPP (CDM 2009). These DQIs for measurement data, formerly called QA objectives, are expressed in terms of PARCCS. The DQIs provide a mechanism for ongoing control to evaluate and measure data quality throughout the project. These criteria are defined in the sections below.

5.1 Precision

Precision is a quantitative term that estimates the reproducibility of a set of replicate measurements under a given set of conditions. It is defined as a measurement of mutual agreement between measurements of the same property and is expressed in terms of relative percent difference (RPD) between duplicate determinations.

RPD is calculated as follows:

$$\text{RPD} = \text{absolute value } [(C1-C2)/\{(C1+C2)/2)\}] \times 100\%$$

Where:

C1 = concentration of primary sample
C2 = concentration of duplicate sample

The analytical precision for the reported data was determined by review of applicable laboratory duplicate results. Field and analytical precision was determined from the review of the field duplicate results. The sample results were compared by calculating their RPDs. The field duplicate samples were collected in the same manner as the original samples but were collected in separate, individual containers; given separate sample identifiers; and treated as individual samples by the laboratory.

Laboratory and field RPD results for the validated data are presented below:

VOAs

- Applicable MS/MSD samples were analyzed and all RPDs were within criteria.
- Laboratory duplicates were not analyzed for volatiles.
- The field duplicate RPD results for water samples were within acceptable criteria for the validated data (a control limit of 40 percent).

Metals

- The RPD recoveries between total and dissolved results were within criteria except for cobalt in SDG CDMF016. Both the total and dissolved results for cobalt in sample MW-28D were rejected "R."

- The laboratory duplicate RPD results were within criteria (20 percent for aqueous samples or within applicable laboratory defined limits) with the following exceptions listed below:
  - Manganese for seven samples in SDG CDMF013
  - Aluminum for one sample in SDG CDMF016
  - Manganese for 18 samples in SDG CDMF017
  - Manganese for 16 samples in SDG CDMF018

Following data validation procedures, associated sample results were qualified as estimated "J/UJ" and should be used with a degree of caution.

- The field duplicate RPD results for the water samples were within acceptable criteria except for the analytes identified in Table 2. The following sample results were qualified as estimated "J/UJ" due to field duplicate RPD results:
  - Iron in the field duplicate pair MW-49S/MW-902 in SDG CDMF016
  - Manganese in field duplicate pair MW-44S/MW-904 in SDG CDMF017

For metal RPD validation, a control limit of 40 percent RPD is used when both sample results are greater than 5 times the reporting limit (RL). If one or both of the sample results are less than the 5 times the RL a control limit of the RL absolute value is used for comparison.

The RPD for manganese is 73 percent and the iron field duplicate results failed the RL criteria. Neither of these compounds are indicated as compounds of concern for this site.

The project action limit is 300 µg/L for each of these compounds so although the iron results exceed criteria both results are less than the action limit. Similarly although the RPD for manganese exceeded criteria the reported concentrations for both samples indicated that the concentration for manganese is greater than the action limit.

RAD

- The replicate RPD results were within criteria except for gross beta in SDG 10-03176 and Radium-228 in SDG 10-04009. Associated sample results were estimated as "J." Thorium-230 replicate RPD (169.1 percent) was outside of criteria in SDG 10-03166 and Radium-228 RPD (193.59 percent) was outside of criteria in SDG 10-04046. Fifteen associated sample results in SDG 10-03166 and six associated sample results in SDG 10-04046 were rejected as other QC criteria was also outside of criteria.

- The field duplicate RPD results were within criteria for the RAD analyses except for the following:
  - Potassium-40, Radium-226, Radium-228 and Uranium-235 in field duplicate samples MW-23S/MW-901
  - Gross Alpha, Gross Beta, Radium-228 and Uranium-234 in field duplicate samples MW-49S/MW902
  - Gross Alpha in field duplicate samples MW-30I/MW-905
  - Bismuth-214, Lead-214, Thorium-230 and Uranium-234 in field duplicate samples MW-34S/MW906
  - Bismuth-214 and Lead-214 in field duplicate samples MW-29S/MS-900
  - Bismuth-214 and Uranium-235 in field duplicate samples MW-44/MW-904
  - Gross Beta, Potassium-40 and Radium-226 in field duplicate samples MW-24D/MW-903

These results were estimated "J" for the field duplicate pair samples only.

Most of the RPDs that were outside of criteria occurred when one sample result was nondetect and the other was detect. Other RPD exceedances were minimal and all sample results were below their associated project action limits (QAPP Worksheet #15).

Non-Validated Screening Level Field Duplicate Results

The following sections identify the results of the non-validated screening level field duplicate results.

VOCs

- The field duplicate RPD results for water samples were within acceptable criteria for the non-validated data (a control limit of 40 percent or RL criteria for low values) with the following exceptions listed below:
  - 2-Butanone in field duplicate samples MW-40S-VP03/ MW-40S-VP03-DUP – 66.7 percent RPD
  - Trichloroethene in field duplicate samples MW-50-VP09/MW_50-VP09-DUP – 66.7 percent RPD
  - Tetrachloroethene in field duplicate samples MW-53-VP07/MW53-VP07-DUP – 133.3 percent RPD
  - 1,1-Dichloroethane and acetone in field duplicate samples MW-54-VP07/MW-54-VP07-DUP – 54.5 percent RPD
  - Acetone in field duplicate samples RI-P-45-VP13/RI-P-45-VP13-DUP – 66.7 percent RPD

- Acetone in field duplicate samples RI-P-45-VP27/RI-PVP45-VP27-DUP – 66.7 percent RPD
- Tetrachloroethene in field duplicate samples RI-P-47-VP05/RI-P-VP47-VP05-DUP – 66.7 percent RPD
- Tetrachloroethene in field duplicate samples RI-P-48-VP11/RI-P-45-VP17-DUP – 139 percent RPD

No qualifiers were applied based on the RPD data listed above as this data has not been validated. This comparison was done to evaluate precision of the screening dataset. It should be noted that the RPD results listed above for 1,1-dichloroethane and tetrachloroethene are associated with results detected at or near the project action limit of 5 µg/L.

Metals

The field duplicate RPD results for the non-validated water samples were within acceptable criteria (a control limit of 40 percent RPD) except for the analytes identified in Table 3. The RL criteria was not evaluated for these screening samples as the data was not validated and a representative evaluation cannot be performed.

Three field duplicate pairs, MW-14DD-VP28/MW-14DD-VP28-DUP, MW-15DD-VP28/MW-15DD-VP28-DUP and RI-P-48-VP11/RI-I-45-VP17-DUP had numerous RPDs outside of criteria. The other field duplicates had one to approximately three RPDs outside of criteria. In almost all cases where RPDs exceeded criteria associated results were below the site action levels. To be conservative though, extra caution should be taken in making decisions in the areas where the above mentioned field duplicate pairs were collected due to the high degree of uncertainty regarding precision of field criteria.

RAD

- The field duplicate RPD results were within criteria for the non-validated RAD analyses except for the following:
  - Total Uranium in field duplicate samples MW-22I-VP05/MW-22I-VP05-DUP
  - Total Uranium in field duplicate samples MW-28I-VP04/MW-28I-VP04-DUP
  - Radium-226 and Thorium-230 in field duplicate samples MW-52-VP02/MW-52-VP02-DUP
  - Total Uranium in field duplicate samples MW-56-VP17/MW-56-VP17-DUP
  - Gross Alpha, Uranium-234, and Thorium-230 in field duplicate samples RI-P-47-VP05/RI-P-47-VP05-DUP

Most RPDs that exceeded criteria had low sample concentrations hence a higher RPD number is calculated. Overall the RAD screening level field duplicate RPD results exhibited good field precision.

Field duplicate results for the validated data are presented in the individual data validation reports in Appendix A and Table 2. Field duplicate results for the non-validated screening data are presented in Table 3. For the validated metals and RAD data, RPDs were calculated for all results including those that were nondetect in order to further evaluate precision of the field duplicates.

RPD objectives are analyte dependent. Duplicate results for concentrations near the detection limits (within 5 times the quantitation limit) are reviewed based on their absolute differences as compared to their respective quantitation limit values as described above when field duplicate RPDs exceed the QC limit. There is no discernable pattern or reason for the exceedences. No field sampling issues were identified from the RPD results that were outside of criteria for both the validated and non-validated data and the exceedances are reasonable for this type of sampling activity.

5.2 Accuracy

Accuracy is the degree of agreement of a measurement with an accepted reference or true value and is a measure of the bias in a system. Accuracy of the data was assessed by comparing LCS recovery, MS recovery, calibration recovery, internal standard checks, and surrogate recoveries and by performing serial dilution checks during metals analyses. Accuracy is expressed as percent recovery, which was calculated by:

$$\textbf{Percent Recovery} = \frac{\textbf{(Total Analyte Found - Analyte Originally Present) x 100}}{\textbf{Analyte Added}}$$

Analytical accuracy for the entire data collection activity is difficult to measure because several sources of error exist. Errors can be introduced by any of the following:

- Sampling procedure
- Field contamination
- Sample preservation and handling
- Sample matrix
- Sample preparation
- Analytical techniques

Accuracy is maintained by adhering to the EPA method and approved field and analytical standard operating procedures. CDM's validators reviewed the laboratories' data for accuracy by examining the reported calibrations, MS/MSD recoveries, LCS/LCS duplicate recoveries, serial dilutions, inductively coupled plasma (ICP) results (ICP interference check standards and ICP serial dilutions), tracer recoveries and carrier recoveries. Recoveries outside criteria are summarized below. The data validators qualified the data as required by the validation guidance.

For the data collected for the RI the following percent recoveries (%Rs) were outside of criteria:

VOAs

- MS %Rs were all within criteria.
- LCS %R's were all within criteria.
- The continuing calibration standards had several analytes outside of the percent difference (%D) criteria of 20 percent (30 percent for CCC compounds). The analytes that were outside of the calibration criteria were qualified as estimated "J/UJ" are listed below:
  - Acetone, dibromochloromethane and 1,2,3-trichlorobenzene in SDG CDMF013
  - Acetone, 4-methyl-2-pentanone, 2-hexanone and 1,2,3-trichlorobenzene in SDG CDMF014
  - 2-butanone, 4-methyl-2-pentanone, trichlorofluoromethane, 1,2,4-trichlorobenzene and 2-hexanone in SDG CDMF016
  - Trichlorofluoromethane, dichlorodifluoromethane, 1,2-dichloroethane, tetrachloroethene, 4-methyl-2-pentanone, 2-hexanone and 1,2,4-trichlorobenzene in SDG CDMF017
  - Dichlorodifluoromethane, acetone, methyl acetate, 1,2-dichloroethane, 4-methyl-2-pentanone and 2-hexanone in SDG CDMF018
- The initial and continuing calibration relative response factor (RRF) results were within criteria except for the following analytes:
  - 1,4-dioxane in SDG CDMF013
  - 1,4-dioxane in SDG CDMF014
  - 1,4-dioxane in SDG CDMF016
  - 1,4-dioxane in SDG CDMF017
  - 1,4-dioxane in SDG CDMF018

All 76 1,4-dioxane results were nondetect and were therefore qualified as rejected "R due to RRF criteria. Due to this rejection criteria, no 1,4-dioxane results are available for project decisions. 1,4-Dioxane is not a COC so the impact to the overall project objectives is limited.

Sample preservation, handling, and holding times are additional measures of accuracy of the data. All sample preservation and handling criteria were met and a review of the data confirmed that samples were analyzed within holding times, with the exception of two samples that were analyzed at a dilution for tetrachloroethene. The dilution analyses was performed at 13 days. The holding time criteria is 7 days for unpreserved samples hence the tetrachloroethene result from both dilution runs was qualified as estimated "J" due to holding time criteria. There is no negative

impact on the project since in both cases the dilution results for tetrachloroethene far exceeded the project action levels.

Metals

- All initial and continuing calibration %Rs were within criteria.
- Matrix spike recoveries were outside of criteria for the following analytes:
  - Aluminum, lead, and selenium in the dissolved analysis for SDG CDMF016
  - Chromium and lead in the total analysis for SDG CDMF017
  - Selenium in dissolved analysis for SDG CDMF018

All associated analytes were qualified as estimated "J/UJ." The non-detect sample results for aluminum and lead were rejected "R" due to percent recoveries above 150 in SDG CDMF016 for sample MW-28D.

- LCS recoveries were within criteria for all SDGs.
- All ICP Interference check standards were within criteria.
- ICP serial dilution %Ds were outside of criteria for the following anlaytes:
  - Cobalt (total/dissolved) and nickel (dissolved) in SDG CDMF014
  - Manganese (total), cobalt (dissolved), and nickel (dissolved) in SDG CDMF016
  - Manganese (total) in SDG CDMF017
  - Cobalt (total) and manganese (total) in SDG CDMF018

Associated sample results were qualified as estimated "J/UJ" with the exception of cobalt in SDG CDMF016 which was rejected "R."

- The RL check standard (CRI) recoveries were within criteria.

Sample holding times and preservation criteria were also reviewed. All samples were analyzed within the contract required holding times and all preservation criteria were met.

RAD

- MS %Rs were all within criteria except for the following:
  - Thorium-230 and Radium-226 in SDG 10-04004
  - Thorium-228, Thorium-230 and Radium-226 in SDG 10-03166
  - Radium-226 in SDG 10-04008
  - Thorium-230 and Radium-228 in SDG 10-04046

Associated sample results were qualified as estimated "J." The Thorium-230 results in SDG 10-03166 (15 results) and Radium-228 in SDG 10-04046 (6 results) were rejected as other QC criteria was also outside of criteria for these analytes.

- LCS %Rs were all within criteria except for Radium-228 in SDG 10-03166. Associated sample results were estimated "J."

- Tracer %R's were all within criteria except for Uranium-234, Uranium-235 and Uranium-238 for samples MW-31D, MW-51I and MW-42I in SDG 10-04009. Associated sample results were qualified as estimated "J."

Sample preservation, handling, and holding times are additional measures of accuracy of the data. All sample preservation and handling criteria were met and a review of the data confirmed that samples were analyzed within holding times.

5.2.1 Blank Contamination

Field equipment blanks and laboratory method blanks are analyzed to identify possible sources of contamination. Contamination of a sample can be introduced by field sample collection methods, sample handling, preparation, and/or analysis.

VOAs

- Tetrachloroethene was detected in the trip blanks above the reporting limit of 0.5 µg/L. The associated samples with tetrachloroethene results less than 5 times the concentration reported in the trip blank, have been qualified as nondetect "U."

- All method blank results were less than half of the reporting limit and less than the reporting limit for common laboratory contaminants.

- Acetone and o-xylene were detected in the field blank sample. All other results were nondetect. Associated samples were qualified as required.

Metals

- In all five of the SDGs, various analytes were detected between the method detection limits (MDLs) and the RLs in the laboratory method blanks:

  ICP AES

  - Potassium, copper, and iron in SDG CDMF013

  - Calcium, copper, iron, potassium, sodium, aluminum in the total analysis SDG and potassium in the dissolved analysis for SDG CDMF014

  - Potassium, sodium, calcium, and zinc in the total analysis and potassium in the dissolved analysis for SDG CDMF016

  - Mercury in the total analysis in SDG CDMF016

- Zinc, potassium, sodium, aluminum, and iron in the total analysis for SDG CDMF017

- Copper, potassium, sodium, aluminum, calcium, and magnesium in the total analysis and potassium, aluminum, copper, and magnesium in the dissolved analysis for SDG CDMF018

- Mercury for total analysis in SDG CDMF018

ICP MS

- Arsenic and lead in SDG CDMF013

- Antimony, lead, silver, arsenic, and nickel in the total analysis for SDG CDMF014 and lead, antimony, and arsenic in the dissolved analysis for SDG CDMF04

- Lead, and arsenic in the total analysis and arsenic and silver in the dissolved analysis for SDG CDMF016

- Lead and arsenic in the total analysis for SDG CDMF017

- Lead, antimony and silver in the total analysis and arsenic, lead, manganese, antimony, and silver in the dissolved analysis for CDMF018.

Following data validation criteria, associated sample results were qualified as nondetect "U" and the sample concentration was raised to the RL value. If the blank concentration was negative, the associated sample results were qualified as estimated biased low "J-/UJ."

- Aluminum, barium, chromium, cobalt, magnesium, manganese, vanadium and zinc were detected in the field rinsate sample collected with the metal samples. Associated sample results were qualified as nondetect if sample concentrations were less than the field blank concentration. Concentrations were also low. Field rinsate contamination was acceptable.

RAD

- The following analytes were detected in the laboratory method blanks:
  - Radium-226, Thorium-230 and Uranium-234 in SDG 10-03176
  - Gross Alpha and Radium-226 in SDG 10-04004
  - Protactinium-234M, Radium-228 and Thorium-230 in SDG 10-04045
  - Radium-226, Radium-228 and Uranium-234 in SDG 10-03166
  - Bismuth-212, Bismuth-214, Potassium-40, Radium-226 and Thorium-230 in SDG 10-04008
  - Radium-226, Radium-228 and Thorium-230 in SDG 10-04009

- Radium-226, Thorium-227, Thorium-228 and Thorium-230 in SDG 10-04046
- Radium-228, Thorium-227, Thorium-230 and Uranium-234 in SDG 10-04007

Following data validation criteria, associated sample results that had a normalized difference less than 1.96 were qualified as estimated "J."

- One validated field blank sample was collected with the samples in SDG 10-03166. Gross Beta and Radium-228 were detected. All associated sample results for Gross Beta were greater than the field blank result or nondetect so no qualifiers were required. Six sample results were estimated "J" for Radium-228 as the sample concentrations were less than the field blank concentration. The concentrations of these analytes were low. Field blank contamination was acceptable.

Non-Validated Screening Level Field Duplicate Results

VOCs

Acetone and tetrachloroethene were detected in one of the non-validated rinsate samples. Concentrations were low. All other rinsates sample results were nondetect. Field blank contamination was acceptable.

Metals

Various analytes were detected in the non-validated rinsate samples as shown on Table 5. In general concentrations were low.

RAD

Most of the RAD analytes were nondetect in the non-validated rinsate samples as shown on Table 5. Almost all detected results were low concentrations.

Field equipment blank results are presented in Table 4 for the validated samples and Table 5 for the non-validated samples. The data validators qualified the data on the basis of the laboratory and field blank contaminants as required by relevant data validation guidelines for the validated samples. The reported sample results are judged to be valid after validation. In general, all detected concentrations were low indicating field sample collection activities were adequately performed for the validated and non-validated data.

5.3 Representativeness, Comparability, and Sensitivity

Representativeness, comparability, and sensitivity are achieved by using EPA-approved sampling procedures and analytical methodologies. By following the QAPP (CDM 2009) procedures for the RI sampling this and future sampling events should yield results representative of environmental conditions at the time of sampling. Similarly, reasonable comparability of analytical results for this and future sampling events can be achieved if approved EPA analytical methods and standardized reporting units are employed.

5.3.1 Representativeness

Representativeness is a qualitative term that expresses the degree to which the sample data accurately and precisely represent the environmental conditions corresponding to the location and depth interval of sample collection. Requirements and procedures for sample collection are designed to maximize sample representativeness.

Representativeness also can be monitored by reviewing field documentation and/or by performing field audits. For this report, a detailed review was performed on the chain of custody forms, field data collection forms, and laboratory sample confirmation logs and data validation packages. Appropriate laboratory QA/QC requirements were described in the QAPP (CDM 2009) and laboratory statements of work (SOWs) to ensure that the laboratory analytical results were representative of true field conditions.

Field sampling accuracy was attained through strict adherence to the approved QAPP (CDM 2009) and by using EPA-approved analytical methods for sample analyses. Based on this, the data should represent as near as possible the actual field conditions at the time of sampling.

Representativeness, as defined above, has met the applicable requirements for the field work and laboratory analyses. Deviations to the planned sampling activity were minimal and did not compromise the ability of the data to represent conditions within the project area. Therefore, the data collected are suitable for a representative characterization of the project area.

5.3.2 Comparability

Comparability is a qualitative term that expresses the confidence with which a data set can be compared with another. Strict adherence to standard sample collection procedures, analytical detection limits, and analytical methods assures that data from like samples and sample conditions are comparable. This comparability is independent of laboratory personnel, data reviewers, or sampling personnel. Comparability criteria are met for the project if, based on data review, the sample collection and analytical procedures are determined to have been followed, or defined to show that variations did not affect the values reported.

To ensure comparability of data generated for the site, standard sample collection procedures and EPA-approved analytical methods were utilized by CDM. The sample analyses were performed by H2M Labs, Inc., Melville, New York and Eberline Services/Oak Ridge Laboratory, Oak Ridge, Tennessee using the same methodology as the Phase IIIa activities. Utilizing such procedures and methods enables the current data to be comparable with the previous data sets generated with similar methods.

5.3.3 Sensitivity

Sensitivity is related to the ability to compare analytical results with project-specific levels of interest, such as delineation levels or action levels. Analytical quantitation

limits for the various sample analytes should be below the level of interest to allow an effective comparison.

Detection Limits

Each analytical method used during the RI sampling was selected because it had a laboratory limit at or below the project objectives. For each analyte, the QAPP (CDM 2009) provided a Reference Limit and Evaluation Table (QAPP Worksheet #15) that the laboratory was to achieve to provide analytical results at or below regulatory comparison criteria which consists of Ambient Water Quality Standards and Guidance Value and Groundwater Effluent Limitations, New York State Department of Environmental Conservation (NYSDEC), June 1998 Edition for Class GA Standards and EPA Drinking Water Maximum Contaminant Limits (MCLs) EPA 816-F-02-013, July 2002.

The laboratory quantitation limit (QLs) are the minimum levels of quantitation acceptable under the QAPP (CDM 2009). The QL is generally equal to or greater than the method detection limit MDL. The QLs are set above MDLs to simplify comparisons between results from individual samples by minimizing influences from matrix effects (e.g., moisture content and high-level analytes) and to increase confidence in the reported values.

The MDL is described in the methods and is defined as the concentration of an analyte that produces a signal with a 99 percent probability that the concentration is above that of a blank. A blank is a sample that does not contain measurable concentrations of the analyte of concern. MDLs are usually at least less than one-half the QLs. Tested by statistical performance, calibration samples, and LCSs, MDLs represent the best fundamental measurement of instrument sensitivity and the basis for establishing quantitation limits.

Laboratory results are reported according to rules that provide established certainty of detection and quantitation limits. The result for an analyte is flagged with a "U" if that analyte was not detected or qualified with a "J" if blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty for RAD analyses (i.e., was not present at a concentration above the limit of measurement). If an analyte is present at a concentration between the MDL and the QL, the analytical result is flagged with a "J," indicating an estimated quantity. Qualifying the result as an estimated concentration reflects increased uncertainty in the reported value.

Quantitation limits are a compromise between analytical sensitivity and precision. Setting low QLs can lead to poorly defensible data because of false positive (Type I) and/or false negative (Type II) errors, whereas elevated QLs can hamper site characterization. Laboratory determinations of MDLs are performed on non-typical samples (e.g., distilled water) leading to idealized limits. Confidence in detection limits increases with instrument signal level above the MDL and higher limits mean better precision.

Although the QLs of some analyte groups are set high to avoid Type I and Type II errors, these limits provide a conservative picture of the nature and extent of contamination and the associated risk.

In general, for the data validated in this report, detection limits for the sample results were low enough to compare to the action levels stated in the QAPP (CDM 2009).

The VOA detection limits met QAPP (CDM 2009) criteria. Samples that had high concentrations were diluted according to laboratory criteria. Detection limits were raised where applicable.

The metal detection limits met QAPP (CDM 2009) criteria.

The RAD detection limits met QAPP (CDM 2009) criteria. Samples that had high concentrations were diluted according to laboratory criteria. Detection limits were raised where applicable.

RAD sample results were reviewed for quantitation and detection limits. This is done to ensure that the reported quantitation results are accurate and that the required detection limits have been met. All results were evaluated relative to the uncertainty associated with the analysis and reported by the laboratory with the sample results. All criteria followed is from the USACE Kansas City and St. Louis District Radionuclide Data Quality Evaluation Guidance for Alpha and Gamma Spectroscopy (December 17, 2002), Revision 01, June 27, 2004. Sample results that were less than the uncertainty but greater than the MDA, and the uncertainty multiplied by 1.65 was greater than the MDA, the sample results were qualified as estimated "UJ." If the sample results were greater than the uncertainty but less than the MDA, and the uncertainty multiplied by 1.65 was greater than the MDA, the sample results were qualified as estimated "UJ." If the sample results were greater than the uncertainty but less than the MDA and the uncertainty multiplied by 1.65 was less than the MDA then the results were qualified as estimated "J." If the sample result was less than the uncertainty and also less than the MDA the samples were qualified as nondetect "U" unless the uncertainty multiplied by 1.65 was greater than the MDA in which case the results were qualified as nondetect and estimated "UJ." Negative sample results where the absolute values were greater than the uncertainty were rejected "R." All eight RAD SDGs had sample results that were either estimated as described above or rejected due to this criteria. A total of one hundred and four sample analyte results from all eight SDGs were rejected.

The data validation process also evaluates the data regarding compound quantitation limits. If sample results exceed calibration ranges, results are qualified appropriately as estimated J. Data validation also determines the most valid analyte result to use for samples that are re-analyzed or diluted. These validated results are entered into the project database and used for decision-making.

In general, detection limits met project goals and objectives as discussed above.

5.4 Data Completeness

Completeness of the field program is defined as the percentage of samples planned for collection as listed in the final work plan versus the actual number of samples collected during the field program (see equation A).

Completeness for acceptable data is defined as the percentage of acceptable data obtained judged to be valid versus the total quantity of data generated (see equation B). Acceptable data include both data that pass all the QC criteria (unqualified data) and data that may not pass all the QC criteria but had appropriate corrective actions taken (qualified but usable data).

A. $$\%\text{Completeness} = C \times \frac{100}{n}$$

Where:

C = actual number of samples collected
n = total number of samples planned

B. $$\%\text{Completeness} = V \times \frac{100}{n'}$$

Where:

V = number of measurements judged valid
n' = total number of measurements made

The completeness results are presented in Table 6.

The overall completeness goal for this project was 90 percent for all validated project data and 90 percent for site contaminants of interest.

A total of 349 environmental samples were collected to be analyzed by H2M and Eberline Services laboratories. This sample count included field duplicates, MS/MSDs, and field blanks. All samples outlined in the QAPP (CDM 2009) were collected as planned and based on field decisions more samples were also collected. The completeness for the number of samples planned to be collected versus the number of samples collected was 100 percent for VOCs, metals and RAD analyses.

The completeness goal for acceptable data achieved was 98.13 percent for VOCs, 99.52 percent for metals and 93.5 percent for RAD. The VOCs, metals and RAD completeness goals for acceptable data are over the 90 percent criteria for the number of measurements judged to be valid versus the total number of measurements made.

A total of 2.42 percent of the sample results were rejected. Seventy-six VOC sample results were rejected because of calibration criteria, four metal sample results were rejected because of MS criteria and 104 RAD sample results were rejected because of various validation criteria as discussed previously. The listed rejected results for VOCs and metals are not contaminants of concern (COCs) for the site so these rejected

results do not affect DQOs for the project. The listed rejected results for RAD thorium isotopes are COCs for the site. It should be noted that most of these thorium results were Th-234 results captured from the gamma spectroscopy screening analysis. Twenty-six out of 104, or 25 percent of the rejected results are thorium isotopes. There are a total of 405 thorium results for 81 RAD samples (includes filtered and unfiltered samples), which equates to 6.4 percent of the thorium isotope results being rejected. This meets the completeness goal of 90 percent and the impact to overall RAD results for project decisions is minimal.

The completeness goals for both the number of samples collected for the entire sampling event and the number of measurements judged to be valid for the limited data reviewed were met.

Deviations for sample collection are discussed in the DSR (CDM 2010). Sample deviations were driven by results based on field screening samples and did not impact DQOs for the project.

The data reported are suitable for their intended use as stated in the QAPP (CDM 2009) except for the rejected results. Overall, the DQIs identified in Worksheet #12 Measurement Performance Criteria of the QAPP (CDM 2009) met appropriate criteria. The achievement of the completeness goals for the data provides sufficient data for project decisions.

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Section 6
Assessment of Data Usability and Reconciliation with Work Plan Goals

Ninety-eight percent of the data reported and validated in this DUAR are suitable for their intended use as stated in the QAPP (CDM 2009). One hundred and eighty-four sample results were rejected due to validation criteria. These data are not acceptable for use. Of the rejected sample results, six percent of the RAD thorium isotopes, which are COCs for the site, were rejected. The impact to the RAD results for project uses from the rejected sample results is minimal. The other rejected results were not COCs for the site. The detection limits reported do not exceed the expected limits as documented in the QAPP (CDM 2009) except for applicable dilutions. The achievement of the completeness goals for number of samples collected, and the number of sample results acceptable for use provides sufficient quality data to support project decisions. Field duplicate precision also met criteria a majority of the time. RPDs were outside criteria mostly when the sample results were close to the reporting limit and/or below the project required action limits. Decisions based on results close to the reporting limit should be made with a degree of caution.

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Section 7
References

Department of Defense (DoD) Quality Systems Manual - Version 3 Final - Appendix D - June 2003

DoD Quality Systems Manual - Version 3 Final - Table B-6 and D18 - June 2003

Data Summary Report (DSR) Phase IIIb, Sylvania- Corning FUSRAP Site, Hicksville, New York (CDM 2010)

Project-Specific Quality Assurance Project Plan (QAPP) for the Remedial Investigation (Phase IIIb) Sylvania Corning FUSRAP Site, Hicksville, Nassau County, New York (CDM 2009)

USACE Kansas City and St. Louis District Radionuclide Data Quality Evaluation Guidance for Alpha and Gamma Spectroscopy, Revision 01, June 2004

USEPA Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260 B - October 2006 - SOP # HW-24

Validation of Metals for the Contract Laboratory Program based on SOW ILM05.3 (SOP Revision 13) September 2006 - SOP #HW-2

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Table 1

Sample Summary

Table 1
Sample Summary
Sylvania Corning FUSRAP Site
Hicksville, NY

Sample Name	Parent Sample Name	Laboratory Sample Delivery Group	Location	Matrix	Sample Date	Gross Alpha and Gross Beta	Gamma Spectroscopy	Radium-226	Radium-228	Volatile Organics SW8260B	Volatile Organics SW8260C	Volatile Organics SW8260B	Volatile Organics SW8260C	Uranium	Uranium
MW-10-GWR2		10-03166	MW-10	Ground Water	3/21/10	2[a]	11	1	1					4	3
MW-10-GWR2		CDMF014	MW-10	Ground Water	3/21/10					11	11	1	55		
MW-11-GWR2		10-03166	MW-11	Ground Water	3/22/10	2	11	1	1					4	3
MW-11-GWR2		CDMF014	MW-11	Ground Water	3/22/10					11	11	1	55		
MW-12-GWR2		10-03166	MW-12	Ground Water	3/21/10	2	11	1	1					4	3
MW-12-GWR2		CDMF014	MW-12	Ground Water	3/21/10					11	11	1	55		
MW-13D-GWR2		10-03176	MW-13D	Ground Water	3/24/10	2	11	1	1					4	3
MW-13D-GWR2		CDMF013	MW-13D	Ground Water	3/24/10					11	11	1	55		
MW-13S-GWR2		10-03176	MW-13S	Ground Water	3/24/10	2	11	1	1					4	3
MW-13S-GWR2		CDMF013	MW-13S	Ground Water	3/24/10					11	11	1	55		
MW-14DD-GWR2		10-03166	MW-14DD	Ground Water	3/22/10	2	11	1	1					4	3
MW-14DD-GWR2		CDMF014	MW-14DD	Ground Water	3/22/10					11	11	1	55		
MW-14D-GWR2		10-03166	MW-14D	Ground Water	3/23/10	2	11	1	1					4	3
MW-14D-GWR2		CDMF014	MW-14D	Ground Water	3/23/10					11	11	1	55		
MW-14S-GWR2		10-03166	MW-14S	Ground Water	3/22/10	2	11	1	1					4	3
MW-14S-GWR2		CDMF014	MW-14S	Ground Water	3/22/10					11	11	1	55		
MW-15DD-GWR2		10-03176	MW-15DD	Ground Water	3/23/10	2	11	1	1					4	3
MW-15DD-GWR2		CDMF014	MW-15DD	Ground Water	3/23/10					11	11	1	55		
MW-15D-GWR2		10-03166	MW-15D	Ground Water	3/23/10	2	11	1	1					4	3
MW-15D-GWR2		CDMF014	MW-15D	Ground Water	3/23/10					11	11	1	55		
MW-15S-GWR2		10-03166	MW-15S	Ground Water	3/23/10	2	11	1	1					4	3
MW-15S-GWR2		CDMF014	MW-15S	Ground Water	3/23/10					11	11	1	55		
MW-16D-GWR2		CDMF018	MW-16D	Ground Water	4/7/10					11	11	1	55		
MW-16D-GWR2-DISS		CDMF018	MW-16D	Ground Water	4/7/10					11	11	1			
MW-16D-GWR2-FILTERED		10-04046	MW-16D	Ground Water	4/7/10	2	11	1	1					4	3
MW-16D-GWR2-UNFILTERED		10-04046	MW-16D	Ground Water	4/7/10	2	11	1	1					4	3
MW-16S-GWR2		10-04046	MW-16S	Ground Water	4/7/10	2	11	1	1					4	3
MW-16S-GWR2		CDMF018	MW-16S	Ground Water	4/7/10					11	11	1	55		
MW-17S-GWR2		10-03176	MW-17S	Ground Water	3/23/10	2	11	1	1					4	3
MW-17S-GWR2		CDMF014	MW-17S	Ground Water	3/23/10					11	11	1	55		
MW-18I-GWR2		10-04009	MW-18I	Ground Water	3/31/10	2	11	1	1					4	3
MW-18I-GWR2		CDMF017	MW-18I	Ground Water	3/31/10					11	11	1	55		
MW-18S-GWR2		10-04009	MW-18S	Ground Water	4/1/10	2	11	1	1					4	3
MW-18S-GWR2		CDMF017	MW-18S	Ground Water	4/1/10					11	11	1	55		
MW-19D-GWR2		10-04004	MW-19D	Ground Water	3/31/10	2	11	1	1					4	3
MW-19D-GWR2		CDMF016	MW-19D	Ground Water	3/31/10					11	11	1	55		
MW-19S-GWR2		10-03176	MW-19S	Ground Water	3/24/10	2	11	1	1					4	3
MW-19S-GWR2		CDMF013	MW-19S	Ground Water	3/24/10					11	11	1	55		
MW-20D-GWR2		10-04045	MW-20D	Ground Water	4/5/10	2	11	1	1					4	3
MW-20D-GWR2		CDMF018	MW-20D	Ground Water	4/5/10					11	11	1	55		
MW-20I-GWR2		10-04008	MW-20I	Ground Water	4/1/10	2	11	1	1					4	3
MW-20I-GWR2		CDMF017	MW-20I	Ground Water	4/1/10					11	11	1	55		
MW-20S-GWR2		10-04009	MW-20S	Ground Water	4/1/10	2	11	1	1					4	3
MW-20S-GWR2		CDMF017	MW-20S	Ground Water	4/1/10					11	11	1	55		
MW-21D-GWR2		10-03176	MW-21D	Ground Water	3/24/10	2	11	1	1					4	3

Table 1
Sample Summary
Sylvania Corning FUSRAP Site
Hicksville, NY

Sample Name	Parent Sample Name	Laboratory Sample Delivery Group	Location	Matrix	Sample Date	Gross Alpha and Gross Beta	Gamma	Radium 226	Radium 228	Metals SW6010	Metals SW6020	Mercury SW7470	Volatiles SW8260B	Thorium	Uranium
MW-21D-GWR2		CDMF013	MW-21D	Ground Water	3/24/10					11	11	1	55		
MW-21I-GWR2		10-03176	MW-21I	Ground Water	3/24/10	2	11	1	1					4	3
MW-21I-GWR2		CDMF013	MW-21I	Ground Water	3/24/10					11	11	1	55		
MW-21S-GWR2		10-03176	MW-21S	Ground Water	3/24/10	2	11	1	1					4	3
MW-21S-GWR2		CDMF013	MW-21S	Ground Water	3/24/10					11	11	1	55		
MW-22D-GWR2		10-04009	MW-22D	Ground Water	4/1/10	2	11	1	1					4	3
MW-22D-GWR2		CDMF017	MW-22D	Ground Water	4/1/10					11	11	1	55		
MW-22I-GWR2		10-04009	MW-22I	Ground Water	4/1/10	2	11	1	1					4	3
MW-22I-GWR2		CDMF017	MW-22I	Ground Water	4/1/10					11	11	1	55		
MW-22S-GWR2		10-04008	MW-22S	Ground Water	3/31/10	2	11	1	1					4	3
MW-22S-GWR2		CDMF017	MW-22S	Ground Water	3/31/10					11	11	1	55		
MW-23D-GWR2		10-04007	MW-23D	Ground Water	3/31/10	2	11	1	1					4	3
MW-23D-GWR2		CDMF016	MW-23D	Ground Water	3/31/10					11	11	1	55		
MW-23I-GWR2		10-04004	MW-23I	Ground Water	3/29/10	2	11	1	1					4	3
MW-23I-GWR2		CDMF016	MW-23I	Ground Water	3/29/10					11	11	1	55		
MW-23S-GWR2		10-04004	MW-23S	Ground Water	3/29/10	2	11	1	1					4	3
MW-23S-GWR2		CDMF016	MW-23S	Ground Water	3/29/10					11	11	1	55		
MW-23S-GWR2-DUP	MW-23S-GWR2	10-04004	MW-23S	Ground Water	3/29/10	2	11	1	1					4	3
MW-23S-GWR2-DUP	MW-23S-GWR2	CDMF016	MW-23S	Ground Water	3/29/10					11	11	1	55		
MW-24D-GWR2		10-04008	MW-24D	Ground Water	3/31/10	2	11	1	1					4	3
MW-24D-GWR2		CDMF016	MW-24D	Ground Water	3/31/10					11	11	1	55		
MW-24D-GWR2-DUP	MW-24D-GWR2	10-04008	MW-24D	Ground Water	3/31/10	2	11	1	1					4	3
MW-24D-GWR2-DUP	MW-24D-GWR2	CDMF016	MW-24D	Ground Water	3/31/10					11	11	1	55		
MW-24S-GWR2		10-04007	MW-25S	Ground Water	3/31/10	2	11	1	1					4	3
MW-24S-GWR2		CDMF016	MW-25S	Ground Water	3/31/10					11	11	1	55		
MW-25D-GWR2		10-04007	MW-25D	Ground Water	3/31/10	2	11	1	1					4	3
MW-25D-GWR2		CDMF016	MW-25D	Ground Water	3/31/10					11	11	1	55		
MW-25I-GWR2		10-04004	MW-25I	Ground Water	3/31/10	2	11	1	1					4	3
MW-25I-GWR2		CDMF016	MW-25I	Ground Water	3/31/10					11	11	1	55		
MW-25S-GWR2		10-04004	MW-25S	Ground Water	3/31/10	2	11	1	1					4	3
MW-25S-GWR2		CDMF016	MW-25S	Ground Water	3/31/10					11	11	1	55		
MW-26D-GWR2		10-04007	MW-26D	Ground Water	3/29/10	2	11	1	1					4	3
MW-26D-GWR2		CDMF016	MW-26D	Ground Water	3/29/10					11	11	1	55		
MW-26I-GWR2		10-04007	MW-26I	Ground Water	3/24/10	2	11	1	1					4	3
MW-26I-GWR2		CDMF016	MW-26I	Ground Water	3/24/10					11	11	1	55		
MW-27D-GWR2		10-04045	MW-27D	Ground Water	4/2/10	2	11	1	1					4	3
MW-27D-GWR2		CDMF018	MW-27D	Ground Water	4/2/10					11	11	1	55		
MW-27I-GWR2		CDMF018	MW-27I	Ground Water	4/2/10					11	11	1	55		
MW-27I-GWR2-DISS		CDMF018	MW-27I	Ground Water	4/2/10					11	11	1			
MW-27I-GWR2-FILTERED		10-04045	MW-27I	Ground Water	4/2/10	2	11	1	1					4	3
MW-27I-GWR2-FILTEREDLR	MW-27I-GWR2-FILTERED	10-04045	MW-27I	Ground Water	4/2/10	2	11	1	1					4	3
MW-27I-GWR2-UNFILTERED		10-04045	MW-27I	Ground Water	4/2/10	2	11	1	1					4	3
MW-27S-GWR2		10-04046	MW-27S	Ground Water	4/7/10	2	11	1	1					4	3
MW-27S-GWR2		CDMF018	MW-27S	Ground Water	4/7/10					11	11	1	55		

Table 1
Sample Summary
Sylvania Corning FUSRAP Site
Hicksville, NY

Sample Name	Parent Sample Name	Laboratory Sample Delivery Group	Location	Matrix	Sample Date	Gross Alpha and Gross Beta		Radium 226	Radium 228	Metals SW6020	Metals SW6020	Mercury SW7470	Cyanide SW9012B	Thorium	Uranium
MW-28D-GWR2		CDMF016	MW-28D	Ground Water	3/31/10					11	11	1	55		
MW-28D-GWR2-F		10-04007	MW-28D	Ground Water	3/31/10	2	11	1	1					4	3
MW-28D-GWR2-UF		10-04007	MW-28D	Ground Water	3/31/10	2	11	1	1					4	3
MW-28I-GWR2		10-04004	MW-28I	Ground Water	3/31/10	2	11	1	1					4	3
MW-28I-GWR2		CDMF016	MW-28I	Ground Water	3/31/10					11	11	1	55		
MW-28S-GWR2		10-04009	MW-28S	Ground Water	3/31/10	2	11	1	1					4	3
MW-28S-GWR2		CDMF017	MW-28S	Ground Water	3/31/10					11	11	1	55		
MW-29S-GWR2		10-03166	MW-29S	Ground Water	3/23/10	2	11	1	1					4	3
MW-29S-GWR2		CDMF014	MW-29S	Ground Water	3/23/10					11	11	1	55		
MW-29S-GWR2-DUP	MW-29S-GWR2	10-03166	MW-29S	Ground Water	3/23/10	2	11	1	1					4	3
MW-29S-GWR2-DUP	MW-29S-GWR2	CDMF014	MW-29S	Ground Water	3/23/10					11	11	1	55		
MW-30D-GWR2		10-04045	MW-30D	Ground Water	4/1/10	2	11	1	1					4	3
MW-30D-GWR2		CDMF017	MW-30D	Ground Water	4/1/10					11	11	1	55		
MW-30I-GWR2		10-04045	MW-30I	Ground Water	4/2/10	2	11	1	1					4	3
MW-30I-GWR2		CDMF018	MW-30I	Ground Water	4/2/10					11	11	1	55		
MW-30I-GWR2-DUP	MW-30I-GWR2	10-04045	MW-30I	Ground Water	4/2/10	2	11	1	1					4	3
MW-30I-GWR2-DUP	MW-30I-GWR2	CDMF018	MW-30I	Ground Water	4/2/10					11	11	1	55		
MW-30S-GWR2		10-04045	MW-30S	Ground Water	4/1/10	2	11	1	1					4	3
MW-30S-GWR2		CDMF017	MW-30S	Ground Water	4/1/10					11	11	1	55		
MW-31D-GWR2		10-04009	MW-31D	Ground Water	4/1/10	2	11	1	1					4	3
MW-31D-GWR2		CDMF017	MW-31D	Ground Water	4/1/10					11	11	1	55		
MW-31I-GWR2		10-04045	MW-31I	Ground Water	4/1/10	2	11	1	1					4	3
MW-31I-GWR2		CDMF017	MW-31I	Ground Water	4/1/10					11	11	1	55		
MW-32D-GWR2		CDMF014	MW-32D	Ground Water	3/23/10					11	11	1	55		
MW-32D-GWR2 FILTERED		10-03176	MW-32D	Ground Water	3/23/10	2	11	1	1					4	3
MW-32D-GWR2 UNFILTERED		10-03176	MW-32D	Ground Water	3/23/10	2	11	1	1					4	3
MW-33D-GWR2		10-04045	MW-33D	Ground Water	4/2/10	2	11	1	1					4	3
MW-33D-GWR2		CDMF018	MW-33D	Ground Water	4/2/10					11	11	1	55		
MW-33S-GWR2		10-04045	MW-33S	Ground Water	4/2/10	2	11	1	1					4	3
MW-33S-GWR2		CDMF018	MW-33S	Ground Water	4/2/10					11	11	1	55		
MW-34D-GWR2		CDMF018	MW-34D	Ground Water	4/5/10					11	11	1	55		
MW-34D-GWR2-DISS		CDMF018	MW-34D	Ground Water	4/5/10					11	11	1			
MW-34D-GWR2-FILTERED		10-04045	MW-34D	Ground Water	4/5/10	2	11	1	1					4	3
MW-34D-GWR2-UNFILTERED		10-04045	MW-34D	Ground Water	4/5/10	2	11	1	1					4	3
MW-34S-GWR2		10-04045	MW-34S	Ground Water	4/5/10	2	11	1	1					4	3
MW-34S-GWR2		CDMF018	MW-34S	Ground Water	4/5/10					11	11	1	55		
MW-34S-GWR2-DUP	MW-34S-GWR2	10-04045	MW-34S	Ground Water	4/5/10	2	11	1	1					4	3
MW-34S-GWR2-DUP	MW-34S-GWR2	CDMF018	MW-34S	Ground Water	4/5/10					11	11	1	55		
MW-39S-GWR2		10-03176	MW-39S	Ground Water	3/24/10	2	11	1	1					4	3
MW-39S-GWR2		CDMF013	MW-39S	Ground Water	3/24/10					11	11	1	55		
MW-3-GWR2		10-03166	MW-3	Ground Water	3/21/10	2	11	1	1					4	3
MW-3-GWR2		CDMF014	MW-3	Ground Water	3/21/10					11	11	1	55		
MW-41S-GWR2		10-04008	MW-41S	Ground Water	3/31/10	2	11	1	1					4	3
MW-41S-GWR2		CDMF017	MW-41S	Ground Water	3/31/10					11	11	1	55		
MW-42I-GWR2		10-04009	MW-42I	Ground Water	4/1/10	2	11	1	1					4	3

Table 1
Sample Summary
Sylvania Corning FUSRAP Site
Hicksville, NY

Sample Name	Parent Sample Name	Laboratory Sample Delivery Group	Location ID	Matrix	Sample Date	Gross Alpha Minus Rn & U	Gamma	Radium 226	Radium 228	Metals SW6010	Metals SW6020	Mercury SW7470	Volatiles SW8260B	Thorium	Uranium
MW-42I-GWR2		CDMF017	MW-42I	Ground Water	4/1/10					11	11	1	55		
MW-43S-GWR2		10-04009	MW-43S	Ground Water	4/1/10	2	11	1	1					4	3
MW-43S-GWR2		CDMF017	MW-43S	Ground Water	4/1/10					11	11	1	55		
MW-44S-GWR2		10-04008	MW-44S	Ground Water	4/1/10	2	11	1	1					4	3
MW-44S-GWR2		CDMF017	MW-44S	Ground Water	4/1/10					11	11	1	55		
MW-44S-GWR2-DUP	MW-44S-GWR2	10-04008	MW-44S	Ground Water	4/1/10	2	11	1	1					4	3
MW-44S-GWR2-DUP	MW-44S-GWR2	CDMF017	MW-44S	Ground Water	4/1/10					11	11	1	55		
MW-49S-GWR2		10-04004	MW-49S	Ground Water	3/31/10	2	11	1	1					4	3
MW-49S-GWR2		CDMF016	MW-49S	Ground Water	3/31/10					11	11	1	55		
MW-49S-GWR2-DUP	MW-49S-GWR2	10-04004	MW-49S	Ground Water	3/31/10	2	11	1	1					4	3
MW-49S-GWR2-DUP	MW-49S-GWR2	CDMF016	MW-49S	Ground Water	3/31/10					11	11	1	55		
MW-4-GWR2		10-03166	MW-4	Ground Water	3/21/10	2	11	1	1					4	3
MW-4-GWR2		CDMF014	MW-4	Ground Water	3/21/10					11	11	1	55		
MW-50I-GWR2		10-04007	MW-50I	Ground Water	3/31/10	2	11	1	1					4	3
MW-50I-GWR2		CDMF016	MW-50I	Ground Water	3/31/10					11	11	1	55		
MW-51I-GWR2		10-04009	MW-51I	Ground Water	4/1/10	2	11	1	1					4	3
MW-51I-GWR2		CDMF017	MW-51I	Ground Water	4/1/10					11	11	1	55		
MW-52D-GWR2		10-04046	MW-52D	Ground Water	4/5/10	2	11	1	1					4	3
MW-52D-GWR2		CDMF018	MW-52D	Ground Water	4/5/10					11	11	1	55		
MW-53S-GWR2		10-04045	MW-53S	Ground Water	4/5/10	2	11	1	1					4	3
MW-53S-GWR2		CDMF018	MW-53S	Ground Water	4/5/10					11	11	1	55		
MW-55S-GWR2		10-04046	MW-55S	Ground Water	4/7/10	2	11	1	1					4	3
MW-55S-GWR2		CDMF018	MW-55S	Ground Water	4/7/10					11	11	1	55		

a = number of analytes per sample

Table 2

Field Duplicate Pair Data Relative Percent Differences

Validated Data

Table 2
Validated Field Duplicate Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-23S-GWR2		MW-23S-GWR2-DUP		RPD	MW-24D-GWR2		MW-24D-GWR2-DUP		RPD	MW-29S-GWR2		MW-29S-GWR2-DUP		RPD
			sample_name	MW-23S-GWR2		MW-901-GWR2			MW-24D-GWR2		MW-903-GWR2			MW-29S-GWR2		MW-900		
			sys_loc_code	MW-23S		MW-23S			MW-24D		MW-24D			MW-29S		MW-29S		
			sample_date	3/29/2010		3/29/2010		< 40	3/31/2010		3/31/2010		< 40	3/23/2010		3/23/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit															
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1	U	1	U		3		3		0.0	1	U	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1	U	1	U		3		3		0.0	1	U	1	U	
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1	U	1	U		2		2		0.0	1	U	1	U	
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	UJ		1	UJ	1	UJ	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	UJ		1	U	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
17060-07-0	1,2-Dichloroethane-D4	SW8260B	%	90		90		0.0	90		90		0.0	85		84		1.2
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	R	100	R		100	R	100	R		100	R	100	R	
78-93-3	2-Butanone	SW8260B	ug/l	5	UJ	5	UJ		5	UJ	5	U		5	U	5	U	
591-78-6	2-Hexanone	SW8260B	ug/l	5	UJ	5	UJ		5	UJ	5	UJ		5	U	5	U	
460-00-4	4-Bromofluorobenzene	SW8260B	%	94		96		2.1	97		87		10.9	95		94		1.1
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1	UJ	1	UJ		1	UJ	1	UJ		1	U	1	U	
67-64-1	Acetone	SW8260B	ug/l	5	U	5	U		5	U	5	U		5	UJ	5	UJ	
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-38-3/106-42	m,p-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	2		2		0.0	3		3		0.0	360		320		11.8
108-88-3	Toluene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
2037-26-5	Toluene-D8	SW8260B	%	99		96		3.1	99		92		7.3	103		103		0.0
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l	0.5	U	0.5	U		10		9		10.5	4		4		0.0
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	UJ		1	U	1	U	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	

Table 2
Validated Field Duplicate Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-30I-GWR2	MW-30I-GWR2-DUP	RPD	MW-34S-GWR2	MW-34S-GWR2-DUP	RPD	MW-44S-GWR2	MW-44S-GWR2-DUP	RPD
			sample_name	MW-30I-GWR2	MW-905-GWR2		MW-34S-GWR2	MW-906-GWR2		MW-44S-GWR2	MW-904-GWR2	
			sys_loc_code	MW-30I	MW-30I		MW-34S	MW-34S		MW-44S	MW-44S	
			sample_date	4/2/2010	4/2/2010	< 40	4/5/2010	4/5/2010	< 40	4/1/2010	4/1/2010	< 40
cas_rn	chemical_name	analytic_method	result_unit									
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	84	85	1.2	1 U	1 U		1 U	1 U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	3	3	0.0	1 U	1 U		1 U	1 U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	3	3	0.0	1 U	1 U		1 U	1 U	
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	53	57	7.3	1 U	1 U		1 U	1 U	
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	1 J	1	0.0	0.5 U	0.5 U		0.5 UJ	0.5 UJ	
17060-07-0	1,2-Dichloroethane-D4	SW8260B	%	85	93	2.4	83	83	0.0	86	85	1.2
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100 R	100 R		100 R	100 R		100 R	100 R	
78-93-3	2-Butanone	SW8260B	ug/l	5 U	5 U		5 U	5 U		5 U	5 U	
591-78-6	2-Hexanone	SW8260B	ug/l	5 UJ	5 U		5 U	5 U		5 UJ	5 UJ	
460-00-4	4-Bromofluorobenzene	SW8260B	%	89	89	0.0	90	84	6.9	90	90	0.0
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1 UJ	1 U		1 U	1 U		1 UJ	1 UJ	
67-64-1	Acetone	SW8260B	ug/l	5 U	5 U		5 U	5 U		5 U	5 U	
71-43-2	Benzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
75-25-2	Bromoform	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
74-83-9	Bromomethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
75-00-3	Chloroethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
67-66-3	Chloroform	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
74-87-3	Chloromethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	6	6	0.0	1 U	1 U		1 U	1 U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4 U	0.4 U		0.4 U	0.4 U		0.4 U	0.4 U	
110-82-7	Cyclohexane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1 UJ	1 UJ		1 UJ	1 UJ		1 UJ	1 UJ	
100-41-4	Ethylbenzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
108-38-3/106-42	m,p-Xylene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	2	2	0.0	1 U	1 U		1 U	1 U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
75-09-2	Methylene chloride	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
95-47-6	o-Xylene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
100-42-5	Styrene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	2 U	6 U		0.5 U	2 U		41	41	0.0
108-88-3	Toluene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
2037-26-5	Toluene-D8	SW8260B	%	87	89	2.3	87	86	1.2	89	88	1.1
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4 U	0.4 U		0.4 U	0.4 U		0.4 U	0.4 U	
79-01-6	Trichloroethene	SW8260B	ug/l	44	46	4.4	0.5 U	0.5 U		0.6	0.6	0.0
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1 U	1 U		1 U	1 U		1 U	1 U	

Table 2
Validated Field Duplicate Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-49S-GWR2		MW-49S-GWR2-DUP		RPD
			sample_name	MW-49S-GWR2		MW-902-GWR2		
			sys_loc_code	MW-49S		MW-49S		
			sample_date	3/31/2010		3/31/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit					
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1	U	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1	U	1	U	
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1	U	1	U	
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	UJ	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U	
17060-07-0	1,2-Dichloroethane-D4	SW8260B	%	90		91		1.1
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	R	100	R	
78-93-3	2-Butanone	SW8260B	ug/l	5	U	5	U	
591-78-6	2-Hexanone	SW8260B	ug/l	5	UJ	5	UJ	
460-00-4	4-Bromofluorobenzene	SW8260B	%	86		88		2.3
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1	UJ	1	UJ	
67-64-1	Acetone	SW8260B	ug/l	5		5		0.0
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l	1	U	1	U	
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U	
108-38-3/106-42	m,p-Xylene	SW8260B	ug/l	1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	0.5	U	0.5	U	
108-88-3	Toluene	SW8260B	ug/l	1	U	1	U	
2037-26-5	Toluene-D8	SW8260B	%	89		92		3.3
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l	0.5	U	0.5	U	
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	UJ	1	UJ	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U	

Table 2
Validated Field Duplicate Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-23S-GWR2		MW-23S-GWR2-DUP		RPD	MW-24D-GWR2		MW-24D-GWR2-DUP		RPD
			sample_name	MW-23S-GWR2		MW-901-GWR2		<40 or	MW-24D-GWR2		MW-903-GWR2		<40 or
			sys_loc_code	MW-23S		MW-23S		RL	MW-24D		MW-24D		RL
			sample_date	3/29/2010		3/29/2010		Criteria	3/31/2010		3/31/2010		Criteria
cas_rn	chemical_name	analytic_method	result_unit										
7429-90-5	Aluminum	SW6010	ug/l	43.5	J	51.7	J	17.2	37.6	J	38.8	J	3.1
7440-36-0	Antimony	SW6020	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-38-2	Arsenic	SW6020	ug/l	0.075	U	1	U		1	U	1	U	
7440-39-3	Barium	SW6010	ug/l	27.3	J	27.9	J	2.2	21.8	J	22.3	J	2.3
7440-41-7	Beryllium	SW6020	ug/l	0.048	U	0.048	U		0.048	U	0.048	U	
7440-43-9	Cadmium	SW6020	ug/l	0.083	U	0.083	U		0.083	U	0.083	U	
7440-70-2	Calcium	SW6010	ug/l	7810		8280		5.8	8590		8530		0.7
7440-47-3	Chromium	SW6020	ug/l	0.097	U	0.097	U		0.097	U	0.097	U	
7440-48-4	Cobalt	SW6020	ug/l	0.029	U	0.029	U		0.029	U	0.029	U	
7440-50-8	Copper	SW6010	ug/l	0.75	U	0.75	U		0.75	U	0.75	U	
7439-89-6	Iron	SW6010	ug/l	49.8	J	52.6	J	5.5	71.4	J	77.8	J	8.6
7439-92-1	Lead	SW6020	ug/l	1	U	1.3		26.1	1	U	1	U	
7439-95-4	Magnesium	SW6010	ug/l	1680	J	1810		7.4	2420	J	2520	J	4.0
7439-96-5	Manganese	SW6020	ug/l	35.7	J	35.5	J	0.6	10.5	J	10	J	4.9
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U		0.2	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	2240		2090		6.9	0.64	J	0.56	J	13.3
7440-09-7	Potassium	SW6010	ug/l	5000	U	5000	U		5000	U	5000	U	
7782-49-2	Selenium	SW6010	ug/l	4.2	U	4.2	U		4.2	U	4.2	U	
7440-22-4	Silver	SW6020	ug/l	0.069	U	0.069	U		0.069	U	0.069	U	
7440-23-5	Sodium	SW6010	ug/l	7630		7970		4.4	17900		18200		1.7
7440-28-0	Thallium	SW6020	ug/l	0.059	J	0.058	J	1.7	0.038	J	0.036	J	5.4
7440-62-2	Vanadium	SW6010	ug/l	1.2	U	1.2	U		1.2	U	1.2	U	
7440-66-6	Zinc	SW6010	ug/l	60	U	60	U		60	U	60	U	

Key:
U = Non-Detect
J = Value Estimated
NA = not analyzed and/or not applicable
abs. diff = a control limit of the reporting limit is applicable if the sample results are less than 5 times the RL
ug/L = microgram per Liter
RL- Reporting limit criteria. Both sample values are less than 5 times the RL and the absolute difference is less than the RL.
Outside of the 40% RPD criteria or RL criteria.
NC = not calculable

Table 2
Validated Field Duplicate Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-29S-GWR2		MW-29S-GWR2-DUP		RPD	MW-30I-GWR2		MW-30I-GWR2-DUP		RPD
			sample_name	MW-29S-GWR2		MW-900		<40 or	MW-30I-GWR2		MW-905-GWR2		<40 or
			sys_loc_code	MW-29S		MW-29S		RL	MW-30I		MW-30I		RL
			sample_date	3/23/2010		3/23/2010		Criteria	4/2/2010		4/2/2010		Criteria
cas_rn	chemical_name	analytic_method	result_unit										
7429-90-5	Aluminum	SW6010	ug/l	19.6	U	20	U		200	U	24.8	J	NC
7440-36-0	Antimony	SW6020	ug/l	2	U	0.1	U		0.1	U	0.1	U	
7440-38-2	Arsenic	SW6020	ug/l	1	U	1	U		0.24	J	0.37	J	RL
7440-39-3	Barium	SW6010	ug/l	50.1	J	48.5	J	3.2	129	J	134	J	3.8
7440-41-7	Beryllium	SW6020	ug/l	0.048	U	0.058	U		0.048	U	0.048	U	
7440-43-9	Cadmium	SW6020	ug/l	0.16	J	0.15	J	6.5	0.44	J	0.37	J	17.3
7440-70-2	Calcium	SW6010	ug/l	37400		36300		3.0	27000		28600		5.8
7440-47-3	Chromium	SW6020	ug/l	0.097	U	0.11	U		0.63	J	0.57	J	10.0
7440-48-4	Cobalt	SW6020	ug/l	5.6	J	5.6	J	0.0	0.029	UJ	0.029	UJ	
7440-50-8	Copper	SW6010	ug/l	25	U	25	U		25	U	0.75	U	
7439-89-6	Iron	SW6010	ug/l	3090		3020		2.3	60.4	J	67.3	J	10.8
7439-92-1	Lead	SW6020	ug/l	1	U	1	U		1	U	1	U	
7439-95-4	Magnesium	SW6010	ug/l	6460		6230		3.6	7540		7960		5.4
7439-96-5	Manganese	SW6020	ug/l	90.2		93.5		3.6	99.9	J	102	J	2.1
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	40.6		41.8		2.9	0.47	J	0.49	J	4.2
7440-09-7	Potassium	SW6010	ug/l	5000	U	5000	U		7350		7570		2.9
7782-49-2	Selenium	SW6010	ug/l	4.2	U	4.2	U		4.2	U	4.2	U	
7440-22-4	Silver	SW6020	ug/l	0.069	U	0.051	U		0.069	U	0.069	U	
7440-23-5	Sodium	SW6010	ug/l	47400		46000		3.0	64100		67300		4.9
7440-28-0	Thallium	SW6020	ug/l	0.12	J	0.12	J	0.0	0.044	J	0.047	J	6.6
7440-62-2	Vanadium	SW6010	ug/l	1.2	U	1.2	U		1.2	U	1.2	U	
7440-66-6	Zinc	SW6010	ug/l	135		132		2.2	3.5	J	4.2	J	18.2

Table 2
Validated Field Duplicate Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-34S-GWR2		MW-34S-GWR2-DUP		RPD	MW-44S-GWR2		MW-44S-GWR2-DUP		RPD
			sample_name	MW-34S-GWR2		MW-906-GWR2		<40 or	MW-44S-GWR2		MW-904-GWR2		<40 or
			sys_loc_code	MW-34S		MW-34S		RL	MW-44S		MW-44S		RL
			sample_date	4/5/2010		4/5/2010		Criteria	4/1/2010		4/1/2010		Criteria
cas_rn	chemical_name	analytic_method	result_unit										
7429-90-5	Aluminum	SW6010	ug/l	200	U	27.6	J	NC	19.6	U	19.6	U	
7440-36-0	Antimony	SW6020	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-38-2	Arsenic	SW6020	ug/l	0.1	J	0.11	J	9.5	1	U	1	U	
7440-39-3	Barium	SW6010	ug/l	38.7	J	40.7	J	5.0	72.9	J	74.5	J	2.2
7440-41-7	Beryllium	SW6020	ug/l	0.048	U	0.048	U		0.048	U	0.048	U	
7440-43-9	Cadmium	SW6020	ug/l	0.21	J	0.24	J	13.3	0.083	U	0.083	U	
7440-70-2	Calcium	SW6010	ug/l	5440		6000		9.8	42500		43300		1.9
7440-47-3	Chromium	SW6020	ug/l	0.52	J	0.46	J	12.2	0.097	UJ	0.097	UJ	
7440-48-4	Cobalt	SW6020	ug/l	4.9	J	4.5	J	8.5	0.91	J	1.3	J	35.3
7440-50-8	Copper	SW6010	ug/l	25	U	25	U		0.75	U	0.75	U	
7439-89-6	Iron	SW6010	ug/l	147		94.2	J	RL	22.5	J	100	U	NC
7439-92-1	Lead	SW6020	ug/l	1	U	1	U		1	UJ	1	UJ	
7439-95-4	Magnesium	SW6010	ug/l	5000	U	540	J	NC	4560	J	4650	J	2.0
7439-96-5	Manganese	SW6020	ug/l	661	J	616	J	7.0	380	J	697	J	58.9
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	2	J	1.7	J	16.2	1350		1550		13.8
7440-09-7	Potassium	SW6010	ug/l	5000	U	5000	U		5000	U	5000	U	
7782-49-2	Selenium	SW6010	ug/l	4.2	U	4.2	U		4.2	U	4.2	U	
7440-22-4	Silver	SW6020	ug/l	0.069	U	0.069	U		0.069	U	0.069	U	
7440-23-5	Sodium	SW6010	ug/l	6150		6590		6.9	42800		43900		2.5
7440-28-0	Thallium	SW6020	ug/l	0.059	J	0.063	J	6.6	0.042	J	0.044	J	4.7
7440-62-2	Vanadium	SW6010	ug/l	1.2	U	1.2	U		1.2	U	1.2	U	
7440-66-6	Zinc	SW6010	ug/l	3.1	J	10.9	J	RL	4.7	J	60	U	NC

Table 2
Validated Field Duplicate Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-49S-GWR2		MW-49S-GWR2-DUP		RPD
			sample_name	MW-49S-GWR2		MW-902-GWR2		<40 or
			sys_loc_code	MW-49S		MW-49S		RL
			sample_date	3/31/2010		3/31/2010		Criteria
cas_rn	chemical_name	analytic_method	result_unit					
7429-90-5	Aluminum	SW6010	ug/l	28	J	19.6	U	NC
7440-36-0	Antimony	SW6020	ug/l	0.1	U	0.1	U	
7440-38-2	Arsenic	SW6020	ug/l	1	U	1	U	
7440-39-3	Barium	SW6010	ug/l	37.2	J	36.7	J	1.4
7440-41-7	Beryllium	SW6020	ug/l	0.048	U	0.048	U	
7440-43-9	Cadmium	SW6020	ug/l	0.097	J	0.094	J	3.1
7440-70-2	Calcium	SW6010	ug/l	8140		8080		0.7
7440-47-3	Chromium	SW6020	ug/l	0.097	U	0.097	U	
7440-48-4	Cobalt	SW6020	ug/l	3.6	J	3.3	J	8.7
7440-50-8	Copper	SW6010	ug/l	0.75	U	0.75	U	
7439-89-6	Iron	SW6010	ug/l	245	J	114	J	RL
7439-92-1	Lead	SW6020	ug/l	1	U	1	U	
7439-95-4	Magnesium	SW6010	ug/l	1390	J	1370	J	1.4
7439-96-5	Manganese	SW6020	ug/l	784	J	761	E	3.0
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	5.4		5		7.7
7440-09-7	Potassium	SW6010	ug/l	5000	U	5000	U	
7782-49-2	Selenium	SW6010	ug/l	4.2	U	4.2	U	
7440-22-4	Silver	SW6020	ug/l	0.069	U	0.069	U	
7440-23-5	Sodium	SW6010	ug/l	5000	U	5000	U	
7440-28-0	Thallium	SW6020	ug/l	0.046	J	0.044	J	4.4
7440-62-2	Vanadium	SW6010	ug/l	1.2	U	1.2	U	
7440-66-6	Zinc	SW6010	ug/l	60	U	60	U	

Table 2
Validated Field Duplicate Results - RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

		sys_sample_code	MW-23S-GWR2		MW-23S-GWR2-DUP		RPD	MW-24D-GWR2		MW-24D-GWR2-DUP		RPD
		sample_name	MW-23S-GWR2		MW-901-GWR2			MW-24D-GWR2		MW-903-GWR2		
		sys_loc_code	MW-23S		MW-23S			MW-24D		MW-24D		
		sample_date	3/29/2010		3/29/2010		< 50	3/31/2010		3/31/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit									
10045-97-3	Cesium-137	GAMMA	pci/L	4.545	U	6.053	UJ		3.632	UJ	4.479	U	
12587-46-1	Gross Alpha	GAGBT_THSR	pci/L	7.0231		6.7198		4.4	1.2433	UJ	0.8921	J	NC
12587-47-2	Gross Beta	GAGBT_THSR	pci/L	3.1322	J	3.0742		1.9	8.3830	J	4.3375	J	63.6
13966-00-2	Potassium-40	GAMMA	pci/L	-2.095	UJ	59.06	J	214.7	37.92	J	-4.838	UJ	258.5
13966-29-5	Uranium-234	UUISO	pci/L	3.733		3.046		20.3	0.145	UJ	0.1251	UJ	
13982-63-3	Radium-226	RA226	pci/L	0.3646	J	0.1719	J	71.6	0.4856	J	0.819	J	51.1
14255-04-0	Lead-210	GAMMA	pci/L	99.54	R	70.95	UJ		83.05	R	7.5	R	
14269-63-7	Thorium-230	THISO	pci/L	0.1489	U	0.1543	U		0.1596	UJ	0.166	UJ	
14274-82-9	Thorium-228	THISO	pci/L	0.2093	U	0.2395	U		0.2062	UJ	0.2577	U	
14331-83-0	Actinium-228	GAMMA	pci/L	15.32	U	20.37	U		14.01	U	13.74	U	
14913-49-6	Bismuth-212	GAMMA	pci/L	33.06	U	38.75	U		24.25	UJ	32.56	UJ	
15065-10-8	Thorium-234	GAMMA	pci/L	69.15		68.01		1.7	60.43	U	87.33	U	
15067-28-4	Lead-214	GAMMA	pci/L	7.336	UJ	8.981	UJ		7.81	U	9.175	U	
15092-94-1	Lead-212	GAMMA	pci/L	6.582	U	6.823	UJ		5.66	U	6.6	U	
15100-28-4	Protactinium-234M	GAMMA	pci/L	432.7	UJ	623.8	U		372.1	U	527.7	U	
15117-96-1	Uranium-235	UUISO	pci/L	0.6407	J	0.2136	J	100.0	0.1788	U	0.1543	UJ	
15262-20-1	Radium-228	RA228	pci/L	0.6966	J	0.103	UJ	148.5	1.0468		1.3644		26.3
15623-47-9	Thorium-227	THISO	pci/L	0.2373	U	0.2572	U		0.2617	UJ	0.2827	UJ	
7440-28-0	Thallium	GAMMA	pci/L	12.01	U	13.85	U		10.04	U	12.82	U	
7440-29-1	Thorium	THISO	pci/L	0.1137	U	0.1541	U		0.1219	U	0.1657	U	
7440-61-1	Uranium	UUISO	pci/L	3.652		3.465		5.3	0.1296	U	0.2105	U	
7440-69-9	Bismuth-214	GAMMA	pci/L	8.974	U	10.92	UJ		7.166	UJ	9.483	UJ	

Key:
U = Non-detect
J = Value Estimated
R = Rejected
Outside of the 50% RPD criteria
RPD = Relative Percent Difference

Table 2
Validated Field Duplicate Results - RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-29S-GWR2		MW-29S-GWR2-DUP		RPD	MW-30I-GWR2		MW-30I-GWR2-DUP		RPD
			sample_name	MW-29S-GWR2		MW-900			MW-30I-GWR2		MW-905-GWR2		
			sys_loc_code	MW-29S		MW-29S			MW-30I		MW-30I		
			sample_date	3/23/2010		3/23/2010		< 50	4/2/2010		4/2/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/L	3.496	UJ	3.664	U		4.321	U	5.255	UJ	
12587-46-1	Gross Alpha	GAGBT_THSR	pci/L	2.6867	U	2.7485	U		2.7133	J	0.7510	UJ	113.3
12587-47-2	Gross Beta	GAGBT_THSR	pci/L	4.0491		3.7889		6.6	7.3527		7.3706		0.2
13966-00-2	Potassium-40	GAMMA	pci/L	38.91	U	53.24	U		58.39	U	71.46	U	
13966-29-5	Uranium-234	UUISO	pci/L	0.1753	UJ	0.1524	UJ		0.1206	U	0.1562		25.7
13982-63-3	Radium-226	RA226	pci/L	0.2029	J	0.2962	J	37.4	0.4179		0.6257		39.8
14255-04-0	Lead-210	GAMMA	pci/L	81.28	U	2.601	R		5.27	R	69.8	UJ	
14269-63-7	Thorium-230	THISO	pci/L	0.2363	R	0.2541	R		0.115	UJ	0.1064	UJ	
14274-82-9	Thorium-228	THISO	pci/L	0.229	U	0.3391	U		0.1409	U	0.09382	UJ	
14331-83-0	Actinium-228	GAMMA	pci/L	14.35	U	13.08	U		18.22	U	19.57	U	
14913-49-6	Bismuth-212	GAMMA	pci/L	25.47	U	31.43	U		32.87	U	38.62	U	
15065-10-8	Thorium-234	GAMMA	pci/L	59.55	U	72.53	R		90.83	U	66.57	U	
15067-28-4	Lead-214	GAMMA	pci/L	12.76	J	0.38	UJ	188.4	8.077	U	9.087	UJ	
15092-94-1	Lead-212	GAMMA	pci/L	5.758	R	5.915	UJ		6.203	U	6.37	R	
15100-28-4	Protactinium-234M	GAMMA	pci/L	439.9	U	421.9	UJ		486.1	UJ	612	UJ	
15117-96-1	Uranium-235	UUISO	pci/L	0.1578	U	0.1601	UJ		0.1488	U	0.08512	UJ	
15262-20-1	Radium-228	RA228	pci/L	0.374	UJ	0.4976	J	28.4	1.7023	J	1.5451	J	9.7
15623-47-9	Thorium-227	THISO	pci/L	0.2516	U	0.2719	UJ		0.1533	U	0.1843	U	
7440-28-0	Thallium	GAMMA	pci/L	10.56	U	10.48	UJ		12.52	U	14.52	U	
7440-29-1	Thorium	THISO	pci/L	0.146	U	0.2278	R		0.04141	UJ	0.08634	U	
7440-61-1	Uranium	UUISO	pci/L	0.1648	U	0.1292	UJ		0.0697	UJ	0.139	UJ	
7440-69-9	Bismuth-214	GAMMA	pci/L	14.96	J	1.526	U	163.0	8.229	J	7.913	UJ	3.9

Table 2
Validated Field Duplicate Results - RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-34S-GWR2		MW-34S-GWR2-DUP		RPD	MW-44S-GWR2		MW-44S-GWR2-DUP		RPD
			sample_name	MW-34S-GWR2		MW-906-GWR2			MW-44S-GWR2		MW-904-GWR2		
			sys_loc_code	MW-34S		MW-34S			MW-44S		MW-44S		
			sample_date	4/5/2010		4/5/2010		< 50	4/1/2010		4/1/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/L	3.484	U	3.469	UJ		3.597	U	4.014	U	
12587-46-1	Gross Alpha	GAGBT_THSR	pci/L	1.1141	U	1.3505	U		17.1612		15.0526		13.1
12587-47-2	Gross Beta	GAGBT_THSR	pci/L	1.5246	J	2.1903	J	35.8	4.9439		3.1792		43.4
13966-00-2	Potassium-40	GAMMA	pci/L	39.67	U	35.88	U		40.3	UJ	39.74	R	
13966-29-5	Uranium-234	UUISO	pci/L	0.2664	J	0.071	UJ	115.8	7.714		7.77		0.7
13982-63-3	Radium-226	RA226	pci/L	0.1621	UJ	0.1648	UJ		0.2556	J	0.3787	J	38.8
14255-04-0	Lead-210	GAMMA	pci/L	83.95	R	85.99	R		82.59	R	2.6	R	
14269-63-7	Thorium-230	THISO	pci/L	0.1927	J	0.046	UJ	122.9	0.1738	UJ	0.0830	UJ	
14274-82-9	Thorium-228	THISO	pci/L	0.1599	U	0.1833	U		0.2099	U	0.2526	U	
14331-83-0	Actinium-228	GAMMA	pci/L	12.91	U	12.81	UJ		13.85	U	13.1	U	
14913-49-6	Bismuth-212	GAMMA	pci/L	5.965	U	1.645	U		27.02	UJ	27.5	UJ	
15065-10-8	Thorium-234	GAMMA	pci/L	58.01	U	57.02	U		61.75	U	73.87	R	
15067-28-4	Lead-214	GAMMA	pci/L	-2.354	UJ	10.1	J	321.6	7.04	UJ	7.278	UJ	
15092-94-1	Lead-212	GAMMA	pci/L	4.715	UJ	5.725	U		5.095	R	5.169	R	
15100-28-4	Protactinium-234M	GAMMA	pci/L	401.7	UJ	401.2	UJ		416	U	519.6	U	
15117-96-1	Uranium-235	UUISO	pci/L	0.189	U	0.1776	UJ		0.3134	UJ	0.8657	J	93.7
15262-20-1	Radium-228	RA228	pci/L	1.2842	UJ	1.2935	UJ		0.4639	J	0.434	U	6.7
15623-47-9	Thorium-227	THISO	pci/L	0.1639	U	0.1761	U		0.2563	U	0.2795	U	
7440-28-0	Thallium	GAMMA	pci/L	11.32	U	10.32	U		10.58	U	11.14	U	
7440-29-1	Thorium	THISO	pci/L	0.1189	U	0.1177	U		0.1478	UJ	0.1428	U	
7440-61-1	Uranium	UUISO	pci/L	0.1526	UJ	0.1221	UJ		6.659		6.95		4.3
7440-69-9	Bismuth-214	GAMMA	pci/L	-1.029	UJ	12.51		169.0	3.285	UJ	13.22	J	120.4

Table 2
Validated Field Duplicate Results - RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-49S-GWR2		MW-49S-GWR2-DUP		RPD
			sample_name	MW-49S-GWR2		MW-902-GWR2		
			sys_loc_code	MW-49S		MW-49S		
			sample_date	3/31/2010		3/31/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit					
10045-97-3	Cesium-137	GAMMA	pci/L	4.621	UJ	3.524	UJ	
12587-46-1	Gross Alpha	GAGBT_THSR	pci/L	0.462	UJ	1.4514	J	103.4
12587-47-2	Gross Beta	GAGBT_THSR	pci/L	0.233	UJ	2.5549	J	166.6
13966-00-2	Potassium-40	GAMMA	pci/L	57.34	U	49.17	U	
13966-29-5	Uranium-234	UUISO	pci/L	0.1739	J	0.097	UJ	56.8
13982-63-3	Radium-226	RA226	pci/L	0.4153	J	0.3628	J	13.5
14255-04-0	Lead-210	GAMMA	pci/L	6.017	R	79.29	R	
14269-63-7	Thorium-230	THISO	pci/L	0.1283	U	0.2122	UJ	
14274-82-9	Thorium-228	THISO	pci/L	0.2009	U	0.2359	U	
14331-83-0	Actinium-228	GAMMA	pci/L	14.52	U	11.62	U	
14913-49-6	Bismuth-212	GAMMA	pci/L	32.42	U	23.58	U	
15065-10-8	Thorium-234	GAMMA	pci/L	89.11	U	60.94	U	
15067-28-4	Lead-214	GAMMA	pci/L	9.237	U	6.384	UJ	
15092-94-1	Lead-212	GAMMA	pci/L	6.165	U	5.551	U	
15100-28-4	Protactinium-234M	GAMMA	pci/L	625.5	U	362.8	U	
15117-96-1	Uranium-235	UUISO	pci/L	0.0711	UJ	0.1945	UJ	
15262-20-1	Radium-228	RA228	pci/L	0.53	J	0.889	J	50.6
15623-47-9	Thorium-227	THISO	pci/L	0.2999	U	0.2821	U	
7440-28-0	Thallium	GAMMA	pci/L	13.98	U	10.51	U	
7440-29-1	Thorium	THISO	pci/L	0.06332	UJ	0.1823	U	
7440-61-1	Uranium	UUISO	pci/L	0.1299		0.2137		48.8
7440-69-9	Bismuth-214	GAMMA	pci/L	8.704	U	7.99	U	

Table 3

Field Duplicate Pair Data Relative Percent Differences

Non-Validated Data

Table 3
Non-Validated Field Duplicate Screening Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-14DD-VP28		MW-14DD-VP28-DUP		RPD
			sample_name			MW-14DD-VP900		
			sys_loc_code	MW-14DD		MW-14DD		
			sample_date	11/18/2009		11/18/2009		< 40
cas_rn	chemical_name	analytic_method	result_unit					
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1	U	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1	U	1	U	
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1	U	1	U	
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	U	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U	
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	U	100	U	
78-93-3	2-Butanone	SW8260B	ug/l	5	U	5	U	
591-78-6	2-Hexanone	SW8260B	ug/l	5	U	5	U	
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	28		27		3.6
67-64-1	Acetone	SW8260B	ug/l	4	J	4	J	0.0
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l	1	U	1	U	
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U	
179601-23-1	m,p-Xylene	SW8260B	ug/l	1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	0.5	U	0.5	U	
108-88-3	Toluene	SW8260B	ug/l	1	U	1		
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l	0.5	U	0.5	U	
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	U	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U	

MW-15DD-VP28		MW-15DD-VP28-DUP		RPD
		MW-15DD-VP906		
MW-15DD		MW-15DD		
1/12/2010		1/12/2010		< 40
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
100	U	100	U	
5		5		0.0
0.9	J	0.7	J	25.0
2		3		40.0
22	B	20	B	9.5
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1		1		0.0
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
0.4	U	0.4	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	
0.4	U	0.4	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	

MW-18I-VP07		MW-18I-VP07-DUP		RPD
		MW-18I-VP901		
MW-18I		MW-18I		
11/18/2009		11/18/2009		< 40
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
100	U	100	U	
5	U	5	U	
5	U	5	U	
1	U	1	U	
5		5		0.0
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
8		9		11.8
1	U	1	U	
1	U	1	U	
0.4	U	0.4	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	
0.4	U	0.4	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	

Table 3
Non-Validated Field Duplicate Screening Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

				sys_sample_code	MW-40S-VP03		MW-40S-VP03-DUP		RPD	MW-41S-VP07		MW-41S-VP07-DUP		RPD	MW-42S-VP04		MW-42S-VP04-DUP		RPD
				sample_name			MW-40S-VP908					MW-41S-VP902					MW-42S-VP903		
				sys_loc_code	MW-40 (P9)		MW-40 (P9)			MW-41 (P10)		MW-41 (P10)			MW-42 (P11)		MW-42 (P11)		
				sample_date	1/19/2010		1/19/2010		< 40	12/11/2009		12/11/2009		< 40	12/18/2009		12/18/2009		< 40
cas_rn	chemical_name	analytic_method	result_unit																
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-35-4	1,1-Dichloroethene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l		0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
78-87-5	1,2-Dichloropropane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l		100	U	100	U		100	U	100	U		100	U	100	U	
78-93-3	2-Butanone	SW8260B	ug/l		1	J	2	J	66.7	6.8		7.4		8.5	5	U	3	J	
591-78-6	2-Hexanone	SW8260B	ug/l		5	U	5	U		5	U	5	U		5	U	5	U	
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l		1	U	1	U	0.0	1	U	1	U	0.0	1	U	1	U	0.0
67-64-1	Acetone	SW8260B	ug/l		5		7		33.3	4	J	5		22.2	4	J	4	J	0.0
71-43-2	Benzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l		9		9		0.0	6.3		6.2		1.6	3		2		40.0
74-87-3	Chloromethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l		0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
179601-23-1	m,p-Xylene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l		0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
108-88-3	Toluene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l		0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l		0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
75-69-4	Trichlorofluoromethane	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	
75-01-4	Vinyl Chloride	SW8260B	ug/l		1	U	1	U		1	U	1	U		1	U	1	U	

Table 3
Non-Validated Field Duplicate Screening Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-43S-VP03		MW-43S-VP03-DUP		RPD	MW-44S-VP08		MW-44S-VP08-DUP		RPD	MW-50-VP09		MW-50-VP09-DUP		RPD
			sample_name			MW-43S-VP904					MW-44S-VP910					MW-50-VP913		
			sys_loc_code	MW-43 (P13)		MW-43 (P13)			MW-44 (P3)		MW-44 (P3)			MW-50 (P2)		MW-50 (P2)		
			sample_date	12/16/2009		12/16/2009		< 40	1/22/2010		1/22/2010		< 40	2/9/2010		2/9/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit															
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	U	100	U		100	U	100	U		100	U	100	U	
78-93-3	2-Butanone	SW8260B	ug/l	5	U	5	U		3	J	4	J	28.6	5	U	5	U	
591-78-6	2-Hexanone	SW8260B	ug/l	5	U	5	U		5	U	5	U		5	U	5	U	
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1	U	1	U	0.0	1	U	1	U	0.0	1	U	1	U	0.0
67-64-1	Acetone	SW8260B	ug/l	2	J	2	J	0.0	8		8		0.0	5	U	5	U	0.0
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l	6.8		6.9		1.5	1	U	1	U		1	U	1	U	
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
179601-23-1	m,p-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	3.9		3.7		5.3	0.7		0.8		13.3	0.6		0.5		18.2
108-88-3	Toluene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l	0.5	U	0.5	U		0.5	U	0.5	U		2		1		66.7
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	

Table 3
Non-Validated Field Duplicate Screening Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-51-VP10		MW-51-VP10-DUP		RPD	MW-52-VP10		MW-52-VP10-DUP		RPD	MW-53-VP07		MW-53-VP07-DUP		RPD
			sample_name			MW-51-VP912			MW-52-VP10		MW-52-VP916			MW-53-VP 07		MW-53-VP 919		
			sys_loc_code	MW-51 (P8)		MW-51 (P8)			MW-52 (P15)		MW-52 (P15)			MW-53 (P16)		MW-53 (P16)		
			sample_date	2/4/2010		2/4/2010		< 40	2/18/2010		2/18/2010		< 40	3/3/2010		3/3/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit															
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	U	100	U		100	U	100	U		100	U	100	U	
78-93-3	2-Butanone	SW8260B	ug/l	2	J	2	J	0.0	5	U	5	U		2	J	2	J	0.0
591-78-6	2-Hexanone	SW8260B	ug/l	5	U	5	U		5	U	5	U		5	U	5	U	
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1	U	1	U	0.0	1	U	1	U	0.0	1	U	1	U	0.0
67-64-1	Acetone	SW8260B	ug/l	3	J	2	J	40.0	5	U	5	U	0.0	4	J	4	J	0.0
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l	1	U	1	U		23		21		9.1	2		1	U	
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
179601-23-1	m,p-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	0.7		0.6		15.4	0.5	U	0.5	U		1		5		133.3
108-88-3	Toluene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l	0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	

Table 3
Non-Validated Field Duplicate Screening Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-54-VP07		MW-54-VP07-DUP		RPD
			sample_name	MW-54-VP911				
			sys_loc_code	MW-54		MW-54		
			sample_date	2/2/2010		2/2/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit					
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	9		9		0.0
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1		2		66.7
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	12		15		22.2
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	U	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U	
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	U	100	U	
78-93-3	2-Butanone	SW8260B	ug/l	3	J	3	J	0.0
591-78-6	2-Hexanone	SW8260B	ug/l	5	U	5	U	
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1	U	1	U	0.0
67-64-1	Acetone	SW8260B	ug/l	7		4	J	54.5
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l	1	U	1	U	
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1		1		0
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U	
179601-23-1	m,p-Xylene	SW8260B	ug/l	1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	0.7		0.5	U	
108-88-3	Toluene	SW8260B	ug/l	1	U	1	U	
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l	4		4		0.0
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	U	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U	

MW-56-VP04		MW-56-VP04-DUP		RPD
MW-56-VP 04		MW-56-VP 925		
MW-56		MW-56		
3/20/2010		3/20/2010		< 40
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
100	U	100	U	
5	U	5	U	
5	U	5	U	
1	U	1	U	0.0
5	U	5	U	0.0
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
0.4	U	0.4	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
4		3		28.6
1	U	1	U	
1	U	1	U	
0.4	U	0.4	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	

MW-56-VP17		MW-56-VP17-DUP		RPD
MW-56-VP 017		MW-56-VP 926		
MW-56		MW-56		
3/23/2010		3/23/2010		< 40
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
100	U	100	U	
3	J	2	J	40.0
5	U	5	U	
1	U	1	U	0.0
3	J	3	J	0.0
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
4		4		0.0
1	U	1	U	
1	U	1	U	
0.4	U	0.4	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
1	U	1	U	
41		38		7.6
1	U	1	U	
1	U	1	U	
0.4	U	0.4	U	
0.5	U	0.5	U	
1	U	1	U	
1	U	1	U	

Table 3
Non-Validated Field Duplicate Screening Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	RI-P-45-VP13		RI-P-45-VP13-DUP		RPD	RI-P-45-VP27		RI-P-45-VP27-DUP		RPD	RI-P-47-VP05		RI-P-47-VP05-DUP		RPD
			sample_name			RP-I-45-VP920			RI-P-45-VP27		RI-P-45-VP922			RI-P-47-VP05		RI-P-47-VP917		
			sys_loc_code	RI-P-45 (P4)		RI-P-45 (P4)			RI-P-45 (P4)		RI-P-45 (P4)			RI-P-47 (P6)		RI-P-47 (P6)		
			sample_date	3/6/2010		3/6/2010		< 40	3/9/2010		3/9/2010		< 40	2/19/2010		2/19/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit															
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	U	100	U		100	U	100	U		100	U	100	U	
78-93-3	2-Butanone	SW8260B	ug/l	5		3	J	50.0	5	U	1	J		4	J	5	U	
591-78-6	2-Hexanone	SW8260B	ug/l	5	U	5	U		5	U	5	U		5	U	5	U	
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1	U	1	U	0.0	1	U	1		0.0	1	U	1	U	0.0
67-64-1	Acetone	SW8260B	ug/l	8		4	J	66.7	2	J	4	J	66.7	3	J	5	U	NC
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
179601-23-1	m,p-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	0.7		0.7		0.0	3		3		0.0	1		2		66.7
108-88-3	Toluene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U		0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l	0.5	U	0.5	U		0.5	U	0.5	U		0.5	U	0.5	U	
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U		1	U	1	U	

Table 3
Non-Validated Field Duplicate Screening Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	RI-P-48-VP02		RI-P-48-VP02-DUP		RPD	RI-P-48-VP11		RP-I-45-VP17-DUP		RPD
			sample_name	RI-P-48-VP02		RI-P-48-VP918			RI-P-48-VP11		RP-I-45-VP921		
			sys_loc_code	RI-P-48 (P7)		RI-P-48 (P7)			RI-P-48 (P7)		RI-P-45 (P4)		
			sample_date	2/22/2010		2/22/2010		< 40	3/2/2010		3/6/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit										
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1	U	1	U		1	U	2		
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1		
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U		0.5	U	0.5	U	
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	U	100	U		100	U	100	U	
78-93-3	2-Butanone	SW8260B	ug/l	1	J	1	J	0.0	5	U	2	J	
591-78-6	2-Hexanone	SW8260B	ug/l	5	U	5	U		5	U	5	U	
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1	U	1	U	0.0	1	U	1	U	0.0
67-64-1	Acetone	SW8260B	ug/l	3	J	2	J	40.0	2	J	3	J	40.0
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U		1	U	1	U	
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U		1	U	1	U	
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U		1	U	1	U	
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
67-66-3	Chloroform	SW8260B	ug/l	1	U	1	U		1	U	1	U	
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U	
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
179601-23-1	m,p-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U		1	U	1	U	
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U		1	U	1	U	
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U	
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
127-18-4	Tetrachloroethene	SW8260B	ug/l	450	E	410	E	9.3	5		0.9		139.0
108-88-3	Toluene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U		1	U	1	U	
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U		0.4	U	0.4	U	
79-01-6	Trichloroethene	SW8260B	ug/l	3		2		40.0	0.5	U	0.5	U	
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	U		1	U	1	U	
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U		1	U	1	U	

Table 3
Non-Validated Field Duplicate Screening Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-14DD-VP28		MW-14DD-VP28-DUP MW-14DD-VP900		RPD	MW-15DD-VP28		MW-15DD-VP28-DUP MW-15DD-VP906		RPD
			sample_name										
			sys_loc_code	MW-14DD		MW-14DD			MW-15DD		MW-15DD		
			sample_date	11/18/2009		11/18/2009		< 40	1/12/2010		1/12/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit										
7429-90-5	Aluminum	SW6010	ug/l	11400	NE	4990	NE	78.2	158	B	3730		183.7
7440-36-0	Antimony	SW6020	ug/l	0.4	B	0.34	B	16.2	0.4	B	0.57	B	35.1
7440-38-2	Arsenic	SW6020	ug/l	3.9		1.9		69.0	0.58	B	1.5	B	88.5
7440-39-3	Barium	SW6010	ug/l	88	B	39.5	B	76.1	44.9	B	68.2	B	41.2
7440-41-7	Beryllium	SW6020	ug/l	0.47	B	0.18	B	89.2	0.048	U	0.052	B	8.0
7440-43-9	Cadmium	SW6020	ug/l	0.45	B	0.14	B	105.1	1.1	B	0.88	B	22.2
7440-70-2	Calcium	SW6010	ug/l	14900		13500		9.9	14300		18000		22.9
7440-47-3	Chromium	SW6020	ug/l	60.8	E	20.9	E	97.7	0.097	U	10		NC
7440-48-4	Cobalt	SW6020	ug/l	6.2		2.2	B	95.2	18.2	B	27.7	B	41.4
7440-50-8	Copper	SW6010	ug/l	56		18.1	B	102.3	2.2	B	8.6	B	118.5
7439-89-6	Iron	SW6010	ug/l	17800		5260		108.8	31400		76300		83.4
7439-92-1	Lead	SW6020	ug/l	15.4		5.2		99.0	0.071	BN	1.9	BN	185.6
7439-95-4	Magnesium	SW6010	ug/l	4260	B	3690	B	14.3	2960	B	3900	B	27.4
7439-96-5	Manganese	SW6020	ug/l	371	Q	256	Q	36.7	1070	EQ	1660	EQ	43.2
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	35		13.4		89.3	240		355		38.7
7440-09-7	Potassium	SW6010	ug/l	4460	B	2990	B	39.5	6820	E	9090	E	28.5
7782-49-2	Selenium	SW6010	ug/l	2.5	U	2.5	U		2.5	U	2.5	U	
7440-22-4	Silver	SW6020	ug/l	0.18	B	0.16	B	11.8	0.069	U	0.069	U	
7440-23-5	Sodium	SW6010	ug/l	18900		18400		2.7	28400		34500		19.4
7440-28-0	Thallium	SW6020	ug/l	0.07	B	0.045	U		0.45	B	0.36	B	22.2
7440-62-2	Vanadium	SW6010	ug/l	40.2	B	13.4	B	100.0	1.4	U	6.2	B	126.3
7440-66-6	Zinc	SW6010	ug/l	35.1	B	13.3	B	90.1	4990		6190		21.5

Key:
U = Non-Detect
J = Value Estimated
NA = not analyzed and/or not applicable
ug/L - micrograms per liter

Outside of the 40% RPD criteria or RL criteria.

Reporting limit and method detection limits were not provided with the table. As a result only the RPD values were checked.

Table 3
Non-Validated Field Duplicate Screening Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-44S-VP08		MW-44S-VP08-DUP		RPD	MW-50-VP09		MW-50-VP09-DUP		RPD
			sample_name			MW-44S-VP910					MW-50-VP913		
			sys_loc_code	MW-44 (P3)		MW-44 (P3)			MW-50 (P2)		MW-50 (P2)		
			sample_date	1/22/2010		1/22/2010		< 40	2/9/2010		2/9/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit										
7429-90-5	Aluminum	SW6010	ug/l	20.1	B	31.9	B	45.4	30.2	B	17.7	U	52.2
7440-36-0	Antimony	SW6020	ug/l	0.49	B	0.43	B	13.0	0.41	B	0.45	B	9.3
7440-38-2	Arsenic	SW6020	ug/l	0.52	B	0.57	B	9.2	0.67	B	0.61	B	9.4
7440-39-3	Barium	SW6010	ug/l	115	B	116	B	0.9	102	B	109	B	6.6
7440-41-7	Beryllium	SW6020	ug/l	0.048	U	0.048	U	0.0	0.048	U	0.072	B	NC
7440-43-9	Cadmium	SW6020	ug/l	0.23	B	0.32	B	32.7	0.083	U	0.92	B	NC
7440-70-2	Calcium	SW6010	ug/l	13300		13300		0.0	11500		12600		9.1
7440-47-3	Chromium	SW6020	ug/l	0.81	B	0.77	B	5.1	2.3		1.6	B	35.9
7440-48-4	Cobalt	SW6020	ug/l	78.2		81.5		4.1	20.1		20.9		3.9
7440-50-8	Copper	SW6010	ug/l	2.4	B	2.7	B	11.8	0.83	U	0.83	U	
7439-89-6	Iron	SW6010	ug/l	13800		13900		0.7	7980		8700		8.6
7439-92-1	Lead	SW6020	ug/l	0.11	B	0.11	B	0.0	0.4	B	1		85.7
7439-95-4	Magnesium	SW6010	ug/l	4270	B	4270	B	0.0	3970	B	4290	B	7.7
7439-96-5	Manganese	SW6020	ug/l	6940		7400		6.4	1290	E	1370	E	6.0
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	131		136	E	3.7	33.3		35.3		5.8
7440-09-7	Potassium	SW6010	ug/l	5540	E	5550	E	0.2	3960	BE	4250	BE	7.1
7782-49-2	Selenium	SW6010	ug/l	2.5	UN	2.5	U		2.5	UN	2.5	UN	
7440-22-4	Silver	SW6020	ug/l	0.26	B	0.22	B	16.7	0.3	B	0.29	B	3.4
7440-23-5	Sodium	SW6010	ug/l	49400		49100		0.6	64900		70000		7.6
7440-28-0	Thallium	SW6020	ug/l	0.23	B	0.24	B	4.3	0.1	B	0.11	B	9.5
7440-62-2	Vanadium	SW6010	ug/l	1.4	U	1.4	U		1.4	U	1.4	U	0.0
7440-66-6	Zinc	SW6010	ug/l	196	E	204		4.0	10.3	B	13.3	B	25.4

Table 3
Non-Validated Field Duplicate Screening Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	MW-51-VP10		MW-51-VP10-DUP		RPD	RI-P-45-VP13		RI-P-45-VP13-DUP		RPD
			sample_name			MW-51-VP912					RP-I-45-VP920		
			sys_loc_code	MW-51 (P8)		MW-51 (P8)			RI-P-45 (P4)		RI-P-45 (P4)		
			sample_date	2/4/2010		2/4/2010		< 40	3/6/2010		3/6/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit										
7429-90-5	Aluminum	SW6010	ug/l	51	B	36.3	B	33.7	35.3	B	21.4	B	49.0
7440-36-0	Antimony	SW6020	ug/l	0.62	B	0.52	B	17.5	0.1	U	0.1	U	
7440-38-2	Arsenic	SW6020	ug/l	1.1		1	B	9.5	0.49	B	0.44	B	10.8
7440-39-3	Barium	SW6010	ug/l	127	B	125	B	1.6	49.9	B	47.5	B	4.9
7440-41-7	Beryllium	SW6020	ug/l	0.048	U	0.048	U	0.0	0.048	U	0.048	U	
7440-43-9	Cadmium	SW6020	ug/l	0.2	B	0.21	B	4.9	0.083	U	0.083	U	
7440-70-2	Calcium	SW6010	ug/l	22500		22700		0.9	8330	E	7930	E	4.9
7440-47-3	Chromium	SW6020	ug/l	1.9	B	1.4	B	30.3	0.18	B	0.21	B	15.4
7440-48-4	Cobalt	SW6020	ug/l	65.8		66.7		1.4	67.2		60.8		10.0
7440-50-8	Copper	SW6010	ug/l	5.2	B	4.4	B	16.7	4.7	B	2.4	B	64.8
7439-89-6	Iron	SW6010	ug/l	49400		49400		0.0	6580		5840		11.9
7439-92-1	Lead	SW6020	ug/l	0.18	B	0.078	B	79.1	0.048	B	0.08	B	50.0
7439-95-4	Magnesium	SW6010	ug/l	6240		6200		0.6	12200	E	11600	E	5.0
7439-96-5	Manganese	SW6020	ug/l	1930		1860		3.7	18400		17000		7.9
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	144		143		0.7	31.1		28.2		9.8
7440-09-7	Potassium	SW6010	ug/l	6880	E	6800	E	1.2	12800	E	12400	E	3.2
7782-49-2	Selenium	SW6010	ug/l	2.5	UN	2.5	UN		4.2	U	4.2	U	
7440-22-4	Silver	SW6020	ug/l	1.1	B	1.1	B	0.0	0.069	U	0.069	U	
7440-23-5	Sodium	SW6010	ug/l	84900		84400		0.6	215000	E	207000	E	3.8
7440-28-0	Thallium	SW6020	ug/l	0.09	B	0.078	B	14.3	0.31	B	0.31	B	0.0
7440-62-2	Vanadium	SW6010	ug/l	2.5	B	2	B	22.2	1.2	U	1.2	U	
7440-66-6	Zinc	SW6010	ug/l	9.8	BE	11.9	BE	19.4	5.1	BE	2.5	BE	68.4

Table 3
Non-Validated Field Duplicate Screening Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	RI-P-45-VP27		RI-P-45-VP27-DUP		RPD	RI-P-47-VP05		RI-P-47-VP05-DUP		RPD
			sample_name	RI-P-45-VP27		RI-P-45-VP922			RI-P-47-VP05		RI-P-47-VP917		
			sys_loc_code	RI-P-45 (P4)		RI-P-45 (P4)			RI-P-47 (P6)		RI-P-47 (P6)		
			sample_date	3/9/2010		3/9/2010		< 40	2/19/2010		2/19/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit										
7429-90-5	Aluminum	SW6010	ug/l	36.9	B	28.3	B	26.4	19.6	U	26.6	B	NC
7440-36-0	Antimony	SW6020	ug/l	0.38	B	0.31	B	20.3	0.16	B	0.16	B	0.0
7440-38-2	Arsenic	SW6020	ug/l	0.25	B	0.3	B	18.2	0.23	B	0.19	B	19.0
7440-39-3	Barium	SW6010	ug/l	22.3	B	22.2	B	0.4	14.8	B	13.3	B	10.7
7440-41-7	Beryllium	SW6020	ug/l	0.048	U	0.048	U		0.048	U	0.048	U	
7440-43-9	Cadmium	SW6020	ug/l	0.1	B	0.083	U	NC	0.083	U	0.083	U	
7440-70-2	Calcium	SW6010	ug/l	11300		10800		4.5	8390		6990		18.2
7440-47-3	Chromium	SW6020	ug/l	0.097	U	0.097	U		1.2	B	1.3	B	8.0
7440-48-4	Cobalt	SW6020	ug/l	4.9	B	4	B	20.2	41.6		15.6		90.9
7440-50-8	Copper	SW6010	ug/l	0.75	U	1.5	B	NC	0.75	U	0.75	U	
7439-89-6	Iron	SW6010	ug/l	467		401		15.2	7590		4590		49.3
7439-92-1	Lead	SW6020	ug/l	0.08	B	0.17	B	72.0	0.2	B	0.3	B	40.0
7439-95-4	Magnesium	SW6010	ug/l	3630	B	3470	B	4.5	1520	B	1240	B	20.3
7439-96-5	Manganese	SW6020	ug/l	267	*	208	*	24.8	3220	E	1080	E	99.5
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	6.5		6		8.0	215		183		16.1
7440-09-7	Potassium	SW6010	ug/l	5130		4920	B	4.2	2770	B	2000	B	32.3
7782-49-2	Selenium	SW6010	ug/l	4.2	U	4.2	U		4.2	U	4.2	U	
7440-22-4	Silver	SW6020	ug/l	0.069	U	0.069	U		0.069	U	0.069	U	
7440-23-5	Sodium	SW6010	ug/l	302000		294000		2.7	10400		9750		6.5
7440-28-0	Thallium	SW6020	ug/l	0.18	B	0.18	B	0.0	0.11	B	0.09	B	20.0
7440-62-2	Vanadium	SW6010	ug/l	1.2	U	1.2	U		1.2	U	1.2	U	0.0
7440-66-6	Zinc	SW6010	ug/l	19.4	B	13.5	B	35.9	4.4	B	8.5	B	63.6

Table 3
Non-Validated Field Duplicate Screening Results - Metals
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	RI-P-48-VP02		RI-P-48-VP02-DUP		RPD	RI-P-48-VP11		RP-I-45-VP17-DUP		RPD
			sample_name	RI-P-48-VP02		RI-P-48-VP918			RI-P-48-VP11		RP-I-45-VP921		
			sys_loc_code	RI-P-48 (P7)		RI-P-48 (P7)			RI-P-48 (P7)		RI-P-45 (P4)		
			sample_date	2/22/2010		2/22/2010		< 40	3/2/2010		3/6/2010		< 40
cas_rn	chemical_name	analytic_method	result_unit										
7429-90-5	Aluminum	SW6010	ug/l	19.6	U	42.6	B	NC	19.6	U	20	U	
7440-36-0	Antimony	SW6020	ug/l	0.1	U	0.1	U		0.17	B	0.16	B	6.1
7440-38-2	Arsenic	SW6020	ug/l	0.19	B	0.16	B	17.1	0.68	B	0.26	B	89.4
7440-39-3	Barium	SW6010	ug/l	6.4	B	5.8	B	9.8	128	B	15.7	B	156.3
7440-41-7	Beryllium	SW6020	ug/l	0.048	U	0.048	U		0.048	U	0.048	U	
7440-43-9	Cadmium	SW6020	ug/l	0.083	U	0.083	U		0.083	U	0.083	U	
7440-70-2	Calcium	SW6010	ug/l	33700		32900		2.4	21600		8120		90.7
7440-47-3	Chromium	SW6020	ug/l	1.2	B	1.2	B	0.0	1.2	B	0.097	U	NC
7440-48-4	Cobalt	SW6020	ug/l	5.1		4.6	B	10.3	8.1		57.8		150.8
7440-50-8	Copper	SW6010	ug/l	0.75	U	0.75	U		46.7		0.75	U	NC
7439-89-6	Iron	SW6010	ug/l	4240		2340		57.8	8190		9380		13.5
7439-92-1	Lead	SW6020	ug/l	0.044	B	4.1		195.8	0.054	B	0.069	B	24.4
7439-95-4	Magnesium	SW6010	ug/l	4320	B	4270	B	1.2	19500		3720	B	135.9
7439-96-5	Manganese	SW6020	ug/l	533	E	530	E	0.6	598	E	4160	*	149.7
7439-97-6	Mercury	SW7470	ug/l	0.1	U	0.1	U		0.1	U	0.1	U	
7440-02-0	Nickel	SW6020	ug/l	144		141		2.1	56.1		44.1		24.0
7440-09-7	Potassium	SW6010	ug/l	2490	B	2100	B	17.0	4750	B	2570	B	59.6
7782-49-2	Selenium	SW6010	ug/l	4.2	U	4.2	U		4.2	U	4.2	U	
7440-22-4	Silver	SW6020	ug/l	0.069	U	0.069	U		0.069	U	0.07	B	NC
7440-23-5	Sodium	SW6010	ug/l	10300		10100			176000		21400		156.6
7440-28-0	Thallium	SW6020	ug/l	0.055	B	0.044	B	2.0	0.22	B	0.16	B	31.6
7440-62-2	Vanadium	SW6010	ug/l	1.2	U	1.2	U		1.2	U	1.2	U	
7440-66-6	Zinc	SW6010	ug/l	148		125		16.8	25.9	B	1.8	B	174.0

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			sys_sample_code	MW-18I-VP07		MW-18I-VP07-DUP		RPD	MW-22I-VP05		MW-22I-VP05-DUP		RPD
			sample_name			MW-18I-VP901					MW-22I-VP905		
			sys_loc_code	MW-18I		MW-18I			MW-22I		MW-22I		
			sample_date	11/18/2009		11/18/2009		< 50	1/8/2010		1/8/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/l										
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l										
12587-47-2	Gross Beta	GAGBT_THSR	pci/l										
13966-00-2	Potassium-40	GAMMA	pci/l										
13966-29-5	Uranium-234	UUISO	pci/l										
13982-63-3	Radium-226	RA226	pci/l										
14255-04-0	Lead-210	GAMMA	pci/l										
14269-63-7	Thorium-230	THISO	pci/l										
14274-82-9	Thorium-228	THISO	pci/l										
14331-83-0	Actinium-228	GAMMA	pci/l										
14913-49-6	Bismuth-212	GAMMA	pci/l										
15065-10-8	Thorium-234	GAMMA	pci/l										
15067-28-4	Lead-214	GAMMA	pci/l										
15092-94-1	Lead-212	GAMMA	pci/l										
15100-28-4	Protactinium-234M	GAMMA	pci/l										
15117-96-1	Uranium-235	UUISO	pci/l										
15262-20-1	Radium-228	RA228	pci/l										
15623-47-9	Thorium-227	THISO	pci/l										
7440-28-0	Thallium	GAMMA	pci/l										
7440-29-1	Thorium	THISO	pci/l										
7440-61-1	Uranium	KPA-LIQ	pci/l										
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l										
7440-61-1	Uranium	UUISO	pci/l										
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	1.886175		2.294792		19.5	1.303274645		0.362567593	J	112.9
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	2.827848		3.440468		19.5	1.953935		0.5435796	J	112.9
7440-61-1_T	Total Uranium	UUISO	pci/l										
7440-69-9	Bismuth-214	GAMMA	pci/l										

Table 3
Non-Validated Screening Field Duplicate Results - RAD
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		sys_sample_code	MW-28I-VP04		MW-28I-VP04-DUP		RPD	MW-30I-VP08		MW-30I-VP08-DUP		RPD
		sample_name			MW-28I-VP907					MW-30I-VP909		
		sys_loc_code	MW-28I		MW-28I			MW-30I		MW-30I		
		sample_date	1/15/2010		1/15/2010		< 50	1/22/2010		1/22/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit									
10045-97-3	Cesium-137	GAMMA	pci/l									
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l									
12587-47-2	Gross Beta	GAGBT_THSR	pci/l									
13966-00-2	Potassium-40	GAMMA	pci/l									
13966-29-5	Uranium-234	UUISO	pci/l									
13982-63-3	Radium-226	RA226	pci/l									
14255-04-0	Lead-210	GAMMA	pci/l									
14269-63-7	Thorium-230	THISO	pci/l									
14274-82-9	Thorium-228	THISO	pci/l									
14331-83-0	Actinium-228	GAMMA	pci/l									
14913-49-6	Bismuth-212	GAMMA	pci/l									
15065-10-8	Thorium-234	GAMMA	pci/l									
15067-28-4	Lead-214	GAMMA	pci/l									
15092-94-1	Lead-212	GAMMA	pci/l									
15100-28-4	Protactinium-234M	GAMMA	pci/l									
15117-96-1	Uranium-235	UUISO	pci/l									
15262-20-1	Radium-228	RA228	pci/l									
15623-47-9	Thorium-227	THISO	pci/l									
7440-28-0	Thallium	GAMMA	pci/l									
7440-29-1	Thorium	THISO	pci/l									
7440-61-1	Uranium	KPA-LIQ	pci/l									
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l									
7440-61-1	Uranium	UUISO	pci/l									
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	0.279778086	J	0.041264289	J	148.6	0.220362885	J	0.150710499	J	37.5
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	0.4194574	J	0.0618655	J	148.6	0.330379138	J	0.225952772	J	37.5
7440-61-1_T	Total Uranium	UUISO	pci/l									
7440-69-9	Bismuth-214	GAMMA	pci/l									

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Non-Validated Screening Field Duplicate Results - RAD
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			sys_sample_code	MW-31I-VP04		MW-31I-VP04-DUP		RPD	MW-40S-VP03		MW-40S-VP03-DUP		RPD
			sample_name			MW-31I-VP914					MW-40S-VP908		
			sys_loc_code	MW-31I		MW-31I			MW-40 (P9)		MW-40 (P9)		
			sample_date	2/11/2010		2/11/2010		< 50	1/19/2010		1/19/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/l										
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l										
12587-47-2	Gross Beta	GAGBT_THSR	pci/l										
13966-00-2	Potassium-40	GAMMA	pci/l										
13966-29-5	Uranium-234	UUISO	pci/l										
13982-63-3	Radium-226	RA226	pci/l										
14255-04-0	Lead-210	GAMMA	pci/l										
14269-63-7	Thorium-230	THISO	pci/l										
14274-82-9	Thorium-228	THISO	pci/l										
14331-83-0	Actinium-228	GAMMA	pci/l										
14913-49-6	Bismuth-212	GAMMA	pci/l										
15065-10-8	Thorium-234	GAMMA	pci/l										
15067-28-4	Lead-214	GAMMA	pci/l										
15092-94-1	Lead-212	GAMMA	pci/l										
15100-28-4	Protactinium-234M	GAMMA	pci/l										
15117-96-1	Uranium-235	UUISO	pci/l										
15262-20-1	Radium-228	RA228	pci/l										
15623-47-9	Thorium-227	THISO	pci/l										
7440-28-0	Thallium	GAMMA	pci/l										
7440-29-1	Thorium	THISO	pci/l										
7440-61-1	Uranium	KPA-LIQ	pci/l										
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l										
7440-61-1	Uranium	UUISO	pci/l										
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	-0.111818103	U	0.163703366	J	NC	0.081385739	J	0.064755195	J	22.8
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	-0.167643333	U	0.245432333	J	NC	0.1220176	J	0.09708425	J	22.8
7440-61-1_T	Total Uranium	UUISO	pci/l										
7440-69-9	Bismuth-214	GAMMA	pci/l										

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Non-Validated Screening Field Duplicate Results - RAD
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			sys_sample_code	MW-41S-VP07		MW-41S-VP07-DUP		RPD	MW-42S-VP04		MW-42S-VP04-DUP		RPD
			sample_name			MW-41S-VP902					MW-42S-VP903		
			sys_loc_code	MW-41 (P10)		MW-41 (P10)			MW-42 (P11)		MW-42 (P11)		
			sample_date	12/11/2009		12/11/2009		< 50	12/18/2009		12/18/2009		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/l										
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l										
12587-47-2	Gross Beta	GAGBT_THSR	pci/l										
13966-00-2	Potassium-40	GAMMA	pci/l										
13966-29-5	Uranium-234	UUISO	pci/l										
13982-63-3	Radium-226	RA226	pci/l										
14255-04-0	Lead-210	GAMMA	pci/l										
14269-63-7	Thorium-230	THISO	pci/l										
14274-82-9	Thorium-228	THISO	pci/l										
14331-83-0	Actinium-228	GAMMA	pci/l										
14913-49-6	Bismuth-212	GAMMA	pci/l										
15065-10-8	Thorium-234	GAMMA	pci/l										
15067-28-4	Lead-214	GAMMA	pci/l										
15092-94-1	Lead-212	GAMMA	pci/l										
15100-28-4	Protactinium-234M	GAMMA	pci/l										
15117-96-1	Uranium-235	UUISO	pci/l										
15262-20-1	Radium-228	RA228	pci/l										
15623-47-9	Thorium-227	THISO	pci/l										
7440-28-0	Thallium	GAMMA	pci/l										
7440-29-1	Thorium	THISO	pci/l										
7440-61-1	Uranium	KPA-LIQ	pci/l										
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l										
7440-61-1	Uranium	UUISO	pci/l										
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	-0.158687904	U	-0.06139066	U		0.251705323	J	0.191341223	J	27.2
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	-0.2379129	U	-0.09203997	U		0.3773693	J	0.2868684	J	27.2
7440-61-1_T	Total Uranium	UUISO	pci/l										
7440-69-9	Bismuth-214	GAMMA	pci/l										

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Non-Validated Screening Field Duplicate Results - RAD
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			sys_sample_code	MW-43S-VP03		MW-43S-VP03-DUP		RPD	MW-51-VP10		MW-51-VP10-DUP		RPD
			sample_name			MW-43S-VP904					MW-51-VP912		
			sys_loc_code	MW-43 (P13)		MW-43 (P13)			MW-51 (P8)		MW-51 (P8)		
			sample_date	12/16/2009		12/16/2009		< 50	2/4/2010		2/4/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/l										
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l										
12587-47-2	Gross Beta	GAGBT_THSR	pci/l										
13966-00-2	Potassium-40	GAMMA	pci/l										
13966-29-5	Uranium-234	UUISO	pci/l										
13982-63-3	Radium-226	RA226	pci/l										
14255-04-0	Lead-210	GAMMA	pci/l										
14269-63-7	Thorium-230	THISO	pci/l										
14274-82-9	Thorium-228	THISO	pci/l										
14331-83-0	Actinium-228	GAMMA	pci/l										
14913-49-6	Bismuth-212	GAMMA	pci/l										
15065-10-8	Thorium-234	GAMMA	pci/l										
15067-28-4	Lead-214	GAMMA	pci/l										
15092-94-1	Lead-212	GAMMA	pci/l										
15100-28-4	Protactinium-234M	GAMMA	pci/l										
15117-96-1	Uranium-235	UUISO	pci/l										
15262-20-1	Radium-228	RA228	pci/l										
15623-47-9	Thorium-227	THISO	pci/l										
7440-28-0	Thallium	GAMMA	pci/l										
7440-29-1	Thorium	THISO	pci/l										
7440-61-1	Uranium	KPA-LIQ	pci/l										
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l										
7440-61-1	Uranium	UUISO	pci/l										
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	5.541604084		5.884358042		6.0	-0.312562937	U	-0.203732082	U	
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	8.308252		8.822126		6.0	-0.4686101	U	-0.3054454	U	
7440-61-1_T	Total Uranium	UUISO	pci/l										
7440-69-9	Bismuth-214	GAMMA	pci/l										

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		sys_sample_code	MW-52-VP02		MW-52-VP02-DUP		RPD	MW-53-VP07		MW-53-VP07-DUP		RPD
		sample_name	MW-52-VP02		MW-52-VP915			MW-53-VP 07		MW-53-VP 919		
		sys_loc_code	MW-52 (P15)		MW-52 (P15)			MW-53 (P16)		MW-53 (P16)		
		sample_date	2/16/2010		2/17/2010		< 50	3/3/2010		3/3/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit									
10045-97-3	Cesium-137	GAMMA	pci/l	-0.5156	U	0.9953	U					
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l	0.555489394	J	-0.192471516	U					
12587-47-2	Gross Beta	GAGBT_THSR	pci/l	2.65438413	J	2.658713562		0.2				
13966-00-2	Potassium-40	GAMMA	pci/l	-7.256	U	-32.69	U					
13966-29-5	Uranium-234	UUISO	pci/l	-0.03602	U	0.1316	U					
13982-63-3	Radium-226	RA226	pci/l	0.1743	U	0.4199	J	82.7				
14255-04-0	Lead-210	GAMMA	pci/l	-92.5	U	-90.55	U					
14269-63-7	Thorium-230	THISO	pci/l	0.05814	U	0.2865	J	132.5				
14274-82-9	Thorium-228	THISO	pci/l	0.09195	U	-0.01164	U					
14331-83-0	Actinium-228	GAMMA	pci/l	2.337	U	-5.944	U					
14913-49-6	Bismuth-212	GAMMA	pci/l	-8.452	U	6.182	U					
15065-10-8	Thorium-234	GAMMA	pci/l	-25.01	U	-58.3	U					
15067-28-4	Lead-214	GAMMA	pci/l	-0.9227	U	-2.135	U					
15092-94-1	Lead-212	GAMMA	pci/l	10.68	J	-2.034	U					
15100-28-4	Protactinium-234M	GAMMA	pci/l	-160.8	U	-69.91	U					
15117-96-1	Uranium-235	UUISO	pci/l	0.04063	U	0.05413	U					
15262-20-1	Radium-228	RA228	pci/l	0.491995981	J	0.601550177	J	20.0				
15623-47-9	Thorium-227	THISO	pci/l	-0.001338	U	0.1553	U					
7440-28-0	Thallium	GAMMA	pci/l	-3.766	U	0.8929	U					
7440-29-1	Thorium	THISO	pci/l	-0.02756	U	0.02223	U					
7440-61-1	Uranium	KPA-LIQ	pci/l									
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l									
7440-61-1	Uranium	UUISO	pci/l									
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	0.071917594	J	0.095647921	J	28.3	0.058832075	J	-0.042665015	U
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	0.10782248	J	0.143400181	J	28.3	0.08820401	J	-0.06396554	U
7440-61-1_T	Total Uranium	UUISO	pci/l	-0.02638	U	0.08739	U					
7440-69-9	Bismuth-214	GAMMA	pci/l	1.005	U	-3.913	U					

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			sys_sample_code	MW-55-VP08		MW-55-VP08-DUP		RPD	MW-55-VP16		MW-55-VP16-DUP		RPD
			sample_name	MW-55-VP08		MW-55-VP923			MW-55-VP016		MW-55-VP924		
			sys_loc_code	MW-55		MW-55			MW-55		MW-55		
			sample_date	3/16/2010		3/16/2010		< 50	3/18/2010		3/18/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/l										
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l										
12587-47-2	Gross Beta	GAGBT_THSR	pci/l										
13966-00-2	Potassium-40	GAMMA	pci/l										
13966-29-5	Uranium-234	UUISO	pci/l										
13982-63-3	Radium-226	RA226	pci/l										
14255-04-0	Lead-210	GAMMA	pci/l										
14269-63-7	Thorium-230	THISO	pci/l										
14274-82-9	Thorium-228	THISO	pci/l										
14331-83-0	Actinium-228	GAMMA	pci/l										
14913-49-6	Bismuth-212	GAMMA	pci/l										
15065-10-8	Thorium-234	GAMMA	pci/l										
15067-28-4	Lead-214	GAMMA	pci/l										
15092-94-1	Lead-212	GAMMA	pci/l										
15100-28-4	Protactinium-234M	GAMMA	pci/l										
15117-96-1	Uranium-235	UUISO	pci/l										
15262-20-1	Radium-228	RA228	pci/l										
15623-47-9	Thorium-227	THISO	pci/l										
7440-28-0	Thallium	GAMMA	pci/l										
7440-29-1	Thorium	THISO	pci/l										
7440-61-1	Uranium	KPA-LIQ	pci/l										
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l										
7440-61-1	Uranium	UUISO	pci/l										
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	-0.285547569	U	-0.079199847	U		-0.135265478	U	-0.20231991	U	39.7
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	-0.4281073	U	-0.1187404	U		-0.202796819	U	-0.3033282	U	39.7
7440-61-1_T	Total Uranium	UUISO	pci/l										
7440-69-9	Bismuth-214	GAMMA	pci/l										

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			sys_sample_code	MW-56-VP04		MW-56-VP04-DUP		RPD	MW-56-VP17		MW-56-VP17-DUP		RPD
			sample_name	MW-56-VP 04		MW-56-VP 925			MW-56-VP 017		MW-56-VP 926		
			sys_loc_code	MW-56		MW-56			MW-56		MW-56		
			sample_date	3/20/2010		3/20/2010		< 50	3/23/2010		3/23/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/l										
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l										
12587-47-2	Gross Beta	GAGBT_THSR	pci/l										
13966-00-2	Potassium-40	GAMMA	pci/l										
13966-29-5	Uranium-234	UUISO	pci/l										
13982-63-3	Radium-226	RA226	pci/l										
14255-04-0	Lead-210	GAMMA	pci/l										
14269-63-7	Thorium-230	THISO	pci/l										
14274-82-9	Thorium-228	THISO	pci/l										
14331-83-0	Actinium-228	GAMMA	pci/l										
14913-49-6	Bismuth-212	GAMMA	pci/l										
15065-10-8	Thorium-234	GAMMA	pci/l										
15067-28-4	Lead-214	GAMMA	pci/l										
15092-94-1	Lead-212	GAMMA	pci/l										
15100-28-4	Protactinium-234M	GAMMA	pci/l										
15117-96-1	Uranium-235	UUISO	pci/l										
15262-20-1	Radium-228	RA228	pci/l										
15623-47-9	Thorium-227	THISO	pci/l										
7440-28-0	Thallium	GAMMA	pci/l										
7440-29-1	Thorium	THISO	pci/l										
7440-61-1	Uranium	KPA-LIQ	pci/l										
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l										
7440-61-1	Uranium	UUISO	pci/l										
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	-0.070452275	U	-0.212861111	U		0.308593353	J	0.141709019	J	74.1
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	-0.1056256	U	-0.3191321	U		0.4626587	J	0.2124573	J	74.1
7440-61-1_T	Total Uranium	UUISO	pci/l										
7440-69-9	Bismuth-214	GAMMA	pci/l										

Table 3
Non-Validated Screening Field Duplicate Results - RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	RI-P-47-VP05		RI-P-47-VP05-DUP		RPD	RI-P-48-VP02		RI-P-48-VP02-DUP		RPD
			sample_name	RI-P-47-VP05		RI-P-47-VP917			RI-P-48-VP02		RI-P-48-VP918		
			sys_loc_code	RI-P-47 (P6)		RI-P-47 (P6)			RI-P-48 (P7)		RI-P-48 (P7)		
			sample_date	2/19/2010		2/19/2010		< 50	2/22/2010		2/22/2010		< 50
cas_rn	chemical_name	analytic_method	result_unit										
10045-97-3	Cesium-137	GAMMA	pci/l	5.391	J	-0.07127	U		1.437	U	-0.6861	U	
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l	2.074613474		3.746593527		57.4	16.30022292		10.03629358		47.6
12587-47-2	Gross Beta	GAGBT_THSR	pci/l	2.413751751	J	3.228043689	J	28.9	8.551351671		10.29356635		18.5
13966-00-2	Potassium-40	GAMMA	pci/l	-19.78	U	-15.88	U		1.55	U	4.135	U	
13966-29-5	Uranium-234	UUISO	pci/l	2.487		1.435		53.6	8.809		9.847		11.1
13982-63-3	Radium-226	RA226	pci/l	0.09202	U	0.05712	U		0.0665	U	-0.03133	U	
14255-04-0	Lead-210	GAMMA	pci/l	-39.97	U	-120.3	U		-68.61	U	-69.8	U	
14269-63-7	Thorium-230	THISO	pci/l	0.06583	U	0.2027	J	101.9	0.4739	J	0.1368	U	
14274-82-9	Thorium-228	THISO	pci/l	-0.02947	U	0.04498	U		0.08828	U	-0.02708	U	
14331-83-0	Actinium-228	GAMMA	pci/l	2.985	U	1.928	U		1.662	U	0.2749	U	
14913-49-6	Bismuth-212	GAMMA	pci/l	-13.03	U	-0.2735	U		0.7963	U	4.307	U	
15065-10-8	Thorium-234	GAMMA	pci/l	-69.04	U	-79.83	U		-45.32	U	-24.42	U	
15067-28-4	Lead-214	GAMMA	pci/l	7.121	U	-4.44	U		4.523	U	-0.8567	U	
15092-94-1	Lead-212	GAMMA	pci/l	-7.455	U	-2.889	U		0.4367	U	0.5747	U	
15100-28-4	Protactinium-234M	GAMMA	pci/l	134.3	U	-50.6	U		-104.1	U	-163.7	U	
15117-96-1	Uranium-235	UUISO	pci/l	0.2046	U	-0.00941	U		0.5913		0.4868	J	
15262-20-1	Radium-228	RA228	pci/l	-0.465149685	U	0.192387604	U		0.772928332	J	1.33608247	J	
15623-47-9	Thorium-227	THISO	pci/l	0.3041	J	0.1159	U		0.2046	U	0.1297	U	
7440-28-0	Thallium	GAMMA	pci/l	-4.008	U	-4.042	U		-2.971	U	-0.5026	U	
7440-29-1	Thorium	THISO	pci/l	-0.004818	U	0.02962	U		0.007223	U	0.08545	U	
7440-61-1	Uranium	KPA-LIQ	pci/l										
7440-61-1	Uranium	KPA-LIQ-UGL	ug/l										
7440-61-1	Uranium	UUISO	pci/l	2.54		1.436			8.688		9.66		
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	2.372476979		1.780042243		28.5	14.66891746		15.28277757		4.1
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	3.556937		2.668729		28.5	21.99238		22.91271		4.1
7440-61-1_T	Total Uranium	UUISO	pci/l										
7440-69-9	Bismuth-214	GAMMA	pci/l	-4.174	U	-4.652	U		-1.625	U	1.293	U	

Table 4

Field Blank Results

Validated Data

Table 4
Validated Field Blank Results - Volatiles
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	FB-1		TB-3		TB-4		TB-5		TB-6	
			sample_name	FB-1		TB-3		TB-4		TB-5		TB-6	
			sys_loc_code	Blank		Blank		Blank		Blank		Blank	
			sample_date	3/21/2010		3/29/2010		3/31/2010		4/2/2010		4/7/2010	
cas_rn	chemical_name	analytic_method	result_unit										
100-41-4	Ethylbenzene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
100-42-5	Styrene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1	UJ	1	UJ	1	UJ	1	U	1	U
108-38-3/106-42	m,p-Xylene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
108-87-2	Methylcyclohexane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
108-88-3	Toluene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
108-90-7	Chlorobenzene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
110-82-7	Cyclohexane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1	U	1	UJ	1	U	1	U	1	U
123-91-1	1,4-Dioxane	SW8260B	ug/l	100	R	100	R	100	R	100	U	100	R
124-48-1	Dibromochloromethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
127-18-4	Tetrachloroethene	SW8260B	ug/l	0.5	U	0.5	U	0.5	U	2		0.5	U
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
591-78-6	2-Hexanone	SW8260B	ug/l	5	UJ	5	UJ	5	UJ	5	U	5	U
67-64-1	Acetone	SW8260B	ug/l	1	J	5	U	5	U	5	U	5	UJ
67-66-3	Chloroform	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
71-43-2	Benzene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
74-83-9	Bromomethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
74-87-3	Chloromethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
74-97-5	Bromochloromethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-00-3	Chloroethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-01-4	Vinyl Chloride	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-09-2	Methylene chloride	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-15-0	Carbon Disulfide	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-25-2	Bromoform	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-27-4	Bromodichloromethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	UJ	1	U	1	U	1	U
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U	1	UJ	1	UJ	1	UJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
78-93-3	2-Butanone	SW8260B	ug/l	5	U	5	U	5	U	5	U	5	U
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
79-01-6	Trichloroethene	SW8260B	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	UJ
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	UJ	1	U	1	U	1	U	1	U
95-47-6	o-Xylene	SW8260B	ug/l	1		1	U	1	U	1	U	1	U
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U	1	U	1	U	1	U

U = nondetect
UJ = estimated nondetect
R = rejected
ug/L = microgram per liter

Table 4
Validated Field Blank Results - Metals and RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	FB-1	
			sample_name	FB-1	
			sys_loc_code	Blank	
			sample_date	3/21/2010	
cas_rn	chemical_name	analytic_method	result_unit		
7429-90-5	Aluminum	SW6010	ug/l	30.4	J
7440-36-0	Antimony	SW6020	ug/l	0.13	J
7440-38-2	Arsenic	SW6020	ug/l	0.13	J
7440-39-3	Barium	SW6010	ug/l	4.3	J
7440-41-7	Beryllium	SW6020	ug/l	0.048	U
7440-43-9	Cadmium	SW6020	ug/l	0.083	U
7440-47-3	Chromium	SW6020	ug/l	0.24	J
7440-48-4	Cobalt	SW6020	ug/l	0.11	J
7440-50-8	Copper	SW6010	ug/l	2.1	J
7439-89-6	Iron	SW6010	ug/l	86.3	J
7439-92-1	Lead	SW6020	ug/l	0.77	J
7439-95-4	Magnesium	SW6010	ug/l	75.6	J
7439-96-5	Manganese	SW6020	ug/l	0.11	J
7439-97-6	Mercury	SW7470	ug/l	0.1	U
7440-02-0	Nickel	SW6020	ug/l	0.068	U
7440-09-7	Potassium	SW6010	ug/l	231	J
7440-22-4	Silver	SW6020	ug/l	0.08	J
7440-23-5	Sodium	SW6010	ug/l	336	J
7440-28-0	Thallium	GAMMA	pci/l	9.782	UJ
7440-28-0	Thallium	SW6020	ug/l	0.027	U
7440-29-1	Thorium	THISO	pci/l	0.2268	R
7440-62-2	Vanadium	SW6010	ug/l	1.6	J
7440-66-6	Zinc	SW6010	ug/l	6	J
10045-97-3	Cesium-137	GAMMA	pci/l	3.92	UJ
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l	0.690257596	UJ
12587-47-2	Gross Beta	GAGBT_THSR	pci/l	1.802162234	J
13966-00-2	Potassium-40	GAMMA	pci/l	48.95	U
13966-29-5	Uranium-234	UUISO	pci/l	0.1267	UJ
13982-63-3	Radium-226	RA226	pci/l	0.2544	UJ
14255-04-0	Lead-210	GAMMA	pci/l	4.515	R
14269-63-7	Thorium-230	THISO	pci/l	0.2124	R
14274-82-9	Thorium-228	THISO	pci/l	0.2947	U
14331-83-0	Actinium-228	GAMMA	pci/l	14.61	U
14913-49-6	Bismuth-212	GAMMA	pci/l	28.2	U
15065-10-8	Thorium-234	GAMMA	pci/l	75.08	U
15067-28-4	Lead-214	GAMMA	pci/l	7.502	U
15092-94-1	Lead-212	GAMMA	pci/l	5.446	UJ
15100-28-4	Protactinium-234M	GAMMA	pci/l	434.2	U
15117-96-1	Uranium-235	UUISO	pci/l	0.0907	UJ
15262-20-1	Radium-228	RA228	pci/l	1.0438879	J
15623-47-9	Thorium-227	THISO	pci/l	0.2463	U
7440-61-1	Uranium	UUISO	pci/l	0.07321	UJ
7440-69-9	Bismuth-214	GAMMA	pci/l	7.038	U
7440-70-2	Calcium	SW6010	ug/l	106	J
7782-49-2	Selenium	SW6010	ug/l	4.2	U

U = nondetect
UJ = estimated nondetect
R = rejected
ug/L = microgram per liter
pci/l = pico curie per liter

Table 5

Field Blank Results

Non-Validated Data

Table 5
Non-Validated Field Blank Results - Volatiles, Metals and RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

			sys_sample_code	RB-012	RB-013	RB-014	RB-015	RB-016	RB-019	RB-020
			sample_name				RB-015	RB-016	RB-019	RB-020
			sys_loc_code	Blank	Blank	Blank	Blank	Blank	Blank	Blank
			sample_date	2/2/2010	2/2/2010	2/8/2010	2/18/2010	2/18/2010	3/3/2010	3/8/2010
cas_rn	chemical_name	analytic_method	result_unit							
100-41-4	Ethylbenzene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
100-42-5	Styrene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
10061-01-5	cis-1,3-Dichloropropene	SW8260B	ug/l	0.4 U	0.4 U	0.4 U		0.4 U	0.4 U	0.4 U
10061-02-6	trans-1,3-Dichloropropene	SW8260B	ug/l	0.4 U	0.4 U	0.4 U		0.4 U	0.4 U	0.4 U
106-46-7	1,4-Dichlorobenzene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
106-93-4	1,2-Dibromoethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
107-06-2	1,2-Dichloroethane	SW8260B	ug/l	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
108-87-2	Methylcyclohexane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
108-88-3	Toluene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
108-90-7	Chlorobenzene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
110-82-7	Cyclohexane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
120-82-1	1,2,4-Trichlorobenzene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
123-91-1	1,4-Dioxane	SW8260B	ug/l	100 U	100 U	100 U		100 U	100 U	100 U
124-48-1	Dibromochloromethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
127-18-4	Tetrachloroethene	SW8260B	ug/l	0.5 U	0.5 U	0.5 U		0.5 U	0.6	0.5 U
156-59-2	cis-1,2-Dichloroethene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
156-60-5	trans-1,2-Dichloroethene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
1634-04-4	Methyl tert-Butyl Ether	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
179601-23-1	m,p-Xylene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
541-73-1	1,3-Dichlorobenzene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
56-23-5	Carbon tetrachloride	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
591-78-6	2-Hexanone	SW8260B	ug/l	5 U	5 U	5 U		5 U	5 U	5 U
67-64-1	Acetone	SW8260B	ug/l	5 U	5 U	5 U		5 U	1 J	5 U
67-66-3	Chloroform	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
71-43-2	Benzene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
71-55-6	1,1,1-Trichloroethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
74-83-9	Bromomethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
74-87-3	Chloromethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
74-97-5	Bromochloromethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
75-00-3	Chloroethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
75-01-4	Vinyl Chloride	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
75-09-2	Methylene chloride	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
75-15-0	Carbon Disulfide	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
75-25-2	Bromoform	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
75-27-4	Bromodichloromethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
75-34-3	1,1-Dichloroethane	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U
75-35-4	1,1-Dichloroethene	SW8260B	ug/l	1 U	1 U	1 U		1 U	1 U	1 U

T
Non-Validated Field Blank Re... ...latiles, Metals and RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

		sys_sample_code		RB-012		RB-013		RB-014		RB-015 RB-015		RB-016 RB-016		RB-019 RB-019		RB-020 RB-020	
		sample_name		Blank		Blank		Blank		Blank		Blank		Blank		Blank	
		sys_loc_code															
		sample_date		2/2/2010		2/2/2010		2/8/2010		2/18/2010		2/18/2010		3/3/2010		3/8/2010	
cas_rn	chemical_name	analytic_method	result_unit														
75-69-4	Trichlorofluoromethane	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
75-71-8	Dichlorodifluoromethane	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
78-87-5	1,2-Dichloropropane	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
78-93-3	2-Butanone	SW8260B	ug/l	5	U	5	U	5	U			5	U	5	U	5	U
79-00-5	1,1,2-Trichloroethane	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
79-01-6	Trichloroethene	SW8260B	ug/l	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
79-20-9	Methyl Acetate	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
79-34-5	1,1,2,2-Tetrachloroethane	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
87-61-6	1,2,3-Trichlorobenzene	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
95-47-6	o-Xylene	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
95-50-1	1,2-Dichlorobenzene	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
96-12-8	1,2-Dibromo-3-chloropropane	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
98-82-8	Isopropylbenzene	SW8260B	ug/l	1	U	1	U	1	U			1	U	1	U	1	U
7429-90-5	Aluminum	SW6010	ug/l	18	U			245								19.6	U
7440-36-0	Antimony	SW6020	ug/l	0.1	U			0.1	U							0.1	U
7440-38-2	Arsenic	SW6020	ug/l	0.42	U			0.075	U							0.075	U
7440-39-3	Barium	SW6010	ug/l	3	U			3	U							3.9	U
7440-41-7	Beryllium	SW6020	ug/l	0.058	U			0.048	U							0.048	U
7440-43-9	Cadmium	SW6020	ug/l	0.097	U			0.36	B							0.083	U
7440-70-2	Calcium	SW6010	ug/l	73.4	B			35.8	B							25.2	BE
7440-47-3	Chromium	SW6020	ug/l	2.2	B			0.61	B							0.097	U
7440-48-4	Cobalt	SW6020	ug/l	0.041	U			0.029	U							0.12	B
7440-50-8	Copper	SW6010	ug/l	0.83	U			0.83	U							3.2	B
7439-89-6	Iron	SW6010	ug/l	32.2	B			10.7	B							5.2	U
7439-92-1	Lead	SW6020	ug/l	0.11	B			0.023	U							0.043	B
7439-95-4	Magnesium	SW6010	ug/l	7.1	B			7.6	B							26	UE
7439-96-5	Manganese	SW6020	ug/l	0.06	B			0.82	B							10.6	
7439-97-6	Mercury	SW7470	ug/l	0.1	U			0.1	U							0.1	U
7440-02-0	Nickel	SW6020	ug/l	0.44	B			0.29	B							0.16	B
7440-09-7	Potassium	SW6010	ug/l	279	B			41.1	BE							74	BE
7782-49-2	Selenium	SW6010	ug/l	2.5	U			2.5	UN							4.2	U
7440-22-4	Silver	SW6020	ug/l	1.3	B			0.89	B							0.069	U
7440-23-5	Sodium	SW6010	ug/l	80	B			154	B							179	BE
7440-28-0	Thallium	SW6020	ug/l	0.045	U			0.027	U							0.027	U
7440-62-2	Vanadium	SW6010	ug/l	1.4	U			1.4	U							1.2	U
7440-66-6	Zinc	SW6010	ug/l	12	B			2.4	BE							1.3	BE
14269-63-7	Thorium-230	THISO	pci/l									0.1513	U			0.0317	U

Table 5
Non-Validated Field Blank Results - Volatiles, Metals and RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

		sys_sample_code	RB-012		RB-013		RB-014		RB-015 RB-015		RB-016 RB-016		RB-019 RB-019		RB-020 RB-020	
		sample_name	Blank		Blank		Blank		Blank		Blank		Blank		Blank	
		sys_loc_code														
		sample_date	2/2/2010		2/2/2010		2/8/2010		2/18/2010		2/18/2010		3/3/2010		3/8/2010	
cas_rn	chemical_name	analytic_method	result_unit													
14274-82-9	Thorium-228	THISO	pci/l								-0.01492	U			0.03203	U
15623-47-9	Thorium-227	THISO	pci/l								0.2884	J			0.1023	U
7440-29-1	Thorium	THISO	pci/l								0.07184	U			0.02284	U
13966-29-5	Uranium-234	UUISO	pci/l								0.08488	U			0.4122	J
15117-96-1	Uranium-235	UUISO	pci/l								0.1286	U			0.1036	U
7440-61-1	Uranium	UUISO	pci/l								0.2173	U			0.1168	U
12587-46-1	Gross Alpha	GAGBT_THSR	pci/l								-0.532636219	U			0.133871389	U
12587-47-2	Gross Beta	GAGBT_THSR	pci/l								-0.69144052	U			2.554116949	J
10045-97-3	Cesium-137	GAMMA	pci/l								-3.592	U			0.4766	U
13966-00-2	Potassium-40	GAMMA	pci/l								23.39	U			-1.56	U
14255-04-0	Lead-210	GAMMA	pci/l								-49.25	U			5.764	U
14331-83-0	Actinium-228	GAMMA	pci/l								-11.23	U			-3.765	U
14913-49-6	Bismuth-212	GAMMA	pci/l								9.74	U			-7.483	U
15065-10-8	Thorium-234	GAMMA	pci/l								-29.19	U			-33.7	U
15067-28-4	Lead-214	GAMMA	pci/l								8.301	U			-0.3315	U
15092-94-1	Lead-212	GAMMA	pci/l								-5.822	U			-0.5995	U
15100-28-4	Protactinium-234M	GAMMA	pci/l								-74.46	U			-14.19	U
7440-28-0	Thallium	GAMMA	pci/l								-5.946	U			0.755	U
7440-69-9	Bismuth-214	GAMMA	pci/l								-1.69	U			3.017	U
7440-61-1_T	Total Uranium	KPA_LIQ	pci/l						-0.180061656	U	-0.170548706	U	0.035314248	J	0.382001705	J
7440-61-1_T	Total Uranium	KPA_LIQ_UGL	ug/l						-0.269957505	U	-0.255695212	U	0.0529449	J	0.5727162	J
7440-61-1_T	Total Uranium	KPA-LIQ	pci/l	0.29482027	J											
7440-61-1_T	Total Uranium	KPA-LIQ-UGL	ug/l	0.4420094	J											
13982-63-3	Radium-226	RA226	pci/l								0.02153	U			0.06603	U
15262-20-1	Radium-228	RA228	pci/l								0.333574039	U			0.573455618	U

U = nondetect
UJ = estimated nondetect
R = rejected
ug/L = micorgram per liter
pci/l = pico curie per liter

Table 6

Completeness Results

Table 6
Validated Completeness Results - Volatiles, Metals and RAD
Sylvania Corning FUSRAP Site
Hicksville, NY

	Gross Alpha and Gross Beta	Gamma	Radium 226	Radium 228	Metals SW6010	Metals SW6020	Mercury SW7470	Volatiles SW8260B	Thorium	Uranium
Total Number of Results per Analysis	880	80	80	847	847	77	4070	320	240	**7601**
Total Number of Rejected Results per Analysis	79	0	6	2	2	0	76	19	0	**184**
Percentage of Rejected Results per Analysis	8.98%	0.00%	7.50%	0.24%	0.24%	0.00%	1.87%	5.94%	0.00%	**2.42%**

Appendix A

Data Validation Reports

FINAL
Quality Control Summary Report Vertical Profile and Summer 2012 Sampling Events for the Sylvania Corning FUSRAP Site Hicksville, County of Nassau, New York

June 2013

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
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Certificate of Compliance

On behalf of The Louis Berger Group, Inc. (LBG), the undersigned certify that the document listed below was developed in conformance with LBG's Quality Control Plan, and further, that the work was performed in accordance with acceptable standards of engineering and scientific practice.

Quality Control Summary Report
Vertical Profile and Summer 2012 Sampling Events
for the Sylvania Corning FUSRAP Site
Hicksville, New York

Dated: June 2013

Contract Numbers: W912DQ-08-D-0017, Task Order No. 0019
W912DQ-11-D-3009, Task Order No. 0012

Prepared for:

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List of Abbreviations and Acronyms

ADR	Automated Data Review
COC	chain-of-custody
DQOs	data quality objectives
DRM	Data Review Memorandum
DUSR	Data Usability Summary Report
E & E	Ecology and Environment, Inc.
EDD	electronic data deliverable
EDMS	Environmental Data Management System
EPA	Environmental Protection Agency
ESN	ESN Rocky Mountain
FUSRAP	Formerly Utilized Sites Remedial Action Program
g/cc	grams per cubic centimeter
IDL	instrument detection limit
IDW	investigation derived waste
LCS	laboratory control sample
MDC	Minimum Detectable Concentration
MDL	Method Detection Limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
µg/kg	micrograms per kilogram

List of Abbreviations and Acronyms (cont.)

µg/L	micrograms per liter
pCi/g	picocuries per gram
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
QC	quality control
QCP	Quality Control Plan
QCSR	Quality Control Summary Report
RER	reported error ratio
RI	Remedial Investigation
RPD	relative percent difference
SDG	sample delivery group
USACE	United States Army Corps of Engineers
WP	Work Plan

Introduction

The Louis Berger Group, Inc. (LBG) and their subcontractor, Ecology and Environment (E & E), have been contracted by the United States Army Corps of Engineers (USACE), under Contract Numbers W912DQ-08-D-0017, Task Order No. 0019 and W912DQ-11-D-3009, Task Order No. 0012, to perform an Off-Site Groundwater Characterization and Feasibility Study (FS) at the Sylvania Corning Formerly Utilized Sites Remedial Action Program (FUSRAP) Site (Sylvania Site or the Site) located in Hicksville, Nassau County, New York.

The study objectives are to:

- Characterize the nature and extent of off-site groundwater contamination originating from the Sylvania Site.
- Determine if groundwater contaminants from the Sylvania Site are reaching the municipal water supply wells at the Hicksville Water District Plant 5 and Bowling Green facilities.
- Collect sufficient data to select remedial alternatives and prepare a FS for remediation of the Site.

This quality control summary report (QCSR) presents the results of the sampling and analytical program and provides an opportunity to review the completeness and quality of the data collected.

The purpose of this QCSR is to:

- Summarize sample collection, handling, and analytical procedures for the sampling investigation conducted at each site (see Section 1);
- Identify any deviations from the proposed sampling and analysis procedures (see Sections 1 and 2);
- Present the analytical results for the field samples collected (see Section 3);
- Report on any inspections or audits performed and any findings that that may impact the project data (see Section 4); and

- Discuss the results of the data quality evaluation associated with the sampling events (see Sections 2 and 5).

Evaluation of any contaminants detected will be provided in a separate Data Summary Report and the RI Report. The report also will contain maps of sample locations and summary tables of positive results.

Supporting information is included in appendices to the QCSR. The appendices are located on the attached DVD and include:

- Appendix A – Data Review Memoranda (DRM) and Data Usability Summary Report (DUSR) – The DRM or DUSR prepared for each sample delivery group (SDG) in PDF format.

- Appendix B – Analytical Data – All laboratory reports in PDF format which include case narratives and quality control (QC) sample results. The compact disc also includes a database of the final validated data in Electronic Data Management System (EDMS) format.

- Appendix C – Sample Collection Documentation – Daily activity summary reports (on CD), and field adjustment forms which document deviations from the planned activities. This appendix will also include documentation of field audits performed by Marcia Galloway of E & E and Christopher Watt of LBG.

1 Data Collection

Environmental samples were collected as part of the field characterization in accordance with the final Work Plan, Health and Safety Plan, and Quality Assurance Project Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site (LBG May 2011). Methodologies used for field notebooks; sample labeling, packaging, and custody; equipment decontamination; containerization of investigation-derived waste (IDW); and site surveying were performed in accordance with the WP, QAPP, and documents referenced therein. All field QC activities were carried out in accordance with the final Quality Control Plan (QCP) (LBG 2011). Field data collection activities for each phase are summarized below. Audits were performed for each phase as described in Section 4.

Quality assurance/quality control (QA/QC) samples were collected on a site-wide basis according to the criteria established in the QAPP. The field QA/QC sample requirements are as follows:

- Field QC duplicates collected at a frequency of 10% of the number of field samples collected;
- Rinsates collected at a frequency of 10% of the number of field samples collected if non-dedicated equipment was used;
- Matrix spike/matrix spike duplicate (MS/MSDs) for laboratory QC collected at a frequency of 5% of the sample collected; and
- Trip blanks sent one per shipment for each cooler in which water samples for volatile analysis were shipped. Trip blanks were analyzed for all volatile methods designated for the samples.

Any minor variances in field methodologies that occurred during the characterization are noted on the daily activity summary reports or in the field logbook. Deviations from the WP were noted on field adjustment forms. Copies of these reports and forms are provided in Appendix C. The following sections summarize the deviations and fieldwork activities for each phase of fieldwork.

1.1 Off Site Groundwater Characterization Data Collection

This section of the QCSR summarizes the sampling results for Off Site Groundwater Characterization which included vertical profile groundwater screening sampling, monitoring well installation, well development, and the Summer 2012 monitoring well sampling event. The investigation was conducted between June 2011 and June 2012. Deviations to sampling procedures are presented in Appendix C and summarized below:

1.1.1 Drilling and Vertical Profile Sampling

The drilling and vertical profile sampling procedures were performed in accordance with the final Work Plan. Summaries of the exceptions to this are described below:

- The work plan stated that the last five samples collected from the planned end of each boring were to be submitted for quick turn analysis. In some cases, six samples were submitted for quick turnaround analysis (12 hour). This was done to ensure that an entire data set was available so that monitoring well screen placement decisions could be made as quickly as possible after the last sample had been collected.

- Drill water samples were collected quarterly rather than monthly. The water source (public water supply) did not change over the course of the investigation.

- Boreholes were cleared using post hole diggers and hand augers as opposed to air knife techniques described in the work plan. Since access to all locations was not available at the onset of the investigation, this method was most efficient.

- In cases where a groundwater profile sample could not be collected because of geologic restrictions or equipment failures, a second sample attempt was made as close to that depth as reasonably possible. This was not always within the 10 foot interval stated in the work plan.

1.1.2 Monitoring Well Development

The monitoring well development procedures were performed in accordance with the final Work Plan. Summaries of the exceptions to this are described below:

- The work plan states that a picture of the development water in a clear glass jar should be taken after the completion of development from each monitoring well. This step was inadvertently overlooked. However, turbidity readings were collected at each location and all had turbidities less than 50 NTUs and were clear at the completion of development. No staining was noted from any of the newly installed monitoring wells.

- The work plan states that a minimum of three times the drill water lost to the formation during drilling in the interval 15-feet above and below the center point of the chosen screen interval. The minimum volume of water removed during development was three times the volume of water lost in a 20-foot interval centered on the well screen depth. This maintained consistency with previous well development practices completed at the site.

1.1.3 Monitoring Well Installation

The monitoring well procedures were performed in accordance with the final Work Plan. Summaries of the exceptions to this are described below:

- The work plan states that if a boring was drilled more than three feet past the well screen depth, the boring should be backfilled with clean sand. In order to protect against a potential hydraulic connection with higher conductivity sands placed below the well screen than the surrounding formation, a two foot fine sand seal (Moorie #00 or equivalent) was used at the top of the backfilled material.

1.1.4 Groundwater Sampling

The groundwater sampling procedures were performed in accordance with the final Work Plan. Summaries of the exceptions to this are described below:

- The Summer 2012 sampling event described in the work plan was to sample only the 29 newly installed monitoring wells. The USACE team decided to sample the entire area wide monitoring wells for both Summer 2012 and Fall 2012 sampling events to provide a more comprehensive and comparative data set.

- Multiport monitoring well PW-5 was scheduled for sampling. However, water levels within the sample ports were nearly dry and depths to water were not indicative of aquifer conditions. The USACE team decided this well was not appropriate to sample as it does not appear to be operating properly.

- General Instruments (GI) monitoring well W-18-150 was not planned for sampling as it had been known to have an obstruction in the well that did not allow GTEOSI or GI sample the wells. The USACE team was able to install a well wizard pump with drop tubing to collect a sample from the well screen with low flow techniques.

- Monitoring well W-10-120 had an obstruction in the well and no sampling equipment could be installed to reach the well screen to allow for low flow sampling. Therefore, this well was sampled after a minimum of three well volumes were removed and groundwater quality parameters had stabilized to ensure that all stagnant water with the well column had been purged prior to sampling.

- The EPA Region 2 low flow sampling techniques do not require any minimum purge volume. Given the depth of the monitoring wells and amount of sample tubing required to reach the monitoring well screen depth (up to 570 feet BGS), the volumes of "stagnant" water contained within sampling devices can be several gallons. Given the purge rates of low flow sampling (less than 500 mls/min) it is conceivable that sample parameters could show stabilization and the well could be sampled prior to evacuating all "stagnant" water contained within the pumping device. This could provide a sample that is not representative of aquifer conditions. After review of USACE KC low flow techniques, the USACE team decided to require that a minimum of two volumes of water contained within the pumping device be removed prior to determining stabilization of parameters for sampling to ensure representative samples are collected.

- The multiport Anchor Chemical wells have seven small ports in a ~two inch well. When a pump is installed to purge the well there is not room to install a water level meter to monitor the water level conditions during purging as required if using low flow sampling techniques. Therefore, this well was sampled after a minimum of three well volumes were removed and groundwater quality parameters had stabilized to ensure that all stagnant water with the well column had been purged prior to sampling.

- Wells installed for investigation of the General Instruments site are aging and some of them are deteriorating. USACE had planned on sampling 36 of their wells as that is the number of wells that GTEOSI was able to collect samples from 2010 sampling event. Four active wells, W-15-168, W-17-130, W-18-150, and W-34-385, could not be sampled by GTEOSI because of obstructions in the well or the well was not found (W-15-168). USACE was able to install a pump in W-18-150 and W-17-130 and collect a sample possibly because smaller diameter pumps/equipment was used. The W-17-130 sample was inadvertently not analyzed. The field crew had the laboratory put the sample on hold while it was determined if it should be analyzed since at first it had not been planned. It was determined that it was best to have this sample analyzed. However, the laboratory never re-activated this sample and it was not analyzed. The total number of GI wells sampled was 37.

1.1.5 Sample Handling and Sample Custody

Field samples were collected, preserved, and transported to the appropriate laboratory according to the procedures described in the WP. There were no deviations from the WP with regards to sample handling or custody except for the following:

- The work plan stated that groundwater profile samples should be packaged and shipped for same day delivery. Although the majority of groundwater profile samples were delivered to the laboratory on the same day as collection, generally, samples collected after a 4 p.m. courier pick up were held on ice for delivery the following day. For aliquots requiring total uranium analysis, this

was not possible as the laboratory contracted for the analysis is located in Charleston, SC. As a result of the long hold times allowable with this analysis, aliquots were collected and stored until the boring was complete before being shipped to the laboratory.

- The work plan states that stainless steel containers were to be used to temporarily store aliquots for radiological analysis prior to field filtering groundwater profile samples. Stainless steel containers are not a requirement of the total uranium analytical SOP (ASTM D5174: KPA) as had been the requirement of previously used radiological analytical procedures at this site. High density polyethylene containers were used prior to filtering.

- The work plan states that all samples were to be stored on ice at temperatures between 2 and 4 degrees Celsius. The total uranium analysis SOP does not require icing of samples and therefore were not placed or stored on ice.

- In table 3.2-2 of the work plan, the analytical method EPA 200.8 is referred to as the selected method for total uranium analysis. It was decided by the USACE team to use ASTM D5174 (KPA) after the submission of the Final Work Plan.

- The QAPP states that all samples were to be collected into pre-preserved containers or preserved immediately after collection. During previous field investigations at this site, it was found that the turbid samples collected during groundwater profiling only reacted with acids used to preserve the samples causing the sample to bubble. This is problematic during VOC collection as it is difficult to collect a zero headspace sample during a reaction. For samples collected for nickel analysis, filtration of the sample to reduce turbidity was performed at the laboratory. The samples were preserved after filtration. Samples collected for total uranium analysis were collected into unpreserved containers and field filtered into pre-preserved containers at the end of each day.

1.1.6 Equipment Calibration and Maintenance

Calibration procedures for the field and laboratory instruments are presented in LBG's QAPP. There were no deviations from the QAPP with regard to equipment calibration and maintenance.

1.1.7 Equipment Calibration and Maintenance

Samples were shipped to approved laboratories for analysis. Analytical methods in support of the Off Site Groundwater Characterization activities are referenced in the QAPP. American Analytical Laboratories (AAL) of Farmingdale, NY provided volatile and nickel analysis for the vertical profiling samples. GEL Laboratories of Charleston, South Carolina provided total uranium vertical profiling samples and monitoring well samples. Test America of Earth City, MO provided volatile and nickel analysis for all monitoring well samples. Table 1-1 lists all of

the analyses performed and the number of samples collected for methods for the investigation. Any deviations were evaluated as part of the data review process and are described in Section 2.

Table 1-1 Summary of Analytical Methods and Samples Collected for Off Site Groundwater Characterization, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Groundwater – Vertical Profile	6010B	Method 6010B – Dissolved Metals Ni only	392
	8260B	Method 8260B – Volatile Organic Compounds by GC/MS in Water	396
	ASTM D 5174	Dissolved Total Uranium	60
Groundwater – Monitoring Wells	6010B	Method 6010B – Total Metals Ni only	198
	6010B	Method 6010B - Dissolved Metals Ni only	3
	8260B	Method 8260B – Volatile Organic Compounds by GC/MS in Water	208
	ASTM D 5174	Total Uranium	198
	ASTM D 5174	Dissolved Uranium	3

2 Data Analysis and Validation

Data quality evaluations focus on deviations from expected QC activities, problems encountered, and the acceptability of the methodologies used. Sample integrity is based on information provided on the cooler receipt form, COC documents, statements in the laboratory case narratives, and field notebooks. Laboratory activities were conducted in accordance with the QAPP. The target compounds, practical quantitation limits (PQLs), and QC limits for the project were reviewed in accordance with the QAPP. Field duplicate and blank data were used to evaluate the accuracy and precision of the analytical results and field sample collection methods. The final validated data was stored in an Environmental Quality Information Systems (EQuIS) format database.

LBG/E & E performed data review and validation of samples in accordance with the QAPP. The data review tasks completed for this project include:

- **Completeness.** LBG/E & E performed a completeness check on all EDDs and compared the data to the hard copy deliverable to verify the data were reported consistently.

- **Compliance.** LBG/E & E reviewed the laboratory reports and submitted EDDs, checked the hard copy reports and case narratives, and verified the EDD data submitted matched the hard copy data packages. E & E reviewed calibration information and compound identification results in the raw data package and entered the qualifiers.

- **Reporting.** E & E assigned data qualifiers and flagged all reportable data with review from LBG. Results of the data review are summarized in the DRM and DUSR in Appendix A. The DRM and DUSR contain a summary of the data that was qualified, and tables of the QC samples that did not meet applicable limits.

- **Data Management.** E & E developed a project-specific database with all validated data stored in EQuIS format. E & E developed reporting tables through the use of the EQuIS database. E & E generated summary tables of

final qualified data in Excel spreadsheets as shown in Section 3. Databases are provided in Appendix B.

QC samples were collected to assess the quality of the field sampling activities as described in Section 1. The evaluation of these samples was based on completeness of data, positive results of equipment and trip blank analysis, and relative percent differences (RPDs) of field duplicate results. ADR was used to evaluate field duplicates. Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DRM or DUSR. The field duplicate QC criteria are 40% for aqueous samples, and 70% for soil samples. The RPD ratings are listed as "Good" if the RPD is less than field duplicate QC criteria and as "Poor" if the RPD exceeded the field duplicate QC criteria. Data were qualified "J" as estimated based on the data reviewers overall evaluation of field precision and accuracy. The qualification of data because of field duplicates is discussed at the end of each DRM or DUSR.

Field blanks were evaluated for each phase of sampling as described below. Field blanks were evaluated manually based on the associated samples and matrices and shipments.

The appropriate qualifiers were added to the data to indicate potential concerns with data usability. These qualifiers were transferred to the data presented on tables in Section 3. The following qualifiers were added:

J – This qualifier indicates an estimated value because the associated QC data indicated a potential laboratory or matrix problem or interference. In addition, J flags assigned by the laboratory to chemical data indicate the results are below the PQL but above the instrument detection limit (IDL) or method detection limit (MDL).

R – The positive results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified. Negative radiochemical results with absolute values greater than their 2-sigma uncertainty were rejected in accordance with the USACE Kansas City guidance document.

U – The result is considered non-detect. The laboratory assigned this flag to analytes not present at detectable concentrations (above the IDL or MDL). The data validator assigned this flag when an analyte was considered non-detect as a result of blank contamination. If the result is above the PQL, the PQL is considered elevated.

UJ – The non-detect value is considered estimated.

UR – The non-detect results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified.

The following sections summarize the data evaluation for each phase of fieldwork.

2.1 Vertical Profile Data Analysis and Review

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DRM was generated for each Monitoring Well (multiple SDGs within each) drilled and a copy of the DRM is included in Appendix A. The results were checked for completeness and are included in Appendix B. An index of the samples and associated SDG is provided in the beginning of the Appendix A for cross reference. Tables 1 and 2 of the DRM summarize the samples and methods included for each SDG.

2.1.1 Field Data Quality Evaluation

Table 2.1-1 provides a summary of the field QC samples and the associated field samples. Table 2.1-2 provides summaries of the sample collection frequency for the field QC samples by method.

Table 2.1-1 Field QC Associations for Vertical Profile Sampling, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-201-VP910	MW-201-VP06	FD	1109152
MW-201-VP910	MW-201-VP06	FD	286934
MW-202-VP931	MW-202-VP13	FD	1205115
MW-202-VP932	MW-202-VP26	FD	1205151
MW-202-VP933	MW-202-VP33	FD	1205163
MW-203-VP918	MW-203-VP29	FD	1110183
MW-203-VP918	MW-209-VP29	FD	289318
MW-204-VP925	MW-204-VP17	FD	1112019
MW-204-VP925	MW-204-VP17	FD	292019
MW-204-VP926	MW-204-VP22	FD	1112052
MW-204-VP926	MW-204-VP22	FD	292019
MW-204-VP927	MW-204-VP23	FD	1112052
MW-204-VP927	MW-204-VP23	FD	292019
MW-204-VP928	MW-204-VP27	FD	1112062
MW-204-VP928	MW-204-VP27	FD	292019
MW-205-VP919	MW-205-VP11	FD	1111096
MW-206-VP920	MW-206-VP23	FD	1111107
MW-207-VP929	MW-207-VP09	FD	1204164
MW-207-VP930	MW-207-VP23	FD	1204203

Table 2.1-1 Field QC Associations for Vertical Profile Sampling, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-208-VP921	MW-208-VP05	FD	1111168
MW-208-VP922	MW-208-VP11	FD	1112001
MW-208-VP923	MW-208-VP17	FD	1112001
MW-208-VP924	MW-208-VP25	FD	1112010
MW-209-VP908	MW-209-VP17	FD	1109078
MW-209-VP909	MW-209-VP33	FD	1109118
MW-210-VP911	MW-210-VP05	FD	1109167
MW-210-VP912	MW-210-VP23	FD	1109184
MW-211-VP903	MW-211-VP28	FD	1107153
MW-211-VP904	MW-211-VP39	FD	1108014
MW-212-VP913	MW-212-VP05	FD	1110093
MW-212-VP914	MW-212-VP02	FD	1110093
MW-212-VP915	MW-212-VP03	FD	1110093
MW-212-VP916	MW-212-VP07	FD	1110093
MW-212-VP917	MW-212-VP35	FD	1110126
MW-213-VP900	MW-213-VP13	FD	1107014
MW-213-VP901	MW-213-VP25	FD	1107043
MW-213-VP902	MW-213-VP43	FD	1107069
MW-214-VP905	MW-214-VP07	FD	1108155
MW-214-VP906	MW-214-VP21	FD	1108163
MW-214-VP907	MW-214-VP43	FD	1108193
DW-01	Samples Collected between 7/6/2011 and 9/12/2011	DW	1107014
DW-02	Samples Collected between 9/13/2001 and 10/23/2011	DW	1109078
DW-03	Samples Collected between 10/24/2011 and 12/19/2011	DW	1110171
DW-04	Samples Collected between 4/18/2012 and 5/22/2012	DW	1204164
RB-01	All MW-213 Samples	RB	1107014
RB-02	All MW-211 Samples	RB	1107129
RB-03	All MW-214 Samples	RB	1108193
RB-04	All MW-209 Samples	RB	1109078
RB-05	All MW-201 Samples	RB	1109157 & 286934
RB-06	All MW-210 Samples	RB	1109167
RB-07	All MW-57 Samples	RB	1110058
RB-08	All MW-212 Samples	RB	1110125
RB-09	All MW-203 Samples	RB	1110180 & 289318
RB-10	All MW-202 Samples	RB	1205115
RB-11	All MW-205 Samples	RB	1111106
RB-12	All MW-206 Samples	RB	1111129
RB-13	All MW-208 Samples	RB	1111168

Table 2.1-1 Field QC Associations for Vertical Profile Sampling, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
RB-14	All MW-204 Samples	RB	1112019 & 292019
RB-15	All MW-207 Samples	RB	1204164

Key:
RB = Rinsate Blank.
FD = Field Duplicate.

Table 2.1-2 Field QC Samples by Method for Vertical Profile Sampling, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
SW6010C	Water	328	34	10%	NA	1
SW8260C	Water	329	34	10%	0	1
ASTM D5174	Water	50	6	10%	NA	0

Key:
NA = Not Applicable

2.1.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DRM. Field duplicate results are summarized on Table 7 of the DRM. Sampling or sample handling procedures are not considered of concern because of the minimal handling by field personnel.

Field duplicate samples overall showed good precision for the analytical methods being tested. Slight variations in sample concentrations were noted in several field duplicate and parent samples causing results to be qualified “J” as estimated. No data usability concerns are present due to the analysis of field duplicate samples.

2.1.1.2 Field Blanks

A field blank was collected because all samples were collected with disposable or dedicated equipment. No contamination of the field blank sample was detected. Trip blanks were not submitted to the laboratory due to the close proximity of the laboratory to the site, and the use of a courier service or drop offs at the laboratory were performed for sample delivery.

2.1.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DRM in Appendix A and summarized in a separate section for each analytical method described below.

2.1.2.1 Vertical Profile Groundwater Samples – Chemical Analysis

Method 8260C

Methylene Chloride was detected in all of the method blanks associated with this data. The sample results were qualified for method blank contamination as noted on the DRMs. Associated sample results were qualified "U" at the reporting limit if five times below the blank value.

LCS samples analyzed were within laboratory defined QC guidelines.

Matrix spike samples and duplicates were analyzed for the groundwater analysis by Method SW8260C. Several analytes were recovered low in MS sample for MW-204-VP04, results are qualified "J" as estimated as noted in the DRM. Several other MS/MSD pairs had RPDs that were outside of laboratory criteria, however those results were not qualified since no positive detections of those compounds were found in the parent samples associated with the pairs.

Method 6010C

No contamination of the method blanks associated with this data were found.

LCS samples were within laboratory defined QC guidelines with the exception of LCSW051812AD, all associated results with this sample are qualified "J" as estimated.

Matrix spike and duplicate pairs were within laboratory defined QC guidelines for this analysis.

2.1.2.2 Vertical Profile Groundwater Samples – Radiological Analysis

Method ASTM D5174

Uranium was detected in the method blank, QC1202561167. One sample MW-204-VP925 was qualified "U" based on this detection.

No other quality control deviations were encountered during the analysis of these samples.

2.2 Monitoring Well Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DUSR was generated for each SDG reported and a copy of the DUSR is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference.

Tables 1 and 2 of the DUSR summarize the samples and methods included for each SDG.

Sample Delivery Groups for Monitoring Well (Summer 2012) Sampling	Laboratory for Summer 2012
F2F060449	TestAmerica St. Louis
F2F080482	TestAmerica St. Louis
F2F090408	TestAmerica St. Louis
F2F130434	TestAmerica St. Louis
F2F150421	TestAmerica St. Louis
F2F160407	TestAmerica St. Louis
F2F200416	TestAmerica St. Louis
F2F220444	TestAmerica St. Louis
F2F230409	TestAmerica St. Louis
F2F300409	TestAmerica St. Louis

2.2.1 Field Data Quality Evaluation

Table 2.2-1 provides a summary of the field QC samples and the associated field samples. Table 2.2-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.2-1 Field QC Associations for Monitoring Well Sampling (Summer 2012), Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-800-GW-R1	MW-21I-R1	FD	F2F060449
MW-801-GW-R1	MW-08-R1	FD	F2F060449
MW-802-GW-R1	MW-15S-R1	FD	F2F060449
MW-803-GW-R1	MW-20S-R1	FD	F2F080482
MW-804-GW-R1	MW-211-190-R1	FD	F2F090408
MW-805-GW-R1	MW-214-570-R1	FD	F2F090408
MW-806-GW-R1	W-11-70-R1	FD	F2F130434
MW-807-GW-R1	MW-28D-R1	FD	F2F150421
MW-808-GW-R1	W-03-112-R1	FD	F2F130434
MW-809-GW-R1	W-12-120-R1	FD	F2F150421
MW-810-GW-R1	MW-204-320-R1	FD	F2F150421
MW-811-GW-R1	W-19-110-R1	FD	F2F160407
MW-812-GW-R1	PW-7-2-R1	FD	F2F200416
MW-813-GW-R1	W-25-188-R1	FD	F2F200416
MW-814-GW-R1	W-18-150-R1	FD	F2F200416
MW-815-GW-R1	MW-211-250-R1	FD	F2F220444
MW-816-GW-R1	MW-52D-R1	FD	F2F220444
MW-817-GW-R1	MW-55S-R1	FD	F2F230409
TB-01-R1	TB-01-R1	TB	F2F060449
TB-02-R1	TB-02-R1	TB	F2F080482
TB-03-R1	TB-03-R1	TB	F2F090408
TB-04-R1	TB-04-R1	TB	F2F130434

Table 2.2-1 Field QC Associations for Monitoring Well Sampling (Summer 2012), Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
TB-05-R1	TB-05-R1	TB	F2F150421
TB-06-R1	TB-06-R1	TB	F2F160407
TB-07-R1	TB-07-R1	TB	F2F200416
TB-08-R1	TB-08-R1	TB	F2F220444
TB-09-R1	TB-09-R1	TB	F2F230409
TB-10-R1	TB-10-R1	TB	F2F300409
RB-01-R1	MW-12-R1	EB	F2F080482
RB-02-R1	RB-02-R1	EB	F2F130434
RB-03-R1	MW-17-130-R1	EB	F2F150421
RB-04-R1	W-25-188-R1	EB	F2F200416
RB-05-R1	W-36-448-R1	EB	F2F220444

Key:
EB = Equipment Blank.
TB = Trip Blank.
FD = Field Duplicate.

Table 2.2-2 Field QC Samples by Method for Monitoring Well Sampling (Summer 2012), Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
6010B	Groundwater	175	18	10%	NA	5
8260B SIM	Groundwater	175	18	10%	10	5
ASTM D 5174	Groundwater	175	18	10%	NA	5

Key:
NA = Not applicable.

2.2.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DUSR. Field duplicate results are summarized on Table 6 of the DUSR. Overall, field duplicate precision was good. RPD criteria were exceeded for seven field duplicate samples. Results of 1,1-dichloroethane and trichloroethylene in MW-08-R1; tetrachloroethylene in MW-15S-R1; cis-1,2-dichloroethylene in W-12-120-R1; uranium and tetrachloroethylene in MW-204-320-R1; and uranium in PW-7-2-R1, MW-55S-R1, MW-214-570-R, and W-11-70-R1were qualified as estimated.

2.2.1.2 Rinsate Blanks

Rinsate samples were collected at a rate of one every 35 groundwater samples. The bulk of the groundwater sampling equipment was dedicated pumps and tubing. Low levels of 2-butanone, acetone, methylene chloride, and toluene were detected in all five rinsate blanks. In addition, 1,2,3-trichlorobenzene was detected in RB-03-R1. These compounds were also detected in many of the trip blank samples. Refer to Table 3.2-2 for complete analytical results of the trip blank and rinsate samples.

Acetone, methylene chloride, 2-butanone, and toluene were consistently detected in the method blank samples. Acetone and methylene chloride are common laboratory reagents and the presence of acetone and methylene chloride in the rinsate blanks may be attributed to laboratory contamination and not field decontamination procedures. The deionized water used for decontamination or possibly the containers used to ship the water are additional likely sources of acetone in the rinsates, not the field decontamination procedures. Acetone was not used in the field as a decontamination agent.

2.2.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DUSR in Appendix A and summarized in a separate section for each analytical method below.

Tables 3 through 6 in the DUSR provide a list of sample results qualified and the reason for data qualification.

2.2.2.1 Groundwater Samples – Chemical Analysis

Method 8260B SIM

Toluene, methylene chloride, acetone, 2-butanone, and 1,2,4-trichlorobenzene were detected in method blanks at concentrations below the reporting limits. Associated sample results were qualified “U” at the reporting limit.

Internal standard area responses were outside of QC limits for several samples. 1,4-dioxane-d8 for sample MW211-455-R1, 1,4-dichlorobenzene-d4 for samples MW-52D-R1 and MW-31I-R1 were outside of the lower QC limit and 1,4-dichlorobenzene-d4 for sample MW-202-495-R1 is outside of the upper QC limit. The target analytes associated with these internal standards have been qualified as estimated ("J") qualifier.

Laboratory control sample recoveries were outside of QC limits for 1,1,2-trichloro-1,2,2-trifluoroethane and cyclohexane. Associated sample results were qualified as estimated ("J" qualifier).

Six samples were analyzed as MS/MSDs. 1,1,2-trichloro-1,2,2-trifluoroethane, cyclohexane, and acetone were consistently outside of QC limits for the MS/MSD samples. Associated parent sample results were qualified based on high or low recoveries.

Several sample results were qualified based on initial and/or continuing calibration criteria outliers. The relative standard deviation of chloroethane and 1,4-dioxane was outside of QC limits for the initial calibration and 2-butanone, 1,1,2-

trichloro-1,2,2-trifluoroethane, and 1,1,2-trichlorofluoroethane were outside of QC limits for the continuing calibration across several SDGs. Non-detect results were qualified "UJ" if the calibration criteria indicated a low bias. Associated positive results were qualified "J."

Method 6010B

No qualification of the nickel results was performed.

Method ASTM D 5174

The results of uranium were qualified "UJ" or "J" for several samples based on RPD values for the field duplicate.

3 Data Summaries

Tables summarizing the complete results for the site samples are provided in this section. Tables summarizing the positive results only will be provided in the associated data summary report that will be submitted under after completion of Fall 2012 groundwater sampling activities. Field duplicate results are presented along with the field samples. Table 7 in the DRM presented in Appendix A reports the RPDs for the field duplicates. The ADR outlier reports provided as an attachment to the DRM provide a summary of positive results for the QC samples outside QC criteria including positive results for method blanks and the associated data qualifiers.

Complete analytical results are provided in databases in Appendix B.

The following sections provide data tables for each phase of fieldwork.

3.1 Vertical Profile Data Summaries

Tables 3.1-1 and 3.1-2 include complete analytical results for Vertical Profile investigations conducted from July 2011 through May 2012.

3.2 Monitoring Well (Summer 2012) Data Summaries

Tables 3.2-1 through 3.2-3 include complete analytical results for Monitoring Well (Summer 2012) sampling conducting in June 2012.

Table 3.1-1 Complete Analytical Results for On-Site Vertical Profile Groundwater Samples, Sylvania Corning FUSRAP Site

Table 3.1-1 Complete Analytical Results for On-Site Vertical Profile Groundwater Samples, Sylvania Corning FUSRAP Site

Location ID	MW-57	MW-57	MW-57	MW-57	MW-57	MW-57	MW-57	MW-57	MW-57
Sample ID	MW-57-VP02	MW-57-VP03	MW-57-VP04	MW-57-VP05	MW-57-VP06	MW-57-VP07	MW-57-VP08	MW-57-VP09	MW-57-VP10
Sample Date	10/5/2011	10/5/2011	10/5/2011	10/5/2011	10/5/2011	10/5/2011	10/6/2011	10/6/2011	10/6/2011
Metal									
NICKEL	6 J	20 U	20 U	20 U	18 J	18 J	5 J	6 J	22
VOCs									
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-1 Complete Analytical Results for On-Site Vertical Profile Groundwater Samples, Sylvania Corning FUSRAP Site

Location ID	MW-57	MW-57	MW-57	MW-57	MW-57
Sample ID	MW-57-VP11	MW-57-VP12	MW-57-VP13	MW-57-VP14	MW-57-VP15
Sample Date	10/6/2011	10/6/2011	10/6/2011	10/6/2011	10/6/2011
Metal					
NICKEL	22	25 67 54 42			
VOCs					
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-202	MW-202
Sample ID	MW-201-VP02	MW-201-VP04	MW-201-VP06	MW-201-VP08	MW-201-VP10	MW-201-VP12	MW-201-VP14	MW-201-VP15	MW-201-VP17	MW-201-VP19	MW-201-VP21	MW-201-VP910	MW-202-VP03	MW-202-VP05
Sample Date	9/21/2011	9/21/2011	9/21/2011	9/21/2011	9/21/2011	9/21/2011	9/21/2011	9/22/2011	9/22/2011	9/23/2011	9/23/2011	9/21/2011	5/9/2012	5/10/2012
Radioactive														
URANIUM	1.93	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Metal														
NICKEL	62	17 J	20 U	7 J	25	16 J	19 J	10 J	9 J	20 U	28	20 U	7.71 J	17 J
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U	1 U	6.7	1.9	6.5	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 J
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	1.2	4.9	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
CARBON DISULFIDE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2.2	0.61 J	0.74 J	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
DIMETHYL BENZENE	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	0.58 J	1 U	1 U	1 UJ	1 U	1 U
TOLUENE	1.8	0.8 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	2.2	1 U	1 U	33	6.7	4.4	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
VINYL CHLORIDE	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202
Sample ID	MW-202-VP07	MW-202-VP10	MW-202-VP11	MW-202-VP13	MW-202-VP16	MW-202-VP17	MW-202-VP19	MW-202-VP21	MW-202-VP23	MW-202-VP26	MW-202-VP27	MW-202-VP29	MW-202-VP31	MW-202-VP33
Sample Date	5/10/2012	5/10/2012	5/11/2012	5/11/2012	5/14/2012	5/14/2012	5/14/2012	5/15/2012	5/15/2012	5/15/2012	5/16/2012	5/16/2012	5/17/2012	5/17/2012
Radioactive														
URANIUM														
Metal														
NICKEL	5.57 J	7.09 J	5.02 J	20 U	20 U	11 J	20 U	20 U	20 U	12 J	6.71 J	318	38 J	20 U
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.36 J	0.46 J	1 U	0.85 J	4 J
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.45 J	0.33 J	1 U	0.54 J	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1.4	1 U	1.4	1 U
1,1-DICHLOROETHENE	1 U	0.49 J	1 U	1 U	1 J	1 U	0.25 J	1 U	1 U	0.66 J	0.7 J	1 U	1.1 J	5.8 J
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	36	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	7.5	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROFORM	1 U	1.1	1 U	1 U	0.26 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
DIMETHYL BENZENE	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	0.75 J	1 U	1 U	0.36 J	1 U	0.25 J	1 U	1 U	1 U	0.35 J	1 U	0.45 J	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	51	1 U	24 J	270 J
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203
Sample ID	MW-202-VP35	MW-202-VP41	MW-202-VP43	MW-202-VP45	MW-202-VP931	MW-202-VP932	MW-202-VP933	MW-203-VP02	MW-203-VP04	MW-203-VP05	MW-203-VP07	MW-203-VP09	MW-203-VP11	MW-203-VP13
Sample Date	5/17/2012	5/21/2012	5/22/2012	5/22/2012	5/11/2012	5/15/2012	5/17/2012	10/20/2011	10/20/2011	10/21/2011	10/21/2011	10/21/2011	10/21/2011	10/21/2011
Radioactive														
URANIUM								1.11	0.549	0.1 U	0.1 U	0.1 U	0.1 U	0.554
Metal														
NICKEL	10 J	5.81 J	5.93 J	20 U	20 U	40 J	38 J	26	22	140	23	36	13 J	33
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	0.43 J	0.96 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	0.43 J	0.75 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	0.53 J	1.5 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	58	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1 U	1 U	1 U	1 U	1 U	0.52 J	1 U	1 U	1.1	0.76 J	4.6	1.8	
TOLUENE	1 U	1 U	0.89 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.9
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	2	0.93 J	0.79 J	1 U	1 U	1 U	28 J	1 U	1 U	1 U	1 U	1 U	1 U	0.51 J
TRICHLOROFLUOROMETHANE	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203
Sample ID	MW-203-VP15	MW-203-VP18	MW-203-VP20	MW-203-VP24	MW-203-VP26	MW-203-VP27	MW-203-VP29	MW-203-VP31	MW-203-VP33	MW-203-VP35	MW-203-VP38	MW-203-VP39	MW-203-VP40	MW-203-VP918
Sample Date	10/21/2011	10/24/2011	10/24/2011	10/25/2011	10/25/2011	10/26/2011	10/26/2011	10/26/2011	10/25/2011	10/27/2011	10/27/2011	10/27/2011	10/28/2011	10/26/2011
Radioactive														
URANIUM	0.543	0.1 U	0.145	0.1 U	0.1 U	0.155	0.1 U	2.39	0.092	0.142	12	0.088	0.652	0.1 U
Metal														
NICKEL	11 J	20 U	20 UJ	20 U	20 U	20 UJ	82	20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	80
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	0.57 J	1 U	1 U	1.4	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	0.86 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	0.9 J	0.62 J	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	0.5 J	1 U	1 U	1 U	1 U	0.99 J	1 U	0.93 J	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.65 J	1 U	1 U	1 U	1 U	0.51 J	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 UJ	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	0.63 J	12	18	1.6	0.82 J	3.8	1.1	1 U	1 U	1 U	1 U	0.87 J
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1.2	1.2	0.6 J	2.4	15	26	1.1	7	1.3	1 U	1 U	1 U	1 U	0.95 J
TOLUENE	1 U	1 U	1 U	1 U	3.3	1 U	1 U	1.5	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	15	180	340	160	17	76	24	2	1 U	1 U	1 U	14
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204
Sample ID	MW-204-VP02	MW-204-VP03	MW-204-VP05	MW-204-VP07	MW-204-VP09	MW-204-VP11	MW-204-VP13	MW-204-VP16	MW-204-VP17	MW-204-VP22	MW-204-VP23	MW-204-VP26	MW-204-VP27	MW-204-VP29
Sample Date	12/1/2011	12/1/2011	12/1/2011	12/1/2011	12/1/2011	12/1/2011	12/1/2011	12/2/2011	12/2/2011	12/5/2011	12/5/2011	12/6/2011	12/6/2011	12/6/2011
Radioactive														
URANIUM	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.19	0.1 U	0.1 U	1.4	1.57 J	0.1 U	0.1 U	0.135	0.1 U
Metal														
NICKEL	20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 UJ
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1.5	1 U	0.87 J	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	0.65 J	5.5	1.2	1 U	7.5	1 U	1 U	0.81 J	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1	35	17	5.9	0.97 J	2.5	0.86 J	1 U	2.3	2.1	2.7	18	8.2
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	4.4	2	0.65 J	0.86 J	9.7	79	21	4.1	100	3	2.1	19	6.4
TRICHLOROFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-205	MW-205	MW-205	MW-205	MW-205
Sample ID	MW-204-VP31	MW-204-VP33	MW-204-VP35	MW-204-VP37	MW-204-VP42	MW-204-VP925	MW-204-VP926	MW-204-VP927	MW-204-VP928	MW-205-VP02	MW-205-VP03	MW-205-VP05	MW-205-VP07	MW-205-VP10
Sample Date	12/6/2011	12/6/2011	12/7/2011	12/7/2011	12/9/2011	12/2/2011	12/5/2011	12/5/2011	12/6/2011	11/14/2011	11/14/2011	11/14/2011	11/14/2011	11/14/2011
Radioactive														
URANIUM	0.535	0.278	0.1 U	0.229	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ					
Metal														
NICKEL	20 UJ	20 UJ	20 UJ	20 U	20 U	20 UJ	20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	110	96	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	4	1 U	0.96 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.3	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	7.8	1 U	0.76 J	1 U	1 U	6.5	19	6
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	3.4	2.1	1 U	1 U	1 U	1 U	2.4	2	16	1 U	17	46	39	38
TOLUENE	1.2	1 U	1 U	0.56 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	5.7	1.8	1 U	1 U	1 U	4.4	110	2.4	16	1 U	1.1	4.7	50	21
TRICHLOROFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205
Sample ID	MW-205-VP11	MW-205-VP13	MW-205-VP15	MW-205-VP18	MW-205-VP19	MW-205-VP23	MW-205-VP25	MW-205-VP28	MW-205-VP29	MW-205-VP31	MW-205-VP33	MW-205-VP35	MW-205-VP37	MW-205-VP39
Sample Date	11/15/2011	11/15/2011	11/15/2011	11/15/2011	11/16/2011	11/16/2011	11/16/2011	11/16/2011	11/16/2011	11/16/2011	11/17/2011	11/17/2011	11/17/2011	11/17/2011
Radioactive														
URANIUM														
Metal														
NICKEL	20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 UJ	20 U	20 UJ	20 UJ	20 U	20 UJ	20 U	20 UJ	20 U
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	0.92 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	26	1 U	1 U	1 U	1 U	1 U	32	1 UJ	12	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	3.3	1 U	1 U	1 U	6.6	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2.9	2 U	2 U	2 U	2 U	2 U	2.5	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	2.3	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.4	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	2.2	1 U	1 U	1 U	1 U	1 U	1.5	1 U	0.52 J	1 U	1 U
STYRENE	1 U	1 U	1 U	1.8	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	8.9	0.73 J	1 U	1 U	1 U	96	9.9	5.4	7.3	2.1	1 U	1 U	1 U	4.1
TOLUENE	1 U	1 U	1 U	11	1 U	1 U	1 U	1 U	1 U	8.4	1 U	3.8	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	74	3.4	0.65 J	0.81 J	0.68 J	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-205	MW-205	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206
Sample ID	MW-205-VP42	MW-205-VP919	MW-206-VP02	MW-206-VP03	MW-206-VP05	MW-206-VP07	MW-206-VP09	MW-206-VP12	MW-206-VP13	MW-206-VP15	MW-206-VP17	MW-206-VP20	MW-206-VP21	MW-206-VP23
Sample Date	11/18/2011	11/15/2011	11/14/2011	11/14/2011	11/14/2011	11/14/2011	11/14/2011	11/15/2011	11/15/2011	11/15/2011	11/15/2011	11/16/2011	11/16/2011	11/16/2011
Radioactive														
URANIUM														
Metal														
NICKEL	20 U	20 UJ	20 UJ	20 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	101	20 U	20 UJ
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	8.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.1	13	2
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.8	15	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-207	MW-207	MW-207	MW-207
Sample ID	MW-206-VP25	MW-206-VP27	MW-206-VP30	MW-206-VP31	MW-206-VP34	MW-206-VP36	MW-206-VP37	MW-206-VP39	MW-206-VP42	MW-206-VP920	MW-207-VP02	MW-207-VP03	MW-207-VP05	MW-207-VP07
Sample Date	11/16/2011	11/16/2011	11/17/2011	11/17/2011	11/17/2011	11/19/2011	11/19/2011	11/19/2011	11/20/2011	11/16/2011	4/17/2012	4/17/2012	4/18/2012	4/18/2012
Radioactive														
URANIUM														
Metal														
NICKEL	20 UJ	20 UJ	20 UJ	20 U	20 UJ	20 UJ	20 U	20 UJ	20 U	20 UJ	18 J	12 J	29	20 U
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	81	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	16	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	0.63 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	3.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	19	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	11	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	0.65 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	2.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	3.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	7.3	67	1 U	1 U	0.75 J	1.6	1.8	1.9	1 U	1.9	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	31	0.72 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207
Sample ID	MW-207-VP09	MW-207-VP11	MW-207-VP13	MW-207-VP15	MW-207-VP17	MW-207-VP19	MW-207-VP21	MW-207-VP23	MW-207-VP25	MW-207-VP27	MW-207-VP29	MW-207-VP31	MW-207-VP33	MW-207-VP35
Sample Date	4/18/2012	4/19/2012	4/19/2012	4/19/2012	4/20/2012	4/20/2012	4/20/2012	4/23/2012	4/23/2012	4/23/2012	4/24/2012	4/24/2012	4/25/2012	4/25/2012
Radioactive														
URANIUM														
Metal														
NICKEL	17 J	11 J	11 J	14 J	25	29	13 J	13 J	20 U	23	20 J	18 J	21	34
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	6	1 U	1	0.84 J	1.2	1.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U
VINYL CHLORIDE	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-207	MW-207	MW-207	MW-207	MW-207	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208
Sample ID	MW-207-VP38	MW-207-VP39	MW-207-VP-40	MW-207-VP929	MW-207-VP930	MW-208-VP02	MW-208-VP03	MW-208-VP05	MW-208-VP08	MW-208-VP09	MW-208-VP11	MW-208-VP13	MW-208-VP15	MW-208-VP17
Sample Date	4/26/2012	4/27/2012	4/27/2012	4/18/2012	4/23/2012	11/29/2011	11/29/2011	11/29/2011	11/29/2011	11/29/2011	11/30/2011	11/30/2011	11/30/2011	11/30/2011
Radioactive														
URANIUM														
Metal														
NICKEL	61	20 U	20 U	10 J	17 J	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 U	20 UJ
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	0.59 J	0.54 J	0.75 J	0.89 J	0.89 J
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.81 J	0.77 J	1 U	1 U	0.52 J
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6	8.9	1.8	1 U	1 U	8.1
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	8.4	6.1	2.9	0.6 J	1 U	20
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1 UJ	1 UJ	1 U	1 U	3.4	1 U	3.4	16	88	78	28	14	260
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	11	22	17	4.3	3.2	73
TRICHLOROFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4	1.1	1 U	1 U	0.77 J

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208
Sample ID	MW-208-VP19	MW-208-VP21	MW-208-VP23	MW-208-VP25	MW-208-VP27	MW-208-VP29	MW-208-VP31	MW-208-VP33	MW-208-VP35	MW-208-VP37	MW-208-VP39	MW-208-VP41	MW-208-VP43	MW-208-VP45
Sample Date	11/30/2011	11/30/2011	11/30/2011	12/1/2011	12/1/2011	12/1/2011	12/1/2011	12/2/2011	12/2/2011	12/13/2011	12/13/2011	12/14/2011	12/14/2011	12/6/2011
Radioactive														
URANIUM														
Metal														
NICKEL	20 U	20 U	20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	20 U
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	0.92 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	4.6	2.5	1 U	1 U	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	0.54 J	1 U	0.58 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	16	9.6	0.6 J	1 U	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	180	17	3.4	0.84 J	12	28	30	0.89 J	0.74 J	1 U	1 U	1.5	3.5	1
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.9	1.2	0.58 J
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	50	16	0.77 J	1 U	10	28	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
VINYL CHLORIDE	0.99 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-208	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209
Sample ID	MW-208-VP47	MW-208-VP49	MW-208-VP51	MW-208-VP921	MW-208-VP922	MW-208-VP923	MW-208-VP924	MW-209-VP01	MW-209-VP03	MW-209-VP05	MW-209-VP08	MW-209-VP10	MW-209-VP11	MW-209-VP13
Sample Date	12/15/2011	12/16/2011	12/19/2011	11/29/2011	11/30/2011	11/30/2011	12/1/2011	9/9/2011	9/9/2011	9/9/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011
Radioactive														
URANIUM														
Metal														
NICKEL	20 U	20 U	20 U	20 UJ	20 UJ	20 UJ	20 U	20 U	20 U	14 J	100	20	6 J	12 J
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	0.95 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	0.61 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	170 J	2.5 UJ	2.5 UJ
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	2.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5	0.65 J
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.61 J	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	7	0.59 J	0.66 J	3.2	61	15	0.72 J	1 U	1 U	1 U	1 U	1 U	3.3	1.4
TOLUENE	1 U	1 U	2.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6 J	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	13	3.4	1 U	1 U	1 U	1 U	1 U	1 U	22	5.6
TRICHLOROFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	0.86 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209
Sample ID	MW-209-VP16	MW-209-VP17	MW-209-VP19	MW-209-VP21	MW-209-VP23	MW-209-VP25	MW-209-VP27	MW-209-VP29	MW-209-VP31	MW-209-VP33	MW-209-VP35	MW-209-VP37	MW-209-VP39	MW-209-VP41
Sample Date	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/15/2011	9/15/2011	9/15/2011	9/15/2011	9/15/2011
Radioactive														
URANIUM														
Metal														
NICKEL	23	11 J	6 J	9 J	11 J	20 U	7 J	23	98	11 J	12 J	20 U	20 U	16 J
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	0.87 J	1.2	1 U	1.1	1 U	3.7	3.9	2.9	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 UJ	1 U	1 U	1.4	2.2	1 U	2.9	1 U	1 UJ	0.88 J	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	0.75 J	0.76 J	1 U	0.98 J	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	2.1	4.1	4.3	5.4	1.5	12	8.4	7.1	0.85 J	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	4.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
BROMOMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1.1	13	25	9.7	17	1 U	4	21	19	0.51 J	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 J	1 U	1 U	1 U	1 U	1 U	1 U	16 J	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	2.1	5.8 J	13	5.9	140	97	56	120	8.2	98 J	27	1.3	0.9 J	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 UJ
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3.4	1 UJ	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 UJ	1 U	1 U	1 U	1 U	2.1	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
STYRENE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	2.2	8.6	20	25 44 46 12 42					14 J	40	68	0.97 J	10	5.2
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	14	44 J	100	110 570 650 150 850 160 450 180								7.1	19	2.7
TRICHLOROFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	0.78 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-209	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210
Sample ID	MW-209-VP43	MW-209-VP45	MW-209-VP47	MW-209-VP49	MW-209-VP50	MW-209-VP908	MW-209-VP909	MW-210-VP01	MW-210-VP03	MW-210-VP05	MW-210-VP07	MW-210-VP09	MW-210-VP11	MW-210-VP14
Sample Date	9/16/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/13/2011	9/15/2011	9/22/2011	9/22/2011	9/23/2011	9/23/2011	9/23/2011	9/23/2011	9/26/2011
Radioactive														
URANIUM														
Metal														
NICKEL	9 J	10 J	26	136	21	12 J	6 J	58	44	20 U	73	61	7 J	20 U
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	2.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1.9	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	32	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	0.83 J	19	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	4.8	92	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	3.9	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	4.7	1 U	1 U	1 U	1 U	7	39	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.86 J
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	38	430	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210
Sample ID	MW-210-VP15	MW-210-VP17	MW-210-VP20	MW-210-VP21	MW-210-VP23	MW-210-VP25	MW-210-VP27	MW-210-VP29	MW-210-VP31	MW-210-VP33	MW-210-VP35	MW-210-VP37	MW-210-VP39	MW-210-VP42
Sample Date	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/27/2011	9/27/2011	9/27/2011	9/27/2011	9/27/2011	9/27/2011	9/28/2011	9/28/2011	9/29/2011	9/30/2011
Radioactive														
URANIUM														
Metal														
NICKEL	20 U	25	7 J	13 J	44	8 J	25	14 J	25	18 J	20	17 J	20 U	13 J
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.2	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	0.99 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	0.51 J	1 U	0.81 J	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	0.75 J	1 U	1 U	1 U	1.1	0.56 J	4.8	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	8.1	13	17	7	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 UJ	54	30 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 UJ	0.61 J	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1	1 UJ	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	26	0.76 J	1.9	14	18	37	52	7	2.9	1.6	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 UJ	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	8.7 J	9 J	8 J	8.2 J	9.4 J	6.2 J	8.3 J	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	2.2	6.5	24	410	150 J	310	72 J	100	51 J	54	1.5	1.3	1 U
TOLUENE	1 U	1 U	1 U	1 U	0.78 J	1 U	1 U	1 U	1 U	1 U	1 U	0.78 J	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	39	1.7	4.6	15	150	40	50 18 30 3				1 U	0.51 J	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	3.2	1 U	1 U	0.5 J	2.3	4.4	1.1	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-210	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211
Sample ID	MW-210-VP43	MW-210-VP45	MW-210-VP47	MW-210-VP49	MW-210-VP50	MW-210-VP911	MW-210-VP912	MW-211-VP01	MW-211-VP03	MW-211-VP05	MW-211-VP07	MW-211-VP09	MW-211-VP11	MW-211-VP13
Sample Date	9/30/2011	9/30/2011	10/3/2011	10/3/2011	10/3/2011	9/23/2011	9/27/2011	7/21/2011	7/22/2011	7/22/2011	7/22/2011	7/25/2011	7/25/2011	7/25/2011
Radioactive														
URANIUM														
Metal														
NICKEL	5 J	5 J	20 U	20 U	24	20 U	45	99	2160	817	643	240	20	52
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.62 J
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	7.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	200	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	29	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	0.81 J	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	12	1 U	1 U	1 U	1 U	1 U	1 U	1.2
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.9 J	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	9 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.8	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.1	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	15	3.3	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1 U	1 U	1 U	1 U	1 U	470	1 U	1 U	1 U	1 U	1 U	1 U	0.63 J
TOLUENE	0.57 J	1 U	1 U	1 U	1 U	1 U	0.83 J	1 U	1 U	6.4	0.57 J	1 U	1 U	1.2
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	1 U	14	1 U	1 U	1 U	1 U	1 U	1 U	6.9
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211
Sample ID	MW-211-VP15	MW-211-VP18	MW-211-VP19	MW-211-VP21	MW-211-VP23	MW-211-VP28	MW-211-VP29	MW-211-VP31	MW-211-VP33	MW-211-VP35	MW-211-VP37	MW-211-VP39	MW-211-VP42	MW-211-VP43
Sample Date	7/25/2011	7/25/2011	7/25/2011	7/26/2011	7/26/2011	7/27/2011	7/27/2011	7/27/2011	7/28/2011	7/28/2011	7/29/2011	8/1/2011	8/4/2011	8/4/2011
Radioactive														
URANIUM														
Metal														
NICKEL	7 J	35	16 J	20 U	20 U	10 J	15 J	39	36	7 J	18 J	34	17 J	162
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	10	1.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	0.65 J	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	1 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	0.55 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ
TETRACHLOROETHYLENE(PCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	2.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-211	MW-211	MW-211	MW-211	MW-211	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212
Sample ID	MW-211-VP45	MW-211-VP49	MW-211-VP50	MW-211-VP903	MW-211-VP904	MW-212-VP02	MW-212-VP03	MW-212-VP05	MW-212-VP07	MW-212-VP09	MW-212-VP11	MW-212-VP13	MW-212-VP15	MW-212-VP17
Sample Date	8/4/2011	8/5/2011	8/8/2011	7/27/2011	8/1/2011	10/11/2011	10/11/2011	10/11/2011	10/11/2011	10/11/2011	10/11/2011	10/11/2011	10/11/2011	10/11/2011
Radioactive														
URANIUM														
Metal														
NICKEL	30	17 J	29	11 J	46	24 J	20 U	17 J	20 U	20 U	6 J	34	12 J	36
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ	2.5 U	2.5 UJ
ACETONE	34	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.77 J
CHLOROMETHANE	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.9
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ	2.5 U	2.5 UJ
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1 U	1 U	1 U	1 U	1 U	1.7	0.83 J	1 U	4.3	1 U	1 U	1 U	3.5
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	23
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212
Sample ID	MW-212-VP19	MW-212-VP22	MW-212-VP23	MW-212-VP25	MW-212-VP27	MW-212-VP29	MW-212-VP31	MW-212-VP34	MW-212-VP35	MW-212-VP37	MW-212-VP39	MW-212-VP41	MW-212-VP43	MW-212-VP45
Sample Date	10/12/2011	10/12/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/18/2011	10/18/2011	10/18/2011	10/19/2011	10/19/2011	10/19/2011	10/20/2011
Radioactive														
URANIUM														
Metal														
NICKEL	9 J	20 U	33	7 J	193	51	5 J	15 J	27	8 J	20 U	10 J	10 J	29
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.8	1 U	1 U	0.68 J	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	0.51 J	1 U	1 U	1 U	1 U	1.4	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.98 J	1 U	1 U	1.4	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	3.1	1 U	1 U	1 U	1 U	6.9	1 U	1 U	2	0.82 J
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	39	2.5 U	2.5 U	22	2.5 U
BENZENE	1 U	1 U	13	1 U	1.2	1 U	1 U	1 U	1 U	0.96 J	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	2	1 U
CARBON TETRACHLORIDE	2.4	0.98 J	1 U	1 U	1 U	1 U	1 U	1 U	0.63 J	8.8	1 U	1 U	1 U	0.59 J
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	6.2	1.1	1 U	1 U	1 U	3	1 U	1 U	0.84 J	1 U
CHLOROMETHANE	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	2.6 J	1 U
CIS-1,2-DICHLOROETHYLENE	1.9	1.2	0.72 J	1 U	28	5.2	1 U	17	11	74	1 U	1 U	23	6.5
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	1.2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	0.72 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	5.2	8	2.3	3.4	20	2.1	1 U	1.2	1.8 8.8		0.71 J	3.9	21	25
TOLUENE	1 U	1 U	3.9	1 U	0.57 J	1 U	1 U	1 U	1 U	9.8	1 U	1.7	7.5	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	30	15 11		1 U	240	32	1 U	27	27	260	1 U	9.7	120	73
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-213	MW-213	MW-213	MW-213
Sample ID	MW-212-VP47	MW-212-VP49	MW-212-VP51	MW-212-VP53	MW-212-VP55	MW-212-VP913	MW-212-VP914	MW-212-VP915	MW-212-VP916	MW-212-VP917	MW-213-VP01	MW-213-VP03	MW-213-VP05	MW-213-VP07
Sample Date	10/21/2011	10/21/2011	10/24/2011	10/24/2011	10/25/2011	10/11/2011	10/11/2011	10/11/2011	10/11/2011	10/18/2011	6/30/2011	6/30/2011	6/30/2011	6/30/2011
Radioactive														
URANIUM														
Metal														
NICKEL	9 J	10 J	20 UJ	20 UJ	20 U	14 J	15 J	5 J	5 J	28	43	60	34	35
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.83 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	0.54 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	110	120	40	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1.4	7.4	48	11	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	3.4	1.6	4.8	5.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.64 J	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	3.2 J	7.7	11	4	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	4.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	12	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	6.9	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1.1	7.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	38 J	36 J	7.9 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1.3	6.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1.5	9.6	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
TETRACHLOROETHYLENE(PCE)	14	1 U	0.59 J	1 U	1 U	0.85 J	1 U	1.5	1 U	2.1	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	7.8	35	4.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	45	0.71 J	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	27	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213
Sample ID	MW-213-VP11	MW-213-VP13	MW-213-VP15	MW-213-VP17	MW-213-VP19	MW-213-VP21	MW-213-VP23	MW-213-VP25	MW-213-VP27	MW-213-VP29	MW-213-VP31	MW-213-VP32	MW-213-VP35	MW-213-VP37
Sample Date	7/6/2011	7/6/2011	7/7/2011	7/7/2011	7/7/2011	7/7/2011	7/9/2011	7/9/2011	7/9/2011	7/9/2011	7/11/2011	7/11/2011	7/12/2011	7/12/2011
Radioactive														
URANIUM														
Metal														
NICKEL	9 J	29	8 J	27	22	20 U	7 J	42	31		17 J	8 J	12 J	13 J
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.8	1.5	1.5	4.2	1.3
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.7 J	0.89 J	3.1	0.53 J
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.52 J	0.55 J	1 U	0.95 J	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.8	2.2	3	7	2
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.61 J	2.3	1 U	6.3	1.7
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.7	7.5	5.6	12	2.4
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.3	3.6	3.2	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.9	120	36	94	110
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1 U	0.55 J	1 U	2.9	5.1	1 U	58	95	92	280	63
TRICHLOROFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-214	MW-214
Sample ID	MW-213-VP39	MW-213-VP41	MW-213-VP43	MW-213-VP45	MW-213-VP47	MW-213-VP49	MW-213-VP52	MW-213-VP54	MW-213-VP55	MW-213-VP900	MW-213-VP901	MW-213-VP902	MW-214-VP01	MW-214-VP03
Sample Date	7/12/2011	7/12/2011	7/13/2011	7/13/2011	7/14/2011	7/14/2011	7/18/2011	7/18/2011	7/18/2011	7/6/2011	7/9/2011	7/13/2011	8/22/2011	8/22/2011
Radioactive														
URANIUM														
Metal														
NICKEL	21	6 J	7 J	15 J	20 U	6 J	21	20 U	5 J	36	45	9 J	20	61
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	2	1.9	0.61 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.56 J	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 J	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.64 J	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	360	280	80	2.4	1 U	2	1 U	1 U	1 U	1 U	1 U	78	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	4.4	4.2	1.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.9	1.7	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214
Sample ID	MW-214-VP05	MW-214-VP07	MW-214-VP10	MW-214-VP12	MW-214-VP14	MW-214-VP15	MW-214-VP17	MW-214-VP19	MW-214-VP21	MW-214-VP24	MW-214-VP25	MW-214-VP27	MW-214-VP29	MW-214-VP31
Sample Date	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/23/2011	8/23/2011	8/23/2011	8/23/2011	8/23/2011	8/23/2011	8/24/2011	8/24/2011	8/24/2011	8/24/2011
Radioactive														
URANIUM														
Metal														
NICKEL	12 J	35	14 J	7 J	24	17 J	12 J	18 J	8 J	40	18 J	53	13 J	8 J
VOCs														
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	2.5 U	2.5 U	43	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	26	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	2.2	1.1	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.69 J	1.4	1 U	2.6
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHYLENE(PCE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.7	3.1	1 U	8.4
TOLUENE	1 U	1 U	1.8	1 U	1 U	1.5	1 U	1 U	1 U	4.1	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	1 U	1	4.8	1.8 1.5 2.1	3.2 3.3				11	13	9.9	16
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.1-2 Complete Results for Off-Site Groundwater Vertical Profile Samples, Sylvania Corning FUSRAP Site

Location ID	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214
Sample ID	MW-214-VP33	MW-214-VP35	MW-214-VP37	MW-214-VP39	MW-214-VP41	MW-214-VP43	MW-214-VP45	MW-214-VP47	MW-214-VP50	MW-214-VP51	MW-214-VP905	MW-214-VP906	MW-214-VP907
Sample Date	8/24/2011	8/25/2011	8/26/2011	8/26/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	9/1/2011	9/1/2011	8/22/2011	8/23/2011	8/30/2011
Radioactive													
URANIUM													
Metal													
NICKEL	12 J	13 J	8 J	6 J	26	6 J	15 J	18 J	20 U	19 J	29	10 J	9 J
VOCs													
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	320	2.5 U	79	58	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	22	2.5 U	2.5 U	2.5 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	12	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	0.72 J	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHYLENE	1 U	1 U	5.1	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIMETHYL BENZENE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ETHYL KETONE (2-BUTANONE)	77	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ
TETRACHLOROETHYLENE(PCE)	1 U	1 U	21	31	34	15	1.6	1 U	1 U	1 U	1 U	1 U	14
TOLUENE	14	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	0.7 J	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHYLENE (TCE)	1 U	1 U	29	34	1.2	1 U	1 U	1 U	1 U	1 U	1 U	3.2	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	W01-120	W-03-112	W-05-78	W10-120	W-10-71	W-11-70	W12-120	W-12-70	W14-150	W16-148	W-1-75	W-18-150	W19-110	W19-150	W20-120	W20-160	W-22-95	W23-110	W-24-260
Sample ID	W01-120-R1N	W-03-112-R1N	W-05-78-R1N	W10-120-R1N	W-10-71-R1N	W-11-70-R1N	W12-120-R1N	W-12-70-R1N	W14-150-R1N	W16-148-R1N	W-1-75-R1N	W-18-150-R1N	W19-110-R1N	W19-150-R1N	W20-120-R1N	W20-160-R1N	W-22-95-R1N	W23-110-R1N	W-24-260-R1N
Lab ID	F2F130434024	F2F130434018	F2F130434004	F2F160407017	F2F130434006	F2F130434001	F2F150421014	F2F130434012	F2F150421002	F2F160407004	F2F130434023	F2F200416020	F2F160407009	F2F200416006	F2F200416002	F2F200416001	F2F130434007	F2F150421017	F2F220444017
Sample Date	6/12/2012	6/12/2012	6/11/2012	6/15/2012	6/11/2012	6/11/2012	6/13/2012	6/11/2012	6/12/2012	6/14/2012	6/12/2012	6/19/2012	6/15/2012	6/18/2012	6/18/2012	6/18/2012	6/11/2012	6/13/2012	6/19/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive																			
Uranium	0.565	0.1 U	0.0787	0.1 U	0.0913	0.118 J	0.1 U	0.0592	0.1 U	0.0878	0.1 U	0.1 U	0.28	0.1 U	0.1 U	0.1 U	0.069	0.161	0.1 U
Metal																			
Nickel	40 U	40 U	40 U	40 U	40 U	14.7 J	27.8 J	40 U	16.9 J	18.8 J	40 U	73.3	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs																			
1,1,1-Trichloroethane	1 U	1 U	1 U	0.13 J	1 U	1 U	1 U	1 U	1 U	0.08 J	1 U	5 U	2.5 U	5 U	0.56 J	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	2.7	0.55 J	1 U	1 U	0.48 J
1,1-Dichloroethylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.11 J	1 U	5.1 D	2.5 U	5 U	0.51 J	2.1	1 U	0.26 J	1.9
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	10 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U	25 U	5 U	0.18 UJ	5 U	5 U	0.78 J
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	2.3	1 U	1 U	1 U	1 U	1 U	0.28 J	1 U	0.094 J	1 U	11	5 U	2.5 U	0.54 D	0.23 J	52 D	1 U	0.11 J	0.45 J
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.87 J	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	1.7 J	5 UJ	5 U	5 UJ	3.3 J	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 UJ	5 UJ	1.8 J
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UJ	12 U	25 U	5 UJ	5 U	5 U	5 U	5 U
2-Hexanone	0.25 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U	25 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U	25 U	5 U	5 U	5 U	5 U	5 U
Acetone	0.85 UJ	2 U	1.6 UJ	1.5 UJ	1.4 UJ	1.4 UJ	0.86 UJ	1.2 UJ	0.37 UJ	2 U	2 U	6.3 UJ	2.7 UJ	8.1 UJ	3.5 U	1.9 UJ	2.7 U	1.6 UJ	1.1 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	10 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	10 U	2 U	2 U	2 U	2 U	2 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	0.62 J
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.92 J	10 U	5 U	10 U	2 U	0.31 J	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	10 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.2	1 U	5 U	2.5 U	13 D	1 U	1 U	1 U	1 U	1 U
Chloromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	10 U	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	3.7	0.1 J	1 U	0.18 J	1 U	1 U	1.3 J	1 U	0.15 J	0.16 J	26	510 D	2.9 D	96 D	5.2	13	7.7	0.66 J	8.6
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.9	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	0.24 J	1 U	1 U	1 U
Methyl Acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U	25 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.25 J	2 U	1.1 D	5 U	2 U	0.18 J	0.58 J	2 U	2 U	0.45 J
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	20 U	10 U	20 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	0.65 UJ	0.3 UJ	1 U	1 U	1 U	1.7 UJ	0.73 UJ	2.5 D	0.71 UJ	0.47 UJ	1 U	0.62 UJ	0.27 UJ
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3.5	10 U	5 U	10 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.7	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	4.3	24	2.5	150 D	2.5	1 U	13	1 U	3.9	22	72 D	880 D	570 D	580 D	24	150 D	69 D	3.3	27
Toluene	1 U	1 U	0.29 UJ	1 U	0.29 UJ	0.3 UJ	1 U	0.29 UJ	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	0.29 UJ	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.14 J	2.7 D	2.5 U	0.67 D	0.22 J	0.4 J	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	3.2	1.9	7.3	1 U	2.4	1 U	0.47 J	1 U	0.28 J	0.75 J	130 D	190 D	4 D	84 D	30	34	13	7.2	12
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	5 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	2 U	2 U	2 U	2 U	2 U	0.095 J	2 U	2 U	2 U	0.44 J	36 D	5 U	0.54 D	0.58 J	6.1	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	W25-150	W25-188	W-26-270	W-2-70	W-27-240	W-27-285	W-30-285	W31-95	W32-110	W-36-390	W-36-448	W-3-72	W-37-325	W-37-385	W-6-79	W-8-71	S-1-325	S-1-450
Sample ID	W25-150-R1N	W25-188-R1N	W-26-270-R1N	W-2-70-R1N	W-27-240-R1N	W-27-285-R1N	W-30-285-R1N	W31-95-R1N	W32-110-R1N	W-36-390-R1N	W-36-448-R1N	W-3-72-R1N	W-37-325-R1N	W-37-385-R1N	W-6-79-R1N	W-8-71-R1N	S-1-325-R1N	S-1-450-R1N
Lab ID	F2F200416013	F2F200416019	F2F150421024	F2F130434014	F2F150421001	F2F150421013	F2F150421009	F2F150421022	F2F150421008	F2F160407013	F2F220444001	F2F130434020	F2F150421020	F2F160407003	F2F130434005	F2F130434013	F2F200416009	F2F200416008
Sample Date	6/18/2012	6/19/2012	6/14/2012	6/11/2012	6/12/2012	6/13/2012	6/13/2012	6/14/2012	6/13/2012	6/15/2012	6/20/2012	6/12/2012	6/14/2012	6/14/2012	6/11/2012	6/11/2012	6/18/2012	6/18/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive																		
Uranium	0.1 U	0.1 U	0.0638	0.1 U	0.186	0.0542	0.267	0.1 U	0.1 U	0.649	0.118	0.148	0.421	0.0549	0.1 U	0.0499	0.1 U	0.1 U
Metal																		
Nickel	40 U	40 U	40 U	99.7	40 U	40 U	52.6	40 U	40 U	140	52.6	40 U	40 U	40 U	40 U	40 U	68.4	21.2 J
VOCs																		
1,1,1-Trichloroethane	1 U	1 U	1 U	2.9	1 U	1.2	1 U	0.075 J	1 U	10 U	1 U	1 U	2.1	75 D	1 U	1 U	0.97 J	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.57 J	1.5	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	0.12 J	1 U	0.91 J	1.4	1	1 U	1 U	1 U	2.9 D	0.74 J	1 U	6.1	3.2	1 U	1 U	0.35 J	1 U
1,1-Dichloroethylene	1 U	0.92 J	1 U	1 U	5.7	3.9	1 U	1 U	1 U	14 D	2.4	1 U	21	150 D	1 U	1 U	1	0.5 J
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	0.28 J	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	0.52 UJ	5 U	5 U	0.25 UJ	0.97 J	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	2	120 D	1 U	1 U	9.8	76 D	1 U	1 U	1 U	10 U	1 U	1 U	0.1 J	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.12 J	0.29 J	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	3.6	1 U	1 U	1 U	1.4	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 UJ	5 UJ	2.4 J	5 UJ	5 UJ	5 UJ	5 UJ	16 J	5 U	5 UJ	27 J	54 J	5 UJ	5 UJ	1.6 J	5 U
2-Butanone (MEK)	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2.3 U	0.95 UJ	2 U	2 U	0.53 UJ	0.77 UJ	1.7 UJ	0.77 UJ	0.49 UJ	13 UJ	0.69 UJ	0.63 UJ	0.38 UJ	2 U	1.1 UJ	2.5 U	2.1 U	2.2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.17 J	1 U	0.24 J	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.78 J	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Tetrachloride	1 U	1 U	1 U	0.53 J	0.63 J	0.18 J	1 U	1 U	1 U	44 D	9.4	1 U	56 D	8.1	1 U	1 U	2.3	3.1
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	11 J	3.1 J	1 U	5.5	39	1 U	1 U	1 U	0.95 J
Chlorobenzene	2 U	3.3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	0.17 J	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	1 U	0.27 J	1 U	0.35 J	0.38 J	1 U	0.38 J	1 U	4.9 D	1	1 U	360 D	62 D	1 U	1 U	0.32 J	0.43 J
Chloromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	0.97 J	21	0.14 J	0.88 J	100 D	500 D	2.3	1 U	1 U	870 D	160 J	4.7	11	2	1 U	1 U	0.55 J	13
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	0.14 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	0.26 J	0.46 J	0.35 J	2 U	0.19 J	0.64 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	40 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	0.54 UJ	1 U	1 U	0.32 UJ	1 U	0.67 UJ	0.66 UJ	1 U	0.59 UJ	3.7 D	1 U	0.67 UJ	0.34 UJ	1 U	1 U	0.34 UJ	0.7 UJ	0.61 UJ
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	0.26 J	1 U	1 U	1 U	0.83 J	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1.5	5.2	1.9	5.9	54 D	650 D	6.3	1 U	54 D	100 D	42 J	100 D	150 D	76 D	1 U	25	13	180 D
Toluene	1 U	1 U	1 U	0.29 UJ	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	0.3 UJ	0.29 UJ	1 U	1 U
trans-1,2-Dichloroethene	1 U	0.22 J	1 U	1 U	0.82 J	5.2	1 U	1 U	1 U	2.5 D	1.5	1 U	1 U	1 U	1 U	1 U	1 U	0.1 J
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	4.7	13	0.54 J	6.8	160 D	200 D	1.8	0.52 J	1 U	1500 D	310 J	6.9	780 D	180 D	1 U	1 U	19	120 D
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.52 J	9.3	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	12	2 U	2 U	16	67 D	0.18 J	2 U	2 U	1.1 D	0.2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	PW-2-1	PW-2-2	PW-2-3	PW-2-4	PW-2-5	PW-2-6	PW-2-7		PW3-1	PW-3-2	PW3-3		PW-3-4	PW-3-5	PW-3-6	PW-3-7	PW-4-1	PW-4-2	PW-4-3
Sample ID	PW-2-1N	PW-2-2-R1N	PW-2-3-R1N	PW-2-4-R1N	PW-2-5-R1N	PW-2-6-R1N	PW-2-7-R1N	PW-2-7-R1N	PW3-1-R1N	PW-3-2-R1N	PW3-3-R1N	PW3-3-R1ND	PW-3-4-R1N	PW-3-5-R1N	PW-3-6-R1N	PW-3-7-R1N	PW-4-1-R1N	PW-4-2-R1N	PW-4-3-R1N
Lab ID	F2F160407011	F2F130434019	F2F150421006	F2F150421007	F2F150421003	F2F150421012	F2F130434015	F2F130434016	F2F090408013	F2F130434008	F2F090408001	F2F090408002	F2F130434009	F2F090408011	F2F090408004	F2F090408006	F2F220444008	F2F230409010	F2F220444024
Sample Date	6/15/2012	6/12/2012	6/13/2012	6/13/2012	6/12/2012	6/13/2012	6/11/2012	6/11/2012	6/8/2012	6/11/2012	6/8/2012	6/8/2012	6/11/2012	6/8/2012	6/8/2012	6/7/2012	6/20/2012	6/21/2012	6/20/2012
Filter	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive																			
Uranium	0.217	0.314	0.1 U	0.1 U	0.151	0.167	0.494	0.1 U	0.0812	0.331	1.4	0.0905	0.1 U	0.108	0.0871	0.108	0.1 U	0.1 U	0.1 U
Metal																			
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs																			
1,1,1-Trichloroethane	1 U	0.39 J	0.82 J	1 U	1 U	1 U	1 U	N/A	1.6	0.62 J	1 U	N/A	1 U	1 U	0.76 J	1 U	0.68 J	1.9	0.14 J
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
1,1-Dichloroethane	1 U	0.15 J	0.39 J	1 U	1 U	1 U	1 U	N/A	0.79 J	0.29 J	1 U	N/A	1 U	1 U	0.28 J	1 U	0.44 J	0.89 J	1 U
1,1-Dichloroethylene	1 U	1 U	0.14 J	1 U	1 U	1 U	1 U	N/A	0.16 J	1 U	1 U	N/A	1 U	2 U	1 U	1 U	1 U	0.18 J	1 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	2 U	N/A	2 U	5 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A	5 U	5 U	5 U	N/A	5 U	1 U	5 U	5 U	5 U	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	5 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	N/A	5 U	5 UJ	5 U	N/A	5 UJ	5 U	5 U	5 U	1.6 J	7.1	5.8
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A	5 U	5 U	5 U	N/A	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A	5 U	5 U	5 U	N/A	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A	5 U	5 U	5 U	N/A	5 U	2 U	5 U	5 U	5 U	5 U	5 U
Acetone	0.94 UJ	0.59 UJ	0.82 J	0.79 J	2 U	1.1 J	0.41 UJ	N/A	2 U	1.9 UJ	2 U	N/A	1.4 UJ	1 U	1.2 UJ	2 U	2 U	0.71 UJ	0.88 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	0.24 J	0.35 J	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	2 U	1 U	1 U	0.32 J	1.2	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	2 U	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	2 U	N/A	2 U	1 U	2 U	2 U	2 U	2 U	2 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	0.29 J	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	2 U	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	2 U	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	0.29 J	N/A	1 U	0.2 J	0.11 J	N/A	1 U	1 U	1 U	1 U	0.17 J	0.24 J	1 U
Chloromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 UJ	2 U	2 UJ	N/A	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	0.74 J	N/A	1 U	1 U	1 U	N/A	1 U	1 U	0.19 J	0.44 J	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 UJ	1 U	1 UJ	N/A	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	0.37 J	0.87 J	0.21 J
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	2 U	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A	5 U	5 U	5 U	N/A	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	2 U	2 U	0.25 J	2 U	0.92 J	2 U	N/A	2 U	2 U	2 U	N/A	2 U	0.13 J	2 U	0.14 J	2 U	2 U	2 U
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	N/A	4 U	4 U	4 U	N/A	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	0.33 J	0.28 UJ	0.66 J	0.81 J	1 U	1.1	1 U	N/A	0.3 UJ	0.32 UJ	1 U	N/A	0.41 UJ	0.35 UJ	1 U	1 U	1 U	1 U	0.43 J
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	2 U	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	0.84 J	170 D	N/A	1 U	1 U	1 U	N/A	0.19 J	1 U	1 U	4.6	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	0.29 UJ	0.29 UJ	0.29 UJ	N/A	0.29 UJ	0.29 UJ	0.29 UJ	0.29 UJ	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	2.2	N/A	1 U	1 U	1 U	N/A	1 U	1 U	0.31 J	0.57 J	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	1 U	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	2 U	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	PW-4-4	PW-4-5	PW-4-6	PW-4-7	PW-6-1	PW-6-2	PW-6-3	PW-6-4	PW-6-5	PW-6-6	PW-6-7	PW-7-1	PW-7-2	PW-7-3	PW-7-4	PW-7-5	PW-7-6	PW-7-7	
Sample ID	PW-4-4-R1N	PW-4-5N	PW-4-6-R1N	PW-4-7N	PW-6-1-R1N	PW-6-2-R1N	PW-6-3-R1N	PW-6-4-R1N	PW-6-5-R1N	PW-6-6-R1N	PW-6-7-R1N	PW-7-1-R1N	PW-7-2-R1N	PW-7-3N	PW-7-4-R1N	PW-7-5-R1N	PW-7-6-R1N	PW-7-7-R1N	PW-7-7-R1N
Lab ID	F2F220444025	F2F220444019	F2F220444022	F2F220444018	F2F300409005	F2F300409006	F2F300409007	F2F300409008	F2F300409009	F2F300409010	F2F300409011	F2F160407012	F2F200416010	F2F200416011	F2F200416016	F2F200416007	F2F200416022	F2F200416005	F2F200416025
Sample Date	6/20/2012	6/19/2012	6/20/2012	6/19/2012	6/28/2012	6/29/2012	6/29/2012	6/29/2012	6/27/2012	6/27/2012	6/27/2012	6/15/2012	6/18/2012	6/18/2012	6/19/2012	6/18/2012	6/19/2012	6/18/2012	6/18/2012
Filter	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
Radioactive																			
Uranium	0.1 U	0.0672	0.0883	0.1 U	0.1 U	0.0719	0.143	0.105	0.339	0.105	0.174	0.416	0.1 UJ	0.222	0.179	0.1 U	0.1 U	0.1 U	0.623
Metal																			
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	15.3 J	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs																			
1,1,1-Trichloroethane	1 U	1 U	1 U	0.4 J	1 U	1.3	1.5	1 U	1 U	1 U	1 U	0.53 J	1 U	1 U	1 U	0.13 J	1 U	1 U	N/A
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,1-Dichloroethane	1 U	1 U	1 U	0.25 J	1 U	0.62 J	1.2	1 U	1 U	1 U	1 U	0.56 J	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,1-Dichloroethylene	1 U	1 U	1 U	1 U	1 U	0.22 J	1	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.44 J	1 U	N/A
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
1,4-Dioxane	5 U	5 U	5 U	5 U	1.4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	N/A
2-Butanone (MEK)	5 UJ	5 U	5 UJ	5 UJ	5 U	1.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.75 J	5.3 J	0.91 J	0.65 J	5 U	N/A
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.8 J	5 U	5 U	5 U	N/A
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A
Acetone	2 U	0.51 UJ	2 U	1.2 J	1.5 UJ	6.3 J	0.98 UJ	0.71 UJ	2.3 U	0.56 UJ	0.56 UJ	5.8 U	4.4 U	15	21	7.6 U	19	0.95 UJ	N/A
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Bromoform	1 U	1 U	1 U	0.24 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A
Carbon Disulfide	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.28 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Chloromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.94 J	1 U	1 U	1 U	1 U	0.11 J	1 U	1 U	N/A
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Cyclohexane	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Dibromochloromethane	1 U	1 U	1 U	0.2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	0.14 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Methyl Acetate	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A
Methyl tert-butyl ether	2 U	2 U	2 U	2 U	0.86 J	2 U	2 U	2 U	2 U	2 U	2 U	1.6 J	2 U	0.2 J	2 U	2.3	2 U	0.16 J	N/A
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	N/A
Methylene Chloride	1 U	0.3 J	1 U	0.3 J	0.34 J	0.31 J	1 U	1 U	0.37 J	0.3 J	0.34 J	1 U	0.92 UJ	0.59 UJ	0.39 J	0.92 UJ	0.44 J	0.77 UJ	N/A
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	0.22 J	1.7	0.6 J	3.1	150 D	0.45 J	1 U	1 U	1 U	0.84 J	1 U	1 U	N/A
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	0.6 J	1 U	1 U	1 U	2.3	0.91 J	1 U	1 U	1 U	3	1 U	1 U	N/A
Trichlorofluoromethane	1 U	1 U	1 U	1 U	0.18 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A
Vinyl Chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	MW-10	MW-11	MW-12	MW-13D	MW-13S	MW-14DD	MW-14D	MW-14S	MW-15DD	MW-15D	MW-15S	MW-16D	MW-16S	MW-17S	MW-18I	MW-18S	MW-19D	MW-19S	MW-201-220
Sample ID	MW-10-R1N	MW-11-R1N	MW-12-R1N	MW-13D-R1N	MW-13S-R1N	MW-14DD-R1N	MW-14D-R1N	MW-14S-R1N	MW-15DD-R1N	MW-15D-R1N	MW-15S-R1N	MW-16D-R1N	MW-16S-R1N	MW-17S-R1N	MW-18I-R1N	MW-18S-R1N	MW-19D-R1N	MW-19S-R1N	MW-201-220-R1N
Lab ID	F2F080482002	F2F080482001	F2F080482008	F2F060449014	F2F060449009	F2F080482003	F2F080482009	F2F080482005	F2F080482006	F2F060449021	F2F060449019	F2F220444015	F2F220444014	F2F060449010	F2F080482028	F2F080482029	F2F080482015	F2F060449002	F2F080482013
Sample Date	6/5/2012	6/5/2012	6/6/2012	6/5/2012	6/5/2012	6/5/2012	6/6/2012	6/5/2012	6/5/2012	6/5/2012	6/5/2012	6/19/2012	6/19/2012	6/5/2012	6/7/2012	6/7/2012	6/6/2012	6/4/2012	6/6/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive																			
Uranium	0.1 U	0.1 U	9.08	0.1 U	0.1 U	0.0561	0.245	0.1 U	0.0709	0.1 U	0.1 U	0.272	0.1 U	0.0846	420	11000	0.0743	0.1 U	0.056
Metal																			
Nickel	40 U	33.6 J	16.6 J	40 U	40 U	40 U	19.5 J	40 U	40 U	40 U	40 U	40 U	40 U	40 U	15.6 J	16.7 J	40 U	40 U	40 U
VOCs																			
1,1,1-Trichloroethane	1 U	5 U	25 U	1 U	1 U	0.23 J	0.47 J	0.27 J	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	0.38 J	1 U	5.5
1,1,2,2-Tetrachloroethane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	5 U	25 U	0.99 J	1 U	0.27 J	0.72 J	1 U	1 U	0.42 J	1 U	2.5	1 U	1 U	1 U	1 U	0.38 J	1 U	0.18 J
1,1-Dichloroethylene	1 U	5 U	25 U	0.28 J	1 U	0.15 J	0.44 J	1 U	1 U	0.18 J	0.17 J	0.93 J	1 U	1 U	1 U	1 U	0.21 J	1 U	4.3
1,2,3-Trichlorobenzene	2 U	10 U	50 U	2 U	2 U	0.15 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	25 U	120 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.3 J	5 U	5 U	5 U	5 U	5 U	5 U	3 J
2-Butanone (MEK)	5 U	25 U	120 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	25 U	120 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	25 U	120 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	1.6 UJ	7.9 UJ	34 UJ	2 U	2 U	0.94 UJ	1.4 UJ	1.4 UJ	1.3 UJ	2 U	2 U	1.8 J	0.57 J	2 U	1.3 UJ	2 U	1.9 UJ	2 U	2 U
Benzene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	10 U	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	10 U	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Tetrachloride	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1
Chlorinated Fluorocarbon (Freon 113)	1 U	5 U	25 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	10 U	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	10 U	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	5 U	25 U	1 U	1 U	0.12 J	0.12 J	1 U	1.7	1 U	1 U	0.13 J	0.12 J	1 U	5.7	2.2	0.13 J	1 U	1 U
Chloromethane	2 UJ	10 UJ	50 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ
cis-1,2-Dichloroethene	1 U	5 U	4 D	9.5 J	1 U	1 U	1 U	1 U	1 U	0.87 J	1.1	0.13 J	1 U	1 U	1 U	1 U	1 U	1 U	2.7
cis-1,3-Dichloropropene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	5 U	25 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	10 U	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	25 U	120 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	10 U	50 U	2 U	2 U	2 U	2 U	0.13 J	2 U	2 U	2 U	2 U	2 U	2 U	0.24 J	2 U	2 U	2 U	0.27 J
Methylcylohexane	4 U	20 U	100 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	0.39 UJ	1.9 UJ	11 D	1 U	1 U	0.46 J	1 U	0.35 J	0.3 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.39 J	1 U	0.48 J
m-Xylene & p-Xylene	2 U	10 U	50 U	2 U	2 U	2 U	2 U	1.5 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	0.48 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	32	820 D	2500 D	2.4	1 U	1 U	1 U	1 U	1 U	0.26 J	0.65 J	0.28 J	1 U	0.76 J	1 U	1.3	0.24 J	0.49 J	0.59 J
Toluene	0.29 UJ	1.5 UJ	7.5 D	1 U	1 U	0.29 UJ	0.29 UJ	0.29 J	0.29 UJ	1 U	1 U	1 U	1 U	1 U	0.29 UJ	0.29 UJ	0.3 UJ	1 U	0.3 UJ
trans-1,2-Dichloroethene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	0.25 J	1.9 D	26 D	19 J	1 U	1 U	0.43 J	1 U	1 U	2.2	2.9	3.2	1 U	1 U	1 U	1 U	1 U	1 U	32
Trichlorofluoromethane	1 U	5 U	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	10 U	50 U	0.26 J	2 U	2 U	2 U	2 U	2 U	0.19 J	0.21 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	MW-202-220	MW-202-380	MW-202-495	MW-203-160	MW-203-360	MW-203-440	MW-204-320	MW-204-470	MW-205-285	MW-205-470	MW-206-320	MW-206-470	MW-207-170	MW-207-250	MW-207-320
Sample ID	MW-202-220-R1N	MW-202-380-R1N	MW-202-495-R1N	MW-203-160-R1N	MW-203-360-R1N	MW-203-440-R1N	MW-204-320-R1N	MW-204-470-R1N	MW-205-285-R1N	MW-205-470-R1N	MW-206-320-R1N	MW-206-470-R1N	MW-207-170-R1N	MW-207-250-R1N	MW-207-320-R1N
Lab ID	F2F300409001	F2F300409004	F2F300409003	F2F080482020	F2F080482022	F2F080482019	F2F150421021	F2F160407005	F2F150421016	F2F160407008	F2F150421010	F2F160407007	F2F230409003	F2F230409009	F2F230409002
Sample Date	6/26/2012	6/25/2012	6/26/2012	6/6/2012	6/7/2012	6/6/2012	6/14/2012	6/14/2012	6/13/2012	6/14/2012	6/13/2012	6/14/2012	6/21/2012	6/21/2012	6/21/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive															
Uranium	0.0933	0.0687	0.725	0.0489	0.1 U	0.135	1.2 J	0.201	0.143	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.109
Metal															
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs															
1,1,1-Trichloroethane	0.45 J	18 D	1 U	0.92 J	1 U	1 U	1 U	0.19 J	0.23 J	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U
1,1-Dichloroethane	1	1.3 D	0.23 J	0.84 J	0.5 J	1 U	0.16 J	0.32 J	0.077 J	1 U	0.15 J	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	0.65 J	23 D	0.12 J	4.9	0.58 J	1 U	0.092 J	0.24 J	0.36 J	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	2 U	20 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	50 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	10 U	1 UJ	1.9	1 U	1 U	1 U	1 U	0.46 J	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	0.13 J	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	39	5 U	2.7 J	3.1 J	2.3 J	4 J	1.9 J	2 J	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U
2-Butanone (MEK)	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	0.9 UJ	5.5 J	6.6 J	1.1 UJ	4.1 U	2 U	6.9	4.4 U	32	11	0.64 J	0.9 UJ	5.3	2 U	6.6
Benzene	1 U	10 U	1 U	1 U	1 U	1 U	0.14 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	0.54 J	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	20 U	2 U	2 U	2 U	0.15 J	0.9 J	0.84 J	0.39 J	0.95 J	2 U	0.055 J	2 U	2 U	2 U
Carbon Tetrachloride	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 J	1 U	0.46 J	1 U	1 U
Chlorinated Fluorocarbon (Freon 113)	1 U	10 U	1 U	1.3	1 U	1 U	1 U	1 U	2.2	1 U	1 U	1 U	1 UJ	1 UJ	1 U
Chlorobenzene	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	0.16 J	10 U	0.25 J	0.18 J	0.14 J	1 U	0.89 J	0.53 J	1.1	1 U	0.31 J	1.4	0.18 J	15	0.11 J
Chloromethane	2 U	20 U	2 U	2 UJ	0.11 J	2 UJ	2 U	2 U	0.46 J	0.2 J	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	1 U	9.1 D	1.4	3	11	1 U	0.93 J	3.2	2.2	1 U	1.8	1 U	2	1 U	1 U
cis-1,3-Dichloropropene	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.57 J	1 U
Dibromochloromethane	1 U	10 U	0.21 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	20 U	2 U	0.26 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.13 J
Methylcylohexane	4 U	40 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	10 U	0.3 J	1 U	1 U	1 U	1 U	1 U	0.76 J	0.3 J	0.69 J	1 U	1 U	1 U	1 U
m-Xylene & p-Xylene	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	0.64 J	10 U	1 U	79	5.1	0.26 J	0.48 J	28	71 D	0.2 J	370 D	1.5	400 J	30	1 U
Toluene	1 U	10 U	0.25 J	1 U	0.3 UJ	0.31 UJ	0.11 J	1 U	1 U	0.13 J	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	10 U	1 U	1 U	0.1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1100 D	14	39	160	1 U	5.4	75 D	140 D	1 U	4.4	0.36 J	4.2	1 U	1 U
Trichlorofluoromethane	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	MW-208-350	MW-208-540	MW-209-380	MW-209-530	MW-20D	MW-20I	MW-20S	MW-210-280	MW-210-380	MW-210-470	MW-211-190	MW-211-250	MW-211-455	MW-212-580	MW-213-570	MW-214-570
Sample ID	MW-208-350-R1N	MW-208-540-R1N	MW-209-380-R1N	MW-209-530-R1N	MW-20D-R1N	MW-20I-R1N	MW-20S-R1N	MW-210-280-R1N	MW-210-380-R1N	MW-210-470-R1N	MW-211-190-R1N	MW-211-250-R1N	MW-211-455-R1N	MW-212-580-R1N	MW-213-570-R1N	MW-214-570-R1N
Lab ID	F2F150421011	F2F200416003	F2F080482031	F2F080482027	F2F080482025	F2F080482024	F2F080482023	F2F200416024	F2F200416015	F2F200416014	F2F090408015	F2F220444013	F2F090408018	F2F200416004	F2F090408003	F2F090408012
Sample Date	6/13/2012	6/18/2012	6/7/2012	6/7/2012	6/7/2012	6/7/2012	6/7/2012	6/19/2012	6/19/2012	6/18/2012	6/8/2012	6/19/2012	6/8/2012	6/18/2012	6/8/2012	6/8/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive																
Uranium	0.0595	0.1 U	0.119	0.1 U	0.1 U	7.03	462	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.225	0.1 U	0.1 U	0.1 UJ
Metal																
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs																
1,1,1-Trichloroethane	0.13 J	1 U	2.4	1 U	1 U	0.13 J	1 U	1 U	2.5 U	1 U	0.13 J	0.11 J	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.12 J	1 U	2	1 U	1 U	0.18 J	1 U	0.11 J	0.45 D	0.29 J	0.7 J	0.21 J	0.32 J	1 U	1 U	1 U
1,1-Dichloroethylene	0.26 J	1 U	8	1 U	1 U	0.16 J	1 U	0.23 J	0.55 D	0.37 J	0.22 J	1 U	1 U	0.1 J	1 U	1 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.34 J	12 U	5 U	5 U	5 U	5 U	0.13 UJ	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1.5	0.15 J	1 U	1 U	1 U	1 U	1 U	2	2.5 U	4	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	0.15 J	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	0.21 J	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	0.18 J	1 U	0.13 J	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 UJ	5 U	6.5	5 U	5 U	5 U	5 U	1.4 J	1.4 J	1.8 J	5 U	1.9 J	5 UJ	5 U	5 U	5 U
2-Butanone (MEK)	5 U	5 U	2.1 J	5 U	5 U	5 U	5 U	5 UJ	12 U	0.55 J	5 U	5 UJ	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	12 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	12 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	1.2 J	3.1 UJ	2 U	9 U	1.2 UJ	1 UJ	1.1 UJ	2.1	7.7 U	7.9 U	2 U	0.95 J	4.7 U	1.8 UJ	1.3 UJ	2 U
Benzene	1 U	1 U	0.15 J	1 U	1 U	1 U	1 U	1 U	2.5 U	0.22 J	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	0.094 J	2 U	2 U	2 U	2 U	2 U	2 U	1.1 J	5 U	0.39 J	2 U	2 U	2 U	2 U	0.12 J	0.2 J
Carbon Tetrachloride	0.27 J	1 U	8.7	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorinated Fluorocarbon (Freon 113)	2.9	1 U	8.8 D	1 U	1 U	1 U	1 U	0.16 J	1.6 J	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	2.3	1 U	3.2	1 U	0.43 J	6.6	8.5	0.24 J	1.5 D	1 U	1 U	1 U	1 U	0.11 J	1 U	1 U
Chloromethane	2 U	2 U	0.11 J	2 UJ	2 UJ	2 UJ	2 UJ	2 U	5 U	0.2 J	2 U	2 U	0.12 J	2 U	2 UJ	2 UJ
cis-1,2-Dichloroethene	1.2	0.15 J	130 D	0.15 J	1 U	1 U	1 U	10	14 D	22	0.41 J	0.19 J	1 U	1.5	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	12 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	2 U	2 U	2 U	2 U	0.41 J	2 U	2 U	5 U	2 U	2 U	0.52 J	2 U	2 U	2 U	2 U
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	10 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	0.75 J	0.75 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1.4 UJ	0.67 UJ	1 U	1 U	1 U	0.75 J	1 U	1 U
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	0.14 J	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	130 D	5.9	94 D	8.9	1 U	0.23 J	3	160 D	250 D	26	0.63 J	0.57 J	1 U	5.5	1 U	1 U
Toluene	0.088 J	0.12 J	0.31 UJ	0.3 UJ	0.29 UJ	0.3 J	0.29 UJ	1 U	2.5 U	0.12 J	0.29 UJ	1 U	0.34 UJ	1 U	0.31 UJ	0.29 UJ
trans-1,2-Dichloroethene	1 U	1 U	0.57 J	1 U	1 U	1 U	1 U	1 U	2.5 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	110 D	1.7	660 D	1.1	1 U	1 U	0.52 J	18	78 D	17	3.4	1 U	1 U	4.6	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	2 U	0.31 J	2 U	2 U	2 U	2 U	0.47 J	5 U	1.9 J	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	MW-21D	MW-21I	MW-21S	MW-22D	MW-22I	MW-22S	MW-23D	MW-23I	MW-23S	MW-24DD	MW-24S	MW-25D	MW-25I	MW-25S	MW-26D	MW-26S	MW-27DD	MW-27D	MW-27S
Sample ID	MW-21D-R1N	MW-21I-R1N	MW-21S-R1N	MW-22D-R1N	MW-22I-R1N	MW-22S-R1N	MW-23D-R1N	MW-23I-R1N	MW-23S-R1N	MW-24DD-R1N	MW-24S-R1N	MW-25D-R1N	MW-25I-R1N	MW-25S-R1N	MW-26D-R1N	MW-26S-R1N	MW-27DD-R1N	MW-27D-R1N	MW-27S-R1N
Lab ID	F2F060449008	F2F060449004	F2F060449003	F2F130434011	F2F130434010	F2F090408007	F2F160407001	F2F160407002	F2F090408008	F2F220444002	F2F080482018	F2F060449012	F2F060449011	F2F060449013	F2F080482010	F2F080482012	F2F160407014	F2F160407015	F2F220444003
Sample Date	6/5/2012	6/4/2012	6/4/2012	6/11/2012	6/11/2012	6/8/2012	6/14/2012	6/14/2012	6/8/2012	6/20/2012	6/6/2012	6/5/2012	6/5/2012	6/5/2012	6/6/2012	6/6/2012	6/15/2012	6/15/2012	6/20/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive																			
Uranium	0.1 U	0.1 U	0.1 U	0.162	0.0612	9.08	0.79	5.72	11.2	0.1 U	34.4	0.1 U	0.1 U	10	0.813	8.26	0.1 U	6.55	1.78
Metal																			
Nickel	40 U	40 U	40 U	40 U	40 U	21.1 J	14.5 J	17.8 J	1780	40 U	84.1	40 U	40 U	17.5 J	40 U	372	40 U	77	57.2
VOCs																			
1,1,1-Trichloroethane	1 U	0.16 J	1 U	1 U	1 U	50 U	0.73 J	0.18 J	1 U	1.4	1 U	1 U	0.38 J	0.13 J	0.3 J	0.38 J	1.3	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	0.12 J	1 U	50 U	0.79 J	0.21 J	1 U	1.9	1 U	1 U	1 U	1 U	0.34 J	0.68 J	1.6	1 U	1 U
1,1-Dichloroethylene	1 U	1 U	1 U	1 U	1 U	50 U	0.48 J	0.13 J	1 U	1.2	1 U	1 U	1 U	1 U	0.2 J	0.45 J	0.93 J	1 U	1 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	1.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 U	2 U	2 U	1.4 UJ	0.94 UJ	100 U	0.52 UJ	2 U	2 U	0.82 UJ	0.78 UJ	2 U	2 U	2 U	1.2 UJ	1.4 UJ	0.85 UJ	1.7 UJ	0.51 J
Benzene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.25 J	1 U	1 U
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	1 U	1 U	3.3	3.4	50 U	0.35 J	0.17 J	1 U	0.14 J	1 U	1 U	1 U	0.16 J	1 U	1 U	0.14 J	5.5	1 U
Chloromethane	2 U	2 U	2 U	2 U	2 U	100 UJ	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	7.7 D	0.098 J	1 U	0.1 J	0.14 J	1 U	1 U	1 U	1 U	1 U	1 U	0.12 J	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	50 UJ	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	0.25 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	5 U	5 U	5 U	5 U	250 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	2 U	2 U	0.14 J	0.21 J	100 U	2 U	2 U	2 U	0.12 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	200 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	1 U	1 U	0.29 UJ	0.31 UJ	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.31 J	1 U	1 U	0.34 J	1 U
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1 U	1 U	1 U	1.6	1 U	6800 D	3.4	0.19 J	0.26 J	1.3	34	1 U	1 U	1 U	0.3 J	0.28 J	1	13	1.8
Toluene	1 U	1 U	1 U	0.3 UJ	0.3 UJ	14 D	1 U	1 U	0.29 UJ	1 U	0.29 UJ	1 U	1 U	1 U	0.29 UJ	0.29 UJ	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	42 D	2	0.41 J	1 U	6.2	0.28 J	1 U	1 U	1 U	0.74 J	0.29 J	5.6	0.54 J	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	MW-28D	MW-28I	MW-28S	MW-29S	MW-30D	MW-30I	MW-30S	MW-31D	MW-31I	MW-32D	MW-33D	MW-33S	MW-34D	MW-34S	MW-39S	MW-3	MW-41S	MW-42I	MW-43S
Sample ID	MW-28D-R1N	MW-28I-R1N	MW-28S-R1N	MW-29S-R1N	MW-30D-R1N	MW-30I-R1N	MW-30S-R1N	MW-31D-R1N	MW-31I-R1N	MW-32D-R1N	MW-33D-R1N	MW-33S-R1N	MW-34D-R1N	MW-34S-R1N	MW-39S-R1N	MW-3-R1N	MW-41S-R1N	MW-42I-R1N	MW-43S-R1N
Lab ID	F2F150421005	F2F080482032	F2F160407006	F2F230409001	F2F230409004	F2F080482011	F2F080482004	F2F230409006	F2F220444023	F2F130434021	F2F220444009	F2F230409007	F2F220444011	F2F220444012	F2F220444010	F2F060449001	F2F080482007	F2F090408016	F2F080482017
Sample Date	6/12/2012	6/7/2012	6/14/2012	6/21/2012	6/21/2012	6/6/2012	6/5/2012	6/21/2012	6/20/2012	6/12/2012	6/20/2012	6/21/2012	6/19/2012	6/19/2012	6/20/2012	6/4/2012	6/6/2012	6/8/2012	6/6/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive																			
Uranium	0.25	1.9	1.76	0.1 U	0.1 U	0.0551	0.1 U	0.19	0.1 U	0.1 U	0.0662	117	0.1 U	0.1 U	0.1 U	0.1 U	2140	184	271
Metal																			
Nickel	40 U	40 U	40 U	20.2 J	13.8 J	40 U	40 U	204	40 U	40 U	40 U	14.9 J	40 U	40 U	40 U	26.5 J	40 U	40 U	40 U
VOCs																			
1,1,1-Trichloroethane	1 U	0.13 J	1 U	1 U	0.1 J	16	1 U	0.13 J	0.55 J	1 U	1 U	1 U	0.5 J	1 U	0.41 J	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	0.43 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.069 J	0.19 J	0.089 J	1 U	0.14 J	0.71 J	1 U	0.11 J	0.6 J	1 U	1 U	1 U	1.2	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	1 U	0.14 J	1 U	1 U	0.12 J	13	1 U	1 U	0.41 J	1 U	1 U	1 U	0.47 J	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	0.21 J	2 U	0.19 J	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.19 J	0.14 J	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 UJ	5 U	5 UJ	5 U	5 U	2.3 J	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	0.37 J	2 U	2 U	2 U	2 U	1.5 UJ	1.7 UJ	2 U	2 U	0.44 UJ	2 U	2 U	1.1 J	0.98 J	2 U	2 U	1.8 UJ	1.4 UJ	1.7 UJ
Benzene	1 U	1 U	1 U	1 U	0.25 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	2.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	5.9	7.7	1.9	1 U	1 U	1 U	1 U	5.1	1 U	1.2	1 U	1 U	0.17 J	1 U	1 U	1 U	0.24 J	7.6	1 U
Chloromethane	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ
cis-1,2-Dichloroethene	1 U	0.47 J	1 U	0.19 J	0.13 J	1.1	1 U	0.12 J	1 U	1 U	0.37 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	0.25 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	0.8 J	2 U	2 U	2 U	0.16 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.27 J	2 U
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	0.7 J	1 U	1 U	1 U	1 U	0.3 J	0.44 J	1 U	1 U	1 U	0.34 J	1 U	0.31 J	0.32 J	1 U	1 U	0.32 J	1 U	1 U
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	6.1	0.47 J	36	110 J	2.1	0.3 J	0.46 J	36	0.68 J	14	65 J	580 J	2.7	1 U	90 J	28	5.6	1 U	180 D
Toluene	1 U	0.29 UJ	1 U	1 U	1 U	0.3 UJ	0.29 UJ	1 U	1 U	1 U	0.35 J	1 U	1 U	1 U	1 U	1 U	0.29 UJ	0.3 UJ	0.29 UJ
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	0.29 J	0.92 J	0.55 J	0.6 J	0.3 J	2.8	1 U	3.3	1	0.68 J	0.38 J	0.5 J	0.61 J	1 U	1 U	0.26 J	1 U	1 U	0.42 J
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	MW-44S	MW-49S	MW-4	MW-50I	MW-51I	MW-52D	MW-53S	MW-55S	MW-800-GW	MW-801-GW	MW-802-GW	MW-803-GW	MW-804-GW	MW-805-GW	MW-806-GW	MW-807-GW	MW-808-GW
Sample ID	MW-44S-R1N	MW-49S-R1N	MW-4-R1N	MW-50I-R1N	MW-51I-R1N	MW-52D-R1N	MW-53S-R1N	MW-55S-R1N	MW-800-GW-R1N	MW-801-GW-R1N	MW-802-GW-R1N	MW-803-GW-R1N	MW-804-GW-R1N	MW-805-GW-R1N	MW-806-GW-R1N	MW-807-GW-R1N	MW-808-GW-R1N
Lab ID	F2F090408009	F2F060449006	F2F060449016	F2F220444004	F2F220444021	F2F220444007	F2F220444005	F2F230409005	F2F060449005	F2F060449017	F2F060449020	F2F080482026	F2F090408014	F2F090408010	F2F130434002	F2F150421004	F2F130434022
Sample Date	6/8/2012	6/5/2012	6/5/2012	6/20/2012	6/20/2012	6/20/2012	6/20/2012	6/21/2012	6/4/2012	6/5/2012	6/5/2012	6/7/2012	6/8/2012	6/8/2012	6/11/2012	6/12/2012	6/12/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive																	
Uranium	32.4	0.534	0.1 U	11.1	0.1 U	0.1 U	31.5	0.1 UJ	0.1 U	0.1 U	0.1 U	475	0.1 U	0.0867 J	0.0725 J	0.25	0.1 U
Metal																	
Nickel	1310	40 U	40 U	348	32.8 J	40 U	15.8 J	40 U	40 U	503	40 U	40 U	40 U	40 U	16.5 J	40 U	40 U
VOCs																	
1,1,1-Trichloroethane	1 U	0.13 J	1 U	0.23 J	1 U	1 U	1 U	1 U	0.18 J	1 U	1 U	1 U	0.13 J	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	0.4 J	0.32 J	1 U	1 U	1 U	1 U	1 U	0.34 J	1 U	1 U	0.7 J	1 U	1 U	0.075 J	1 U
1,1-Dichloroethylene	1 U	1 U	0.18 J	0.25 J	1 U	1 U	1 U	1 U	0.11 J	0.15 J	0.13 J	1 U	0.2 J	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.9 J	5 U	1.6 J	5 UJ	5 UJ
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 U	2 U	2 U	2 U	2 U	1.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 UJ	1.6 UJ	0.46 J	0.44 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.18 J	2 U	2 U	2 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	8.3	1 U	1 U	1 U	5.8	1 U
Chloromethane	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U
cis-1,2-Dichloroethene	0.12 J	1 U	2.7	1 U	1 U	0.34 J	0.71 J	1 U	1 U	1.8	0.97 J	1 U	0.4 J	0.12 J	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.12 J	2 U	2 U	2 U	2 U
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	0.41 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 UJ	0.78 J	1 U
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	37	1 U	280 D	0.28 J	1.2	58 J	4100 J	1.1	1 U	1	0.42 J	2.8	0.63 J	0.19 J	1 U	6.4	24
Toluene	0.3 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.29 UJ	0.29 UJ	0.29 UJ	0.29 UJ	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	0.38 J	1 U	6.4	0.32 J	1 U	0.38 J	6.9	1 U	1 U	4	2.5	1 U	3.3	1 U	1 U	0.26 J	1.8
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	2 U	0.19 J	2 U	2 U	2 U	2 U	2 U	2 U	0.19 J	0.19 J	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	MW-809-GW	MW-810-GW	MW-811-GW	MW-812-GW	MW-813-GW	MW-814-GW	MW-815-GW	MW-816-GW	MW-817-GW	MW-818-GW	MW-8	MW-9	MWP-110-355	MWP-110-440	MW-P114-170
Sample ID	MW-809-GW-R1N	MW-810-GW-R1N	MW-811-GW-R1N	MW-812-GW-R1N	MW-813-GW-R1N	MW-814-GW-R1N	MW-815-GW-R1N	MW-816-GW-R1N	MW-817-GW-R1N	MW-818-GW-R1N	MW-8-R1N	MW-9-R1N	MWP-110-355-R1N	MWP-110-440-R1N	MW-P114-170-R1N
Lab ID	F2F150421015	F2F150421019	F2F160407010	F2F200416012	F2F200416018	F2F200416017	F2F220444016	F2F220444006	F2F230409008	F2F300409002	F2F060449015	F2F060449018	F2F080482030	F2F090408005	F2F080482014
Sample Date	6/13/2012	6/14/2012	6/15/2012	6/18/2012	6/19/2012	6/19/2012	6/19/2012	6/20/2012	6/21/2012	6/26/2012	6/5/2012	6/5/2012	6/7/2012	6/7/2012	6/6/2012
	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered
Radioactive															
Uranium	0.1 U	0.072 J	0.233	0.0606 J	0.1 U	0.1 U	0.1 U	0.1 U	0.107 J	0.084	0.1 U	0.1 U	0.179	0.132	1.41
Metal															
Nickel	26.7 J	40 U	40 U	40 U	40 U	73.3	40 U	15.7 J	40 U	40 U	507	40 U	40 U	40 U	40 U
VOCs															
1,1,1-Trichloroethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	0.43 J	1 U	1 U	3.5	5 U	2.5 U
1,1,2,2-Tetrachloroethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
1,1,2-Trichloroethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
1,1-Dichloroethane	1 U	0.12 J	2.5 U	1 U	0.13 J	5 U	0.23 J	1 U	1 U	1	0.51 J	1 U	1.9	5 U	3.7 D
1,1-Dichloroethylene	1 U	1 U	2.5 U	1 U	0.89 J	5.1 D	1 U	1 U	1 U	0.66 J	0.19 J	0.18 J	6.2	5 U	1.8 D
1,2,3-Trichlorobenzene	2 U	2 U	5 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U
1,2,4-Trichlorobenzene	5 U	5 U	12 U	5 U	0.57 J	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
1,2-Dibromoethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
1,2-Dichlorobenzene	1 U	1 U	2.5 U	1 U	120 D	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.3 D
1,2-Dichloroethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
1,2-Dichloropropane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.11 J	5 U	2.5 U
1,3-Dichlorobenzene	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
1,4-Dichlorobenzene	1 U	1 U	2.5 U	1 U	3.7	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
1,4-Dioxane	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U	1.6 J	5 U	5 U	5 U	5 U	5 U	14	5 U	4.5 J
2-Butanone (MEK)	5 U	5 U	12 U	5 U	5 U	25 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U
2-Hexanone	5 U	5 U	12 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	12 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U
Acetone	0.93 J	6 UJ	2.1 UJ	3.4 U	0.87 UJ	4.4 D	1.3 J	1.2 UJ	2 U	1.4 UJ	2 U	2 U	1.8 UJ	10 U	3.6 UJ
Benzene	1 U	0.14 J	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.3	5 U	0.48 D
Bromochloromethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Bromodichloromethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Bromoform	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Bromomethane	2 U	2 U	5 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U
Carbon Disulfide	2 U	0.9 J	5 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U
Carbon Tetrachloride	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	3.9	1.6 D	2.5 U
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	2.5 U	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	1 U	1 U	4.2	5 U	2.5 U
Chlorobenzene	2 U	2 U	5 U	2 U	3.4	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U
Chloroethane	2 U	2 U	5 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U
Chloroform	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	0.14 J	1 U	1 U	1.5	5 U	0.59 D
Chloromethane	2 U	2 U	5 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	10 UJ	5 UJ
cis-1,2-Dichloroethene	0.59 J	0.87 J	2.5 D	1 U	22	480 D	0.15 J	0.31 J	1 U	1 U	3.4	1.4	18	6.7 D	40 D
cis-1,3-Dichloropropene	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Cyclohexane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	2.5 U
Dibromochloromethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Dichlorodifluoromethane	2 U	2 U	5 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U
Ethylbenzene	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Isopropylbenzene	1 U	1 U	2.5 U	1 U	0.18 J	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Methyl Acetate	5 U	5 U	12 U	5 U	5 U	25 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	25 U	12 U
Methyl tert-butyl ether	2 U	2 U	5 U	2 U	0.44 J	1.2 D	0.48 J	2 U	2 U	2 U	2 U	2 U	2 U	10 U	1.2 D
Methylcylohexane	4 U	4 U	10 U	4 U	4 U	20 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	20 U	10 U
Methylene Chloride	0.64 J	1 U	0.88 D	0.76 UJ	1 U	2.1 D	1 U	0.43 J	1 U	1 U	1 U	1 U	1 U	1.4 UJ	1.4 UJ
m-Xylene & p-Xylene	2 U	2 U	5 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U
o-Xylene	1 U	1 U	2.5 U	1 U	0.25 J	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Styrene	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Tetrachloroethene	12	0.28 J	510 D	1 U	5.2	900 D	0.56 J	59 J	1.1	0.6 J	1.2	270 D	230 D	770 D	7.6 D
Toluene	1 U	0.12 J	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 UJ	1.5 UJ	0.76 UJ
trans-1,2-Dichloroethene	1 U	1 U	2.5 U	1 U	0.23 J	2.8 D	1 U	1 U	1 U	1 U	1 U	1 U	0.13 J	5 U	2.5 U
trans-1,3-Dichloropropene	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Trichloroethene	1 U	4.4	3.4 D	1 U	13	180 D	1 U	0.43 J	1 U	1 U	8.1	3.8	350 D	17 D	310 D
Trichlorofluoromethane	1 U	1 U	2.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U
Vinyl Chloride	2 U	2 U	5 U	2 U	13	34 D	2 U	2 U	2 U	2 U	0.27 J	0.22 J	2 U	10 U	0.87 D

Table 3.2-1 Complete Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Location ID	MW-P114-290
Sample ID	MW-P114-290-R1N
Lab ID	F2F080482021
Sample Date	6/6/2012
	Unfiltered
Radioactive	
Uranium	0.148
Metal	
Nickel	40 U
VOCs	
1,1,1-Trichloroethane	8.3
1,1,2,2-Tetrachloroethane	1 U
1,1,2-Trichloroethane	1 U
1,1-Dichloroethane	12
1,1-Dichloroethylene	15
1,2,3-Trichlorobenzene	2 U
1,2,4-Trichlorobenzene	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U
1,2-Dibromoethane	1 U
1,2-Dichlorobenzene	1 U
1,2-Dichloroethane	1 U
1,2-Dichloropropane	1 U
1,3-Dichlorobenzene	1 U
1,4-Dichlorobenzene	1 U
1,4-Dioxane	8.4
2-Butanone (MEK)	5 U
2-Hexanone	5 U
4-Methyl-2-Pentanone(MIBK)	5 U
Acetone	1.2 UJ
Benzene	1 U
Bromochloromethane	1 U
Bromodichloromethane	1 U
Bromoform	1 U
Bromomethane	2 U
Carbon Disulfide	2 U
Carbon Tetrachloride	1 U
Chlorinated Fluorocarbon (Freon 113)	1 U
Chlorobenzene	2 U
Chloroethane	2 U
Chloroform	1.4
Chloromethane	2 UJ
cis-1,2-Dichloroethene	14
cis-1,3-Dichloropropene	1 U
Cyclohexane	1 U
Dibromochloromethane	1 U
Dichlorodifluoromethane	2 U
Ethylbenzene	1 U
Isopropylbenzene	1 U
Methyl Acetate	5 U
Methyl tert-butyl ether	0.24 J
Methylcylohexane	4 U
Methylene Chloride	1 U
m-Xylene & p-Xylene	2 U
o-Xylene	1 U
Styrene	1 U
Tetrachloroethene	10
Toluene	0.29 UJ
trans-1,2-Dichloroethene	0.14 J
trans-1,3-Dichloropropene	1 U
Trichloroethene	54 D
Trichlorofluoromethane	1 U
Vinyl Chloride	0.11 J

Table 3.2-2 Complete Trip Blank and Rinsate Blank Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Sample ID	RB-01-R1N	RB02-R1N	RB-03-R1N	RB-04-R1N	RB-05-R1N	S-1-325-R1N	S-1-450-R1N	TB-03-R1N	TB-06-R1N	TB-07-R1N	TB-08-R1N	TB-09-R1N	TB-10-R1N	TB20120604	TB20120607
Lab ID	F2F080482016	F2F130434003	F2F150421018	F2F200416021	F2F220444020	F2F200416009	F2F200416008	F2F090408017	F2F160407016	F2F200416023	F2F220444026	F2F230409011	F2F300409012	F2F060449007	F2F080482033
Sample Date	6/6/2012	6/11/2012	6/14/2012	6/19/2012	6/20/2012	6/18/2012	6/18/2012	6/8/2012	6/15/2012	6/19/2012	6/21/2012	6/22/2012	6/29/2012	6/6/2012	6/7/2012
Metal															
Nickel	40 U	40 U	40 U	40 U	40 U	68.4	21.2 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOCs															
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	0.97 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	0.35 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	1 U	1 U	1 U	1 U	1 U	1	0.5 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	2 U	2 U	0.19 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	0.11 J	5 U	5 U	5 U	5 U	0.13 J	5 U	5 U	5 U	5 U	5 U	5 U
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	1.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	1.5 J	1.6 J	1.2 J	0.84 J	1.2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone(MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	7.4	7.7 J	8.5	7.4	10	2.1	2.2	1.8 J	1.4 J	1.1 J	1 J	1.3 J	1 J	2 U	1.5 J
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	2.3	3.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorinated Fluorocarbon (Freon 113)	1 U	1 U	1 U	1 U	1 U	1 U	0.95 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.19 J	0.19 J	0.13 J	0.14 J	0.13 J	0.15 J	2 U	2 U
Chloroform	1 U	1 U	1 U	1 U	1 U	0.32 J	0.43 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.55 J	13	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methylcylohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	0.67 J	0.49 J	0.35 J	0.34 J	0.39 J	0.7 J	0.61 J	0.32 J	1 U	1 U	0.31 J	1 U	0.27 J	1 U	1 U
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	13	180 D	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	0.35 J	0.43 J	0.25 J	0.31 J	0.28 J	1 U	1 U	0.32 J	1 U	1 U	1 U	1 U	1 U	1 U	0.33 J
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	0.1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	19	120 D	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Table 3.2-2 Complete Trip Blank and Rinsate Blank Results for Monitoring Well Sampling (Round 1), Sylvania Corning FUSRAP Site

Sample ID	TB20120612	TB20120614
Lab ID	F2F130434017	F2F150421025
Sample Date	6/12/2012	6/14/2012
Metal		
Nickel	N/A	N/A
VOCs		
1,1,1-Trichloroethane	1 U	N/A
1,1,2,2-Tetrachloroethane	1 U	N/A
1,1,2-Trichloroethane	1 U	N/A
1,1-Dichloroethane	1 U	N/A
1,1-Dichloroethylene	1 U	N/A
1,2,3-Trichlorobenzene	2 U	N/A
1,2,4-Trichlorobenzene	5 U	N/A
1,2-dibromo-3-Chloropropane (Dbcp)	1 U	N/A
1,2-Dibromoethane	1 U	N/A
1,2-Dichlorobenzene	1 U	N/A
1,2-Dichloroethane	1 U	N/A
1,2-Dichloropropane	1 U	N/A
1,3-Dichlorobenzene	1 U	N/A
1,4-Dichlorobenzene	1 U	N/A
1,4-Dioxane	5 U	5 U
2-Butanone (MEK)	5 U	N/A
2-Hexanone	5 U	N/A
4-Methyl-2-Pentanone(MIBK)	5 U	N/A
Acetone	1.6 J	N/A
Benzene	1 U	N/A
Bromochloromethane	1 U	N/A
Bromodichloromethane	1 U	N/A
Bromoform	1 U	N/A
Bromomethane	2 U	N/A
Carbon Disulfide	2 U	N/A
Carbon Tetrachloride	1 U	N/A
Chlorinated Fluorocarbon (Freon 113)	1 U	N/A
Chlorobenzene	2 U	N/A
Chloroethane	0.14 J	N/A
Chloroform	1 U	N/A
Chloromethane	2 U	N/A
cis-1,2-Dichloroethene	1 U	N/A
cis-1,3-Dichloropropene	1 U	N/A
Cyclohexane	1 U	N/A
Dibromochloromethane	1 U	N/A
Dichlorodifluoromethane	2 U	N/A
Ethylbenzene	1 U	N/A
Isopropylbenzene	1 U	N/A
Methyl Acetate	5 U	N/A
Methyl tert-butyl ether	2 U	N/A
Methylcylohexane	4 U	N/A
Methylene Chloride	0.31 J	N/A
m-Xylene & p-Xylene	2 U	N/A
o-Xylene	1 U	N/A
Styrene	1 U	N/A
Tetrachloroethene	1 U	N/A
Toluene	0.33 J	N/A
trans-1,2-Dichloroethene	1 U	N/A
trans-1,3-Dichloropropene	1 U	N/A
Trichloroethene	1 U	N/A
Trichlorofluoromethane	1 U	N/A
Vinyl Chloride	2 U	N/A

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4 System Audits

Audits were scheduled for the sampling phase for this project. Audits are summarized in Table 4-1 and included in Appendix C.

Table 4-1 Summary of System Audits

Audit Dates	Company	Scope of Audit and Summary of Findings
10/25/2011	E & E	Health and Safety Audit during the installation and soil sampling of MW203 and the sampling of MW212. At the time of the audit, the daily health and safety meeting had occurred but the acknowledgement form had not been signed by the field staff.
10/25/2011	E & E	Field audit of the Offsite Groundwater Characterization, rotosonic drilling and vertical profiling, was completed. Minor deviations from the WP were noted and corrected. Field team leader completed field adjustment forms to document deviations from the WP. Field logbooks and instrument calibration logs were reviewed for past field activities. Field team was instructed to document decontamination procedures in the logbook. The work plan and QAPP did not clearly distinguish procedures for sample handling for vertical profile versus regular well samples.
6/18/2012	LBG	Field audit of the Offsite Groundwater Characterization, groundwater sampling, was completed. Minor deviations from the WP were noted and corrected. Field team leader completed field adjustment forms to document deviations from the WP. Field logbooks and instrument calibration logs were reviewed for field activities.

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5 Data Completeness and QA/QC Problems

This section summarizes the degree to which the analytical systems met or failed the data quality objectives (DQOs) listed in the QAPP. A discussion is provided for each phase of fieldwork.

5.1 Phase I Data Completeness

5.1.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.1-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.1. Data points that were qualified as estimated are considered usable for the purposes of this project. A total of 100% of the data are usable. The completeness goals for the project were met based on this percentage.

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	R	Total	Rejected
Water	SW6010C	90	125	106	65	0	386	0%
	SW8260C	1780	216	18390	947	0	21333	0%
	ASTM D5174	20	1	35	3	0	59	0%
Totals		**1890**	**342**	**18531**	**1015**	**0**	**21778**	**0%**

5.1.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Field duplicate sample precision for a minority of the analytes was not within QC criteria. Field duplicate sampling procedures does not appear to be a concern.

- The laboratory did not spike the full list of compounds into all MS/MSD pairs, however all Compounds of Concern were spiked and did not indicate any problems with the analysis.

- Calibration %D was exceeded for many analytes. Since calibration information was not provided by the laboratory, any compound qualified with a "C" by the laboratory is considered estimated and qualified "J".

5.2 Groundwater Data Completeness

5.2.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.2-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.2. Data points that were qualified as estimated are considered usable for the purposes of this project. No sample results were rejected and 100% of the data are useable. The completeness goals for the project were met based on this percentage.

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	Total	Rejected
Water	6010B	24	24	153		201	0.0%
	8260B	1,016	942	8,696	370	11,024	0.0%
	ASTM D5174	105	7	86	3	201	0.0%
Totals		**1,145**	**973**	**8,935**	**373**	**11,426**	**0.0%**

5.2.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures except for the concentration of 2-butanone, acetone, methylene chloride, toluene, and 1,2,3-trichlorobenzene were found in the some of the rinsate blanks. The recommended changes to procedures are as follows:

- Source water for equipment rinsates should be obtained from a verifiable source.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Some matrix effects were noted for 1,1,2-trichloro-1,2,2-trifluoroethane, cyclohexane, and acetone in the MS/MSD. There are no recommended changes for problems based on sample matrix.

- Acetone, methylene chloride, 2-butanone, and toluene were consistently detected in the method blank samples were consistently detected in the laboratory method blanks at concentrations above the MDL but below the reporting

limit. Toluene is not considered a common laboratory contaminant. Concentrations detected in the field samples were consistent with the method blank levels. None of the affected levels were above the PQL, and therefore should not impact data usability significantly.

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6 References

The Louis Berger Group, Inc. (LBG), 2011, Work Plan, Health and Safety Plan, and Quality Assurance Project Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

The Louis Berger Group, Inc. (LBG), 2011, Quality Control Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

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A Data Review Memoranda and Data Usablity Summary Reports

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DATA REVIEW MEMORANDUM

DATE: October 15, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Bryan Kroon, Chemist, E & E, Buffalo

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1108155
	1108163
	1108171
	1108184
	1108191
	1108192
	1108193
	1109008

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1108155	GW	MW-214-VP01	1108155-01A & B	8/22/2011			None
1108155	GW	MW-214-VP03	1108155-02A & B	8/22/2011			None
1108155	GW	MW-214-VP05	1108155-03A & B	8/22/2011			None
1108155	GW	MW-214-VP07	1108155-04A & B	8/22/2011			None
1108155	GW	MW-214-VP905	1108155-05A & B	8/22/2011			None
1108155	GW	MW-214-VP10	1108155-06A & B	8/22/2011			None
1108163	GW	MW-214-VP14	1108163-01A & B	8/23/2011			None
1108163	GW	MW-214-VP15	1108163-02A & B	8/23/2011			None
1108163	GW	MW-214-VP17	1108163-03A & B	8/23/2011	MS/MSD	*	None
1108163	GW	MW-214-VP19	1108163-06A & B	8/23/2011			None
1108163	GW	MW-214-VP21	1108163-07A & B	8/23/2011			None
1108163	GW	MW-214-VP906	1108163-08A & B	8/23/2011			None
1108163	GW	MW-214-VP24	1108163-09A & B	8/23/2011			None
1108163	GW	MW-214-VP12	1108163-10A & B	8/22/2011			None
1108171	GW	MW-214-VP25	1108171-01A & B	8/24/2011			None
1108171	GW	MW-214-VP27	1108171-02A & B	8/24/2011			None
1108171	GW	MW-214-VP29	1108171-03A & B	8/24/2011			None
1108171	GW	MW-214-VP31	1108171-04A & B	8/24/2011			None
1108184	GW	MW-214-VP33	1108184-01A & B	8/24/2011			None
1108184	GW	MW-214-VP35	1108184-02A & B	8/24/2011	MS/MSD	*	None
1108191	GW	MW-214-VP37	1108191-01A & B	8/26/2011			None
1108191	GW	MW-214-VP39	1108191-02A & B	8/26/2011			None
1108192	GW	MW-214-VP47	1108192-01A & B	8/30/2011			None
1108193	GW	MW-214-VP41	1108193-01A & B	8/30/2011			None
1108193	GW	MW-214-VP43	1108193-02A & B	8/30/2011			None
1108193	GW	MW-214-VP907	1108193-03A & B	8/30/2011			None
1108193	GW	MW-214-VP45	1108193-04A & B	8/30/2011			None
1108193	WQ	RB-03	1108193-05A & B	8/30/2011	MS/MSD	*	None
1109008	GW	MW-214-VP50	1109008-01A & B	9/1/2011			None
1109008	GW	MW-214-VP51	1109008-02A & B	9/1/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time except for those listed on the table below.

Method	Sample ID	Sample Date	Matrix	Sample Date	Sample Type	Prep HT	Prep Date	AnalHT	Analysis Date	Sample Qual
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the blanks except for methylene chloride, benzene, and chloroform as noted on Table 2. Results associated with these method blanks should be qualified “U” as not detected as noted in Table 2A.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged “J” as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved. The samples listed in the table below were analyzed at dilutions with elevated PQLs reported.

ClientSampID	TestNo
NA	NA

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 3 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	PQL
SW8260C	VBLK-082411aYW	MB	Methylene Chloride	8.0		A	ug/L	1.0
SW8260C	VBLK-082411aYW	MB	Methylene Chloride	7.7		A	ug/L	1.0
SW8260C	VBLK-082511HS	MB	Methylene Chloride	4.4		A	ug/L	1.0
SW8260C	VBLK-082511YW	MB	Methylene Chloride	5.2		A	ug/L	1.0
SW8260C	VBLK-082511YW	MB	Methylene Chloride	6.4		A	ug/L	1.0
SW8260C	VBLK-082611YW	MB	Methylene Chloride	9.2		A	ug/L	1.0
SW8260C	VBLK-082611YW	MB	Methylene Chloride	6.9		A	ug/L	1.0
SW8260C	VBLK-083111LW	MB	Methylene Chloride	9.7		A	ug/L	1.0
SW8260C	VBLK-083011LW	MB	Methylene Chloride	9.4		A	ug/L	1.0
SW8260C	VBLK-083111LW	MB	Methylene Chloride	9.7		A	ug/L	1.0
SW8260C	RB-03	RB	Benzene	0.86	J	A	ug/L	1.0
SW8260C	RB-03	RB	Chloroform	1.0		A	ug/L	1.0
SW8260C	VBLK-090211LW	MB	Methylene Chloride	7.7		A	ug/L	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	VBLK-082511HS	WG	Methylene Chloride	4.4	6.1	B	1.0	MW-214-VP01	U FLAG
SW8260C	VBLK-082511HS	WG	Methylene Chloride	4.4	7.0	B	1.0	MW-214-VP03	U FLAG
SW8260C	VBLK-082511HS	WG	Methylene Chloride	4.4	8.6	B	1.0	MW-214-VP05	U FLAG
SW8260C	VBLK-082511HS	WG	Methylene Chloride	4.4	6.2	B	1.0	MW-214-VP07	U FLAG
SW8260C	VBLK-082511HS	WG	Methylene Chloride	4.4	6.0	B	1.0	MW-214-VP10	U FLAG

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	VBLK-082511HS	WG	Methylene Chloride	4.4	8.9	B	1.0	MW-214-VP905	U FLAG
SW8260C	VBLK-082411aYW	WG	Methylene Chloride	7.7	6.5	B	1.0	MW-214-VP12	U FLAG
SW8260C	VBLK-082411aYW	WG	Methylene Chloride	7.7	8.1	B	1.0	MW-214-VP14	U FLAG
SW8260C	VBLK-082411aYW	WG	Methylene Chloride	7.7	6.8	B	1.0	MW-214-VP15	U FLAG
SW8260C	VBLK-082411aYW	WG	Methylene Chloride	7.7	8.2	B	1.0	MW-214-VP17	U FLAG
SW8260C	VBLK-082411aYW	WG	Methylene Chloride	7.7	6.1	B	1.0	MW-214-VP19	U FLAG
SW8260C	VBLK-082411aYW	WG	Methylene Chloride	7.7	8.6	B	1.0	MW-214-VP21	U FLAG
SW8260C	VBLK-082411aYW	WG	Methylene Chloride	7.7	5.9	B	1.0	MW-214-VP24	U FLAG
SW8260C	VBLK-082411aYW	WG	Methylene Chloride	7.7	6.8	B	1.0	MW-214-VP906	U FLAG
SW8260C	VBLK-082511YW	WG	Methylene Chloride	6.4	5.9	B	1.0	MW-214-VP25	U FLAG
SW8260C	VBLK-082511YW	WG	Methylene Chloride	6.4	7.6	B	1.0	MW-214-VP27	U FLAG
SW8260C	VBLK-082511YW	WG	Methylene Chloride	6.4	7.1	B	1.0	MW-214-VP29	U FLAG
SW8260C	VBLK-082511YW	WG	Methylene Chloride	6.4	6.8	B	1.0	MW-214-VP31	U FLAG
SW8260C	VBLK-082611YW	WG	Methylene Chloride	6.9	7.0	B	1.0	MW-214-VP33	U FLAG
SW8260C	VBLK-082611YW	WG	Methylene Chloride	6.9	4.2	B	1.0	MW-214-VP35	U FLAG
SW8260C	VBLK-083011LW	WG	Methylene Chloride	9.4	5.2	B	1.0	MW-214-VP37	U FLAG
SW8260C	VBLK-083011LW	WG	Methylene Chloride	9.4	6.2	B	1.0	MW-214-VP39	U FLAG
SW8260C	VBLK-083111LW	WG	Methylene Chloride	9.7	6.9	B	1.0	MW-214-VP47	U FLAG
SW8260C	VBLK-083111LW	WG	Methylene Chloride	9.7	6.4	B	1.0	MW-214-VP41	U FLAG
SW8260C	VBLK-083111LW	WG	Methylene Chloride	9.7	8.4	B	1.0	MW-214-VP43	U FLAG
SW8260C	VBLK-083111LW	WG	Methylene Chloride	9.7	7.7	B	1.0	MW-214-VP45	U FLAG
SW8260C	VBLK-083111LW	WG	Methylene Chloride	9.7	8.1	B	1.0	MW-214-VP907	U FLAG
SW8260C	VBLK-083111LW	WG	Methylene Chloride	9.7	5.7	B	1.0	RB-03	U FLAG
SW8260C	VBLK-090211LW	WG	Methylene Chloride	7.7	4.4	B	1.0	MW-214-VP50	U FLAG
SW8260C	VBLK-090211LW	WG	Methylene Chloride	7.7	5.5	B	1.0	MW-214-VP51	U FLAG

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	RB-03	WG	Benzene	0.86	3.5		1.0	MW-214-VP51	U FLAG
SW8260C	RB-03	WG	Benzene	0.86	3.2		1.0	MW-214-VP33	U FLAG
SW8260C	RB-03	WG	Benzene	0.86	0.81	J	1.0	MW-214-VP37	U FLAG
SW8260C	RB-03	WG	Benzene	0.86	0.51	J	1.0	MW-214-VP39	U FLAG

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec.	Low Limit	High Limit	Dil Fac	Sample Qual.
NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8260C	MW-214-VP17	MSD	Bromomethane	61.6	20	None
SW8260C	MW-214-VP17	MSD	Choromethane	54.5	20	None
SW8260C	MW-214-VP35	MSD	Bromomethane	25.6	20	None
SW8260C	MW-214-VP35	MSD	Chloroethane	29.5	20	None
SW8260C	MW-214-VP35	MSD	Chloromethane	58.6	20	None
SW8260C	MW-214-VP35	MSD	Methylene Chloride	34.7	20	None

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8260C	MW-214-VP35	MSD	trans-1,2-Dichloroethene	26.8	20	None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	MW-214-VP07	MW-214-VP905	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	35.0	29.0	18.8	Good	None

Method	Analyte	Unit	MW-214-VP21	MW-214-VP906	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	8.00	10.0	22.2	Good	None
SW8260C	Trichloroethene	ug/L	3.2	3.2	0.0	Good	None

Method	Analyte	Unit	MW-214-VP43	MW-214-VP907	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	6.00	9.00	40.0	Poor	J Flag
SW8260C	Tetrachloroethene	ug/L	15	14	6.9	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: 10/15/2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Bryan Kroon, Chemist, E & E, Buffalo

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1106200
	1107014
	1107020
	1107043
	1107052
	1107068
	1107069
	1107079
	1107094
	1107097

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
1106200	WG	MW-213-VP01	1106200-01A & B	6/30/2011			None
1106200	WG	MW-213-VP03	1106200-02A & B	6/30/2011			None
1106200	WG	MW-213-VP05	1106200-03A & B	6/30/2011			None
1106200	WG	MW-213-VP07	1106200-04A & B	6/30/2011			None
1107014	WG	MW-213-VP11	1107014-01A & B	7/6/2011			None
1107014	WG	MW-213-VP13	1107014-02A & B	7/6/2011			None
1107014	WG	MW-213-VP900	1107014-03A & B	7/6/2011			None
1107014	WQ	RB-01	1107014-04A & B	7/6/2011			None
1107014	WQ	DW-01	1107014-05A & B	7/6/2011			None
1107020	WG	MW-213-VP15	1107020-01A &B	7/7/2011	MS/MSD	*	None
1107020	WG	MW-213-VP17	1107020-04A & B	7/7/2011			None
1107020	WG	MW-213-VP19	1107020-05A & B	7/7/2011			None
1107020	WG	MW-213-VP21	1107020-06A & B	7/7/2011			None
1107043	WG	MW-213-VP23	1107043-01A & B	7/9/2011			None
1107043	WG	MW-213-VP25	1107043-02A & B	7/9/2011			None
1107043	WG	MW-213-VP901	1107043-03A & B	7/9/2011			None
1107043	WG	MW-213-VP27	1107043-04A & B	7/9/2011			None
1107043	WG	MW-213-VP29	1107043-05A	7/9/2011			None
1107043	WG	MW-213-VP31	1107043-06A & B	7/11/2011			None
1107043	WG	MW-213-VP32	1107043-07A & B	7/11/2011	MS/MSD	*	None
1107052	WG	MW-213-VP35	1107052-01A & B	07/12/2011			None
1107052	WG	MW-213-VP37	1107052-02A & B	07/12/2011			None
1107052	WG	MW-213-VP39	1107052-03A & B	07/12/2011			None
1107052	WG	MW-213-VP41	1107052-04A & B	07/12/2011			None
1107068	WG	MW-213-VP45	1107068-01A&B	7/13/2011			None
1107069	WG	MW-213-VP43	1107069-01A & B	7/13/2011			None
1107069	WG	MW-213-VP902	1107069-02A & B	7/13/2011			None
1107079	WG	MW-213-VP47	1107079-01A & B	7/14/2011			None
1107079	WG	MW-213-VP49	1107079-02A & B	7/14/2011			None
1107094	WG	MW-213-VP52	1107094-01A & B	7/18/2011			None
1107094	WG	MW-213-VP54	1107094-02A & B	7/18/2011			None
1107097	WG	MW-213-VP55	1107097-01A & B	7/18/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for XXXXX as noted on Table 2A. Results associated with these method blanks should be qualified "U" as not detected.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar

results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved. The samples listed in the table below were analyzed at dilutions with elevated PQLs reported.

None

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were performed on three sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	PQL
SW8260C	VBLK-070111LW	MB	Methylene Chloride	7.8		A	ug/L	1.0
SW8260C	RB-01	RB	Benzene	2.0		A	ug/L	1.0
SW8260C	RB-01	RB	Chloroform	1.5		A	ug/L	1.0
SW8260C	RB-01	RB	Toluene	1.4		A	ug/L	1.0
SW8260C	DW-01	DW	Bromoform	2.4		A	ug/L	1.0
SW8260C	DW-01	DW	Dibromochloromethane	0.73	J	A	ug/L	1.0
SW8260C	VBLK-070711HS	MB	Methylene Chloride	6.2		A	ug/L	1.0
SW8260C	VBLK-071111HS	MB	Methylene Chloride	5.0		A	ug/L	1.0
SW8260C	VBLK-071211aHS	MB	Methylene Chloride	8.4		A	ug/L	1.0
SW8260C	VBLK-071311YW	MB	Methylene Chloride	12		A	ug/L	1.0
SW8260C	VBLK-071411YW	MB	Methylene Chloride	7.0		A	ug/L	1.0
SW8260C	VBLK-071411YW	MB	Methylene Chloride	7.9		A	ug/L	1.0
SW8260C	VBLK-071311aYW	MB	Methylene Chloride	7.1		A	ug/L	1.0
SW8260C	VBLK-071411YW	MB	Methylene Chloride	7.0		A	ug/L	1.0
SW8260C	VBLK-071411LW	MB	Methylene Chloride	9.3		A	ug/L	1.0
SW8260C	VBLK-071811LW	MB	Methylene Chloride	7.5		A	ug/L	1.0
SW8260C	VBLK-071911HS	MB	Methylene Chloride	6.4		A	ug/L	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	VBLK-070111LW	WG	Methylene Chloride	7.8	7.1	B	1.0	MW-213-VP01	U FLAG
SW8260C	VBLK-070111LW	WG	Methylene Chloride	7.8	9.6	B	1.0	MW-213-VP03	U FLAG
SW8260C	VBLK-070111LW	WG	Methylene Chloride	7.8	9.5	B	1.0	MW-213-VP05	U FLAG
SW8260C	VBLK-070111LW	WG	Methylene Chloride	7.8	8.4	B	1.0	MW-213-VP07	U FLAG
SW8260C	VBLK-070711HS	WG	Methylene Chloride	6.2	6.0	B	1.0	DW-01	U FLAG
SW8260C	VBLK-070711HS	WG	Methylene Chloride	6.2	4.8	B	1.0	MW-213-VP11	U FLAG
SW8260C	VBLK-070711HS	WG	Methylene Chloride	6.2	5.8	B	1.0	MW-213-VP13	U FLAG
SW8260C	VBLK-070711HS	WG	Methylene Chloride	6.2	6.2	B	1.0	MW-213-VP900	U FLAG
SW8260C	VBLK-070711HS	WG	Methylene Chloride	6.2	5.8	B	1.0	RB-01	U FLAG
SW8260C	VBLK-071111HS	WG	Methylene Chloride	5.0	7.9	B	1.0	MW-213-VP15	U FLAG
SW8260C	VBLK-071111HS	WG	Methylene Chloride	5.0	8.3	B	1.0	MW-213-VP17	U FLAG
SW8260C	VBLK-071111HS	WG	Methylene Chloride	5.0	7.5	B	1.0	MW-213-VP19	U FLAG
SW8260C	VBLK-071111HS	WG	Methylene Chloride	5.0	7.0	B	1.0	MW-213-VP21	U FLAG
SW8260C	VBLK-071211aHS	WG	Methylene Chloride	8.4	9.2	B	1.0	MW-213-VP23	U FLAG
SW8260C	VBLK-071211aHS	WG	Methylene Chloride	8.4	6.1	B	1.0	MW-213-VP25	U FLAG
SW8260C	VBLK-071211aHS	WG	Methylene Chloride	8.4	8.7	B	1.0	MW-213-VP27	U FLAG
SW8260C	VBLK-071211aHS	WG	Methylene Chloride	8.4	6.2	B	1.0	MW-213-VP29	U FLAG
SW8260C	VBLK-071211aHS	WG	Methylene Chloride	8.4	7.8	B	1.0	MW-213-VP31	U FLAG
SW8260C	VBLK-071211aHS	WG	Methylene Chloride	8.4	4.7	B	1.0	MW-213-VP32	U FLAG
SW8260C	VBLK-071211aHS	WG	Methylene Chloride	8.4	12	B	1.0	MW-213-VP901	U FLAG
SW8260C	VBLK-071311YW	WG	Methylene Chloride	12	6.4	B	1.0	MW-213-VP35	U FLAG
SW8260C	VBLK-071311YW	WG	Methylene Chloride	12	10	B	1.0	MW-213-VP37	U FLAG
SW8260C	VBLK-071311YW	WG	Methylene Chloride	12	9.8	B	1.0	MW-213-VP39	U FLAG
SW8260C	VBLK-071311YW	WG	Methylene Chloride	12	12	B	1.0	MW-213-VP41	U FLAG
SW8260C	VBLK-071311aYW	WG	Methylene Chloride	7.1	4.9	B	1.0	MW-213-VP45	U FLAG

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	VBLK-071411YW	WG	Methylene Chloride	7.0	5.0	B	1.0	MW-213-VP43	U FLAG
SW8260C	VBLK-071411YW	WG	Methylene Chloride	7.0	5.3	B	1.0	MW-213-VP902	U FLAG
SW8260C	VBLK-071411LW	WG	Methylene Chloride	9.3	7.7	B	1.0	MW-213-VP47	U FLAG
SW8260C	VBLK-071411LW	WG	Methylene Chloride	9.3	5.5	B	1.0	MW-213-VP49	U FLAG
SW8260C	VBLK-071811LW	WG	Methylene Chloride	7.5	7.6	B	1.0	MW-213-VP52	U FLAG
SW8260C	VBLK-071811LW	WG	Methylene Chloride	7.5	9.8	B	1.0	MW-213-VP-54	U FLAG
SW8260C	VBLK-071911HS	WG	Methylene Chloride	6.4	6.5	B	1.0	MW-213-VP55	U FLAG

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	RB-01	WG	Toluene	1.4	1.2		1.0	MW-213-VP11	U FLAG
SW8260C	RB-01	WG	Benzene	2.0	3.3		1.0	MW-213-VP13	U FLAG
SW8260C	RB-01	WG	Toluene	1.4	3.5		1.0	MW-213-VP13	U FLAG
SW8260C	RB-01	WG	Benzene	2.0	3.5		1.0	MW-213-VP900	U FLAG
SW8260C	RB-01	WG	Toluene	1.4	3.8		1.0	MW-213-VP900	U FLAG
SW8260C	RB-01	WG	Toluene	1.4	0.69		1.0	MW-213-VP17	U FLAG
SW8260C	RB-01	WG	Toluene	1.4	0.62		1.0	MW-213-VP21	U FLAG
SW8260C	RB-01	WG	Chloroform	1.5	0.67	J	1.0	MW-213-VP31	U FLAG
SW8260C	RB-01	WG	Chloroform	1.5	1.4		1.0	MW-213-VP32	U FLAG
SW8260C	RB-01	WG	Chloroform	1.5	1.6		1.0	MW-213-VP35	U FLAG
SW8260C	RB-01	WG	Chloroform	1.5	0.64	J	1.0	MW-213-VP37	U FLAG

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	MW-213-VP13	MW-213-VP900	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	29.0	36.0	21.5	Good	None

Method	Analyte	Unit	MW-213-VP25	MW-213-VP901	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	42.0	45.0	6.9	Good	None
SW8260C	Trichloroethene	ug/L	5.1	4.9	4.0	Good	None

Method	Analyte	Unit	MW-213-VP43	MW-213-VP902	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	7.00	9.00	25	Good	None
SW8260C	cis-1,2-	ug/L	0.61	0.56	8.5	Good	None

Method	Analyte	Unit	MW-213-VP43	MW-213-VP902	RPD	RPD Rating	Qualifier
	Dichloroethene						
SW8260C	Tetrachloroethene	ug/L	80	78	2.5	Good	None
SW8260C	Trichloroethene	ug/L	1.6	1.7	6.1	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 15, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Bryan Kroon, Chemist, E & E, Buffalo

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1110093
	1110125
	1110126
	1110136
	1110143
	1110150
	1110166
	1110170
	1110171
	1110173

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
1110093	WG	MW-212-VP02	1110093-01A & B	10/11/2011			None
1110093	WG	MW-212-VP03	1110093-03A & B	10/11/2011			None
1110093	WG	MW-212-VP05	1110093-05A & B	10/11/2011			None
1110093	WG	MW-212-VP07	1110093-07A & B	10/11/2011			None
1110093	WG	MW-212-VP09	1110093-09A & B	10/11/2011			None
1110093	WG	MW-212-VP11	1110093-10A & B	10/11/2011	MS/MSD	*	None
1110093	WG	MW-212-VP13	1110093-13A & B	10/11/2011			None
1110093	WG	MW-212-VP15	1110093-14A & B	10/11/2011			None
1110093	WG	MW-212-VP17	1110093-15A & B	10/11/2011			None
1110093	WG	MW-212-VP19	1110093-16A & B	10/12/2011			None
1110093	WG	MW-212-VP22	1110093-17A & B	10/12/2011			None
1110093	WG	MW-212-VP913	1110093-06A & B	10/11/2011			None
1110093	WG	MW-212-VP914	1110093-02A & B	10/11/2011			None
1110093	WG	MW-212-VP915	1110093-04A & B	10/11/2011			None
1110093	WG	MW-212-VP916	1110093-08A & B	10/11/2011			None
1110125	WG	RB-08	1110125-01A & B	10/17/2011			None
1110125	WG	MW-212-VP23	1110125-02A & B	10/17/2011			None
1110125	WG	MW-212-VP25	1110125-03A & B	10/17/2011			None
1110125	WG	MW-212-VP27	1110125-04A & B	10/17/2011			None
1110125	WG	MW-212-VP29	1110125-05A & B	10/17/2011			None
1110126	WG	MW-212-VP31	1110126-01A & B	10/17/2011			None
1110126	WG	MW-212-VP34	1110126-02A & B	10/18/2011			None
1110126	WG	MW-212-VP35	1110126-03A & B	10/18/2011			None
1110126	WG	MW-212-VP917	1110126-04A & B	10/18/2011			None
1110136	WG	MW-212-VP37	1110136-01A & B	10/18/2011			None
1110136	WG	MW-212-VP39	1110136-02A & B	10/19/2011			None
1110136	WG	MW-212-VP41	1110136-03A & B	10/19/2011			None
1110136	WG	MW-212-VP43	1110136-04A & B	10/19/2011	MS/MSD Ni Only	*	None
1110143	WG	MW-212-VP45	1110143-01A & B	10/20/2011			None
1110150	WG	MW-212-VP47	1110150-01A & B	10/21/2011			None
1110150	WG	MW-212-VP49	1110150-02A & B	10/21/2011			None
1110166	WG	MW-212-VP51	1110166-01A & B	10/24/2011			None
1110170	WG	MW-212-VP53	1110170-01A & B	10/24/2011			None
1110171	WG	DW-03	1110171-01A & B	10/24/2011			None
1110173	WG	MW-212-VP55	1110173-01A & B	10/25/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Drill water blanks were analyzed and showed Bromoform, Dibromochloromethane, and Nickel as noted on Table 2. Results associated with these blanks should be qualified "U" as not detected as noted on Table 2A and 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar

results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable).

The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were performed on 4 sets of samples collected for an overall frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	PQL
SW8260C	VBLK-101311YW	MB	Methylene Chloride	9.1		A	ug/L	1.0
SW8260C	VBLK-101311YW	MB	Methylene Chloride	8.9		A	ug/L	1.0
SW8260C	VBLK-101811YW	MB	Methylene Chloride	7.6		A	ug/L	1.0
SW8260C	VBLK-101911YW	MB	Methylene Chloride	6.1		A	ug/L	1.0
SW8260C	VBLK-102011YW	MB	Methylene Chloride	7.5		A	ug/L	1.0
SW8260C	VBLK-102011YW	MB	Methylene Chloride	9.4		A	ug/L	1.0
SW8260C	VBLK-102011aYW	MB	Methylene Chloride	8.6		A	ug/L	1.0
SW8260C	VBLK-102011YW	MB	Methylene Chloride	7.0		A	ug/L	1.0
SW8260C	VBLK-102111YW	MB	Methylene Chloride	7.7		A	ug/L	1.0
SW8260C	VBLK-102111YW	MB	Methylene Chloride	8.9		A	ug/L	1.0
SW8260C	VBLK-102511HS	MB	Methylene Chloride	6.1		A	ug/L	1.0
SW8260C	DW-03	DW	Bromoform	1.2		A	ug/L	1.0
SW6010C	DW-03	DW	Nickel	14.0	J	A	ug/L	20.0
SW8260C	VBLK-102511HS	MB	Methylene Chloride	6.4		A	ug/L	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	10	B	1.0	MW-212-VP02	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	9.8	B	1.0	MW-212-VP03	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	9.8	B	1.0	MW-212-VP05	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	10	B	1.0	MW-212-VP07	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	11	B	1.0	MW-212-VP09	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	8.4	B	1.0	MW-212-VP11	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	9.3	B	1.0	MW-212-VP13	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	9.2	B	1.0	MW-212-VP15	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	9.5	B	1.0	MW-212-VP17	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	9.2	B	1.0	MW-212-VP19	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	10	B	1.0	MW-212-VP22	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	8.9	B	1.0	MW-212-VP913	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	9.6	B	1.0	MW-212-VP914	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	8.3	B	1.0	MW-212-VP915	U FLAG
SW8260C	VBLK-101311YW	WG	Methylene Chloride	8.9	9.5	B	1.0	MW-212-VP916	U FLAG
SW8260C	VBLK-101811YW	WG	Methylene Chloride	7.6	9.8	B	1.0	MW-212-VP23	U FLAG
SW8260C	VBLK-101811YW	WG	Methylene Chloride	7.6	9.2	B	1.0	MW-212-VP25	U FLAG

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	VBLK-101811YW	WG	Methylene Chloride	7.6	8.3	B	1.0	MW-212-VP27	U FLAG
SW8260C	VBLK-101811YW	WG	Methylene Chloride	7.6	8.3	B	1.0	RB-08	U FLAG
SW8260C	VBLK-101911YW	WG	Methylene Chloride	6.1	6.8	B	1.0	MW-212-VP29	U FLAG
SW8260C	VBLK-101911YW	WG	Methylene Chloride	6.1	7.2	B	1.0	MW-212-VP31	U FLAG
SW8260C	VBLK-101911YW	WG	Methylene Chloride	6.1	5.1	B	1.0	MW-212-VP34	U FLAG
SW8260C	VBLK-102011YW	WG	Methylene Chloride	9.4	4.7	B	1.0	MW-212-VP35	U FLAG
SW8260C	VBLK-102011YW	WG	Methylene Chloride	9.4	4.8	BC	1.0	MW-212-VP917	U FLAG
SW8260C	VBLK-102011aYW	WG	Methylene Chloride	8.6	7.6	B	1.0	MW-212-VP37	U FLAG
SW8260C	VBLK-102011aYW	WG	Methylene Chloride	8.6	5.0	BC	1.0	MW-212-VP39	U FLAG
SW8260C	VBLK-102011aYW	WG	Methylene Chloride	8.6	4.5	B	1.0	MW-212-VP41	U FLAG
SW8260C	VBLK-102011aYW	WG	Methylene Chloride	8.6	7.2	BC	1.0	MW-212-VP43	U FLAG
SW8260C	VBLK-102011aYW	WG	Methylene Chloride	7.0	4.5	B	1.0	MW-212-VP45	U FLAG
SW8260C	VBLK-102111YW	WG	Methylene Chloride	8.9	3.9	B	1.0	MW-212-VP47	U FLAG
SW8260C	VBLK-102111YW	WG	Methylene Chloride	8.9	4.0	B	1.0	MW-212-VP49	U FLAG
SW8260C	VBLK-102511HS	WG	Methylene Chloride	6.1	3.1	B	1.0	MW-212-VP51	U FLAG
SW8260C	VBLK-102511HS	WG	Methylene Chloride	6.1	4.3	B	1.0	MW-212-VP53	U FLAG
SW8260C	VBLK-102511HS	WG	Methylene Chloride	6.4	4.8	B	1.0	DW-03	U FLAG
SW8260C	VBLK-102511HS	WG	Methylene Chloride	6.1	3.5	B	1.0	MW-212-VP55	U FLAG

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	DW-02	WG	Bromoform	3.1	1.1		1.0	MW-212-VP25	U FLAG
SW8260C	DW-02	WG	Bromoform	3.1	0.55	J	1.0	MW-212-VP31	U FLAG
SW8260C	DW-02	WG	Bromoform	3.1	0.55	J	1.0	MW-212-VP35	U FLAG
SW8260C	DW-02	WG	Bromoform	3.1	0.56	J	1.0	MW-212-VP917	U FLAG

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	DW-02	WG	Bromoform	3.1	0.63	J	1.0	MW-212-VP39	U FLAG
SW6010C	DW-03	WG	Nickel	14.0	19.0	J	20.0	MW-212-VP51	U FLAG
SW6010C	DW-03	WG	Nickel	14.0	13.0	J	20.0	MW-212-VP53	U FLAG
SW6010C	DW-03	WG	Nickel	14.0	46.0		20.0	MW-212-VP55	U FLAG

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8260C	MW-212-VP11	MSD	Bromomethane	48.6	20	None
SW8260C	MW-212-VP11	MSD	Chloroethane	33.0	20	None
SW8260C	MW-212-VP11	MSD	Chloromethane	41.3	20	None
SW8260C	MW-212-VP11	MSD	Trichlorofluoromethane	35.8	20	None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	MW-212-VP05	MW-212-VP913	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	17.0	14.0	19.4	Good	None
SW8260C	Tetrachloroethene	ug/L	0.83	0.85	2.4	Good	None

Method	Analyte	Unit	MW-212-VP02	MW-212-VP914	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	24.0	15.0	46.2	Poor	J

Method	Analyte	Unit	MW-212-VP03	MW-212-VP915	RPD	RPD Rating	Qualifier
SW8260C	Tetrachloroethene	ug/L	1.7	1.5	12.5	Good	None

Method	Analyte	Unit	MW-212-VP35	MW-212-VP917	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	27.0	28.0	3.6	Good	None
SW8260C	Carbon Tetrachloride	ug/L	0.63	0.64	1.6	Good	None
SW8260C	cis-1,2-Dichloroethene	ug/L	11	12	8.7	Good	None
SW8260C	Tetrachloroethene	ug/L	1.8	2.1	15.4	Good	None
SW8260C	Trichloroethene	ug/L	27	27	0.0	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 15, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Bryan Kroon, Chemist, E & E, Buffalo

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1107129
	1107140
	1107146
	1107153
	1107159
	1107163
	1108014
	1108045
	1108054
	1108057
	1108059
	1108068

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
1107129	WG	MW-211-VP01	1107129-01A & B	7/21/2011			None
1107129	WG	MW-211-VP03	1107129-02A & B	7/22/2011	MS/MSD	*	None
1107129	WQ	RB-02	1107129-05A & B	7/22/2011			None
1107129	WG	MW-211-VP05	1107129-06A & B	7/22/2011			None
1107129	WG	MW-211-VP07	1107129-07A & B	7/22/2011			None
1107140	WG	MW-211-VP09	1107140-01A & B	7/25/2011			None
1107140	WG	MW-211-VP11	1107140-02A & B	7/25/2011			None
1107140	WG	MW-211-VP13	1107140-03A & B	7/25/2011			None
1107140	WG	MW-211-VP15	1107140-04A & B	7/25/2011			None
1107140	WG	MW-211-VP18	1107140-05A & B	7/25/2011			None
1107146	WG	MW-211-VP19	1107146-01A & B	7/25/2011			None
1107146	WG	MW-211-VP21	1107146-02A & B	7/26/2011			None
1107146	WG	MW-211-VP23	1107146-03A & B	7/26/2011			None
1107153	WG	MW-211-VP903	1107153-01A & B	7/27/2011			None
1107153	WG	MW-211-VP28	1107153-02A & B	7/27/2011			None
1107153	WG	MW-211-VP29	1107153-03A & B	7/27/2011	MS/MSD	*	None
1107159	WG	MW-211-VP33	1107159-01A & B	7/28/2011			None
1107159	WG	MW-211-VP31	1107159-02A & B	7/27/2011			None
1107163	WG	MW-211-VP35	1107163-01A & B	7/28/2011			None
1107163	WG	MW-211-VP37	1107163-02A & B	7/29/2011			None
1108014	WG	MW-211-VP39	1108014-01A & B	8/1/2011			None
1108014	WG	MW-211-VP904	1108014-02A & B	8/1/2011			None
1108045	WG	MW-211-VP42	1108045-01A & B	8/4/2011	MS/MSD	*	None
1108054	WG	MW-211-VP43	1108054-01A & B	8/4/2011			None
1108057	WG	MW-211-VP45	1108057-01A & B	8/4/2011			None
1108059	WG	MW-211-VP49	1108059-01A & B	8/5/2011			None
1108068	WG	MW-211-VP50	1108068-01A & B	8/8/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method and field blanks except for methylene chloride, benzene, and chloroform as noted on Table 2. Results associated with these method blanks should be qualified “U” as not detected as noted on Tables 2A and 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate

compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged “J” as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were performed on two sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	PQL
SW8260C	VBLK-072211YW	MB	Methylene Chloride	4.7		A	ug/L	1.0
SW8260C	VBLK-072211YW	MB	Methylene Chloride	5.8		A	ug/L	1.0
SW8260C	VBLK-072611LW	MB	Methylene Chloride	17		A	ug/L	1.0
SW8260C	VBLK-072711YW	MB	Methylene Chloride	6.2		A	ug/L	1.0
SW8260C	VBLK-072711YW	MB	Methylene Chloride	7.9		A	ug/L	1.0
SW8260C	VBLK-072811YW	MB	Methylene Chloride	8.4		A	ug/L	1.0
SW8260C	VBLK-072911YW	MB	Methylene Chloride	8.4		A	ug/L	1.0
SW8260C	VBLK-072911YW	MB	Methylene Chloride	7.0		A	ug/L	1.0
SW8260C	VBLK-080211LW	MB	Methylene Chloride	14		A	ug/L	1.0
SW8260C	VBLK-080411LW	MB	Methylene Chloride	10		A	ug/L	1.0
SW8260C	VBLK-080511LW	MB	Methylene Chloride	9.6		A	ug/L	1.0
SW8260C	VBLK-080811LW	MB	Methylene Chloride	12		A	ug/L	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	VBLK-072211YW	WG	Methylene Chloride	5.8	3.5	B	1.0	MW-211-VP01	U FLAG
SW8260C	VBLK-072211YW	WG	Methylene Chloride	5.8	2.9	B	1.0	MW-211-VP03	U FLAG
SW8260C	VBLK-072211YW	WG	Methylene Chloride	5.8	3.0	B	1.0	MW-211-VP05	U FLAG
SW8260C	VBLK-072211YW	WG	Methylene Chloride	5.8	2.9	B	1.0	MW-211-VP07	U FLAG
SW8260C	VBLK-072211YW	WG	Methylene Chloride	5.8	3.2	B	1.0	RB-02	U FLAG
SW8260C	VBLK-072611LW	WG	Methylene Chloride	17	8.3	B	1.0	MW-211-VP09	U FLAG
SW8260C	VBLK-072611LW	WG	Methylene Chloride	17	17	B	1.0	MW-211-VP11	U FLAG

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	VBLK-072611LW	WG	Methylene Chloride	17	19	B	1.0	MW-211-VP13	U FLAG
SW8260C	VBLK-072611LW	WG	Methylene Chloride	17	17	B	1.0	MW-211-VP15	U FLAG
SW8260C	VBLK-072611LW	WG	Methylene Chloride	17	14	B	1.0	MW-211-VP18	U FLAG
SW8260C	VBLK-072711YW	WG	Methylene Chloride	7.9	9.2	B	1.0	MW-211-VP19	U FLAG
SW8260C	VBLK-072711YW	WG	Methylene Chloride	7.9	9.9	B	1.0	MW-211-VP21	U FLAG
SW8260C	VBLK-072711YW	WG	Methylene Chloride	7.9	6.6	B	1.0	MW-211-VP23	U FLAG
SW8260C	VBLK-072811YW	WG	Methylene Chloride	8.4	12	B	1.0	MW-211-VP28	U FLAG
SW8260C	VBLK-072811YW	WG	Methylene Chloride	8.4	11	B	1.0	MW-211-VP29	U FLAG
SW8260C	VBLK-072811YW	WG	Methylene Chloride	8.4	12	B	1.0	MW-211-VP903	U FLAG
SW8260C	VBLK-072911YW	WG	Methylene Chloride	7.0	10	B	1.0	MW-211-VP31	U FLAG
SW8260C	VBLK-072911YW	WG	Methylene Chloride	7.0	7.8	B	1.0	MW-211-VP33	U FLAG
SW8260C	VBLK-072911YW	WG	Methylene Chloride	7.0	8.3	B	1.0	MW-211-VP35	U FLAG
SW8260C	VBLK-072911YW	WG	Methylene Chloride	7.0	9.1	B	1.0	MW-211-VP37	U FLAG
SW8260C	VBLK-080211LW	WG	Methylene Chloride	14	19	B	1.0	MW-211-VP39	U FLAG
SW8260C	VBLK-080211LW	WG	Methylene Chloride	14	18	B	1.0	MW-211-VP904	U FLAG
SW8260C	VBLK-080411LW	WG	Methylene Chloride	10	8.3	B	1.0	MW-211-VP42	U FLAG
SW8260C	VBLK-080411LW	WG	Methylene Chloride	10	13	B	1.0	MW-211-VP43	U FLAG
SW8260C	VBLK-080511LW	WG	Methylene Chloride	9.6	8.9	B	1.0	MW-211-VP45	U FLAG
SW8260C	VBLK-080511LW	WG	Methylene Chloride	9.6	11	B	1.0	MW-211-VP49	U FLAG
SW8260C	VBLK-080811LW	WG	Methylene Chloride	12	13	B	1.0	MW-211-VP50	U FLAG

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260C	RB-02	WG	Benzene	1.5	3.0		1.0	MW-211-VP07	U FLAG
SW8260C	RB-02	WG	Benzene	1.5	4.5		1.0	MW-211-VP45	U FLAG

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8260C	MW-211-VP29	MSD	1,2-Dichlorobenzene	22.2	20	None
SW8260C	MW-211-VP29	MSD	Chloromethane	35.8	20	None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	MW-211-VP28	MW-211-VP903	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	10	11	9.5	Good	None

Method	Analyte	Unit	MW-211-VP39	MW-211-VP904	RPD	RPD Rating	Qualifier
SW6010C	Nickel	ug/L	34	46	30	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 13, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1109167
	1109178
	1109184
	1109198
	1109208
	1109212
	1110006

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1109167	GW	MW-210-VP01	1109167-01	9/22/11			None
1109167	GW	MW-210-VP02	1109167-02	9/22/11			None
1109167	GW	MW-210-VP05	1109167-03	9/23/11	FD1		None
1109167	GW	MW-210-VP05MS	1109167-04	9/23/11		MS	None
1109167	GW	MW-210-VP05MSD	1109167-05	9/23/11		MSD	None
1109167	GW	MW-210-VP911	1109167-06	9/23/11	FD1		None
1109167	GW	RB-06	1109167-07	9/23/11	RB		None
1109167	GW	MW-210-VP07	1109167-08	9/23/11			None
1109167	GW	MW-210-VP09	1109167-09	9/23/11			None
1109167	GW	MW-210-VP11	1109167-10	9/23/11			None
1109178	GW	MW-210-VP14	1109178-01	9/26/11			None
1109178	GW	MW-210-VP15	1109178-02	9/26/11			None
1109178	GW	MW-210-VP17	1109178-03	9/26/11			None
1109178	GW	MW-210-VP20	1109178-04	9/26/11			None
1109184	GW	MW-210-VP21	1109184-01	9/26/11			None
1109184	GW	MW-210-VP23	1109184-02	9/27/11	FD2		None
1109184	GW	MW-210-VP912	1109184-03	9/27/11	FD2		None
1109184	GW	MW-210-VP25	1109184-04	9/27/11			None
1109184	GW	MW-210-VP27	1109184-05	9/27/11			None
1109184	GW	MW-210-VP29	1109184-06	9/27/11			None
1109184	GW	MW-210-VP31	1109184-07	9/27/11			None
1109184	GW	MW-210-VP33	1109184-08	9/27/11			None
1109198	GW	MW-210-VP35	1109198-01	9/28/11			None
1109208	GW	MW-210-VP37	1109208-01	9/28/11			None
1109208	GW	MW-210-VP39	1109208-02	9/29/11			None
1109212	GW	MW-210-VP42	1109212-01	9/30/11			None
1109212	GW	MW-210-VP43	1109212-02	9/30/11			None
1109212	GW	MW-210-VP45	1109212-03	9/30/11			None
1110006	GW	MW-210-VP47	1110006-01	10/3/11			None
1110006	GW	MW-210-VP49	1110006-02	10/3/11			None
1110006	GW	MW-210-VP50	1110006-03	10/3/11			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A. No blank contamination was detected in the rinsate except chloroform and benzene as noted on Table 2. Results associated with these rinsate blanks should be qualified "U" for not detected as noted on Table 2B. Results associated with drill water blanks should be qualified "U" for not detected as noted on Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable

and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-092311aHS	Prep Blank	Methylene Chloride	5.8	B	VOC	ug/l	0.5	1.0
8260	RB-06	Rinsate	Chloroform	1.2	B	VOC	ug/l	0.5	1.0
8260	RB-06	Rinsate	Benzene	1.1	B	VOC	ug/l	0.5	1.0
8260	VBLK-092711YW	Prep Blank	Methylene Chloride	9.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-092811aYW	Prep Blank	Methylene Chloride	9.0	B	VOC	ug/l	0.5	1.0
8260	VBLK-092911YW	Prep Blank	Methylene Chloride	9.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-093011YW	Prep Blank	Methylene Chloride	3.2	B	VOC	ug/l	0.5	1.0
8260	VBLK-093011aYW	Prep Blank	Methylene Chloride	4.1	B	VOC	ug/l	0.5	1.0
8260	VBLK-100311YW	Prep Blank	Methylene Chloride	4.6	B	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-092311aHS	GW	Methylene Chloride	5.8	4.5	B	1.0	MW-210-VP01	U
8260	VBLK-092311aHS	GW	Methylene Chloride	5.8	5.0	B	1.0	MW-210-VP02	U
8260	VBLK-092311aHS	GW	Methylene Chloride	5.8	5.7	B	1.0	MW-210-VP05	U
8260	VBLK-092311aHS	GW	Methylene Chloride	5.8	5.3	B	1.0	MW-210-VP11	U
8260	VBLK-092311aHS	GW	Methylene Chloride	5.8	5.1	B	1.0	RB-06	U
8260	VBLK-092311aHS	GW	Methylene Chloride	5.8	5.4	B	1.0	MW-210-VP07	U
8260	VBLK-092311aHS	GW	Methylene Chloride	5.8	5.5	B	1.0	MW-210-VP09	U
8260	VBLK-092311aHS	GW	Methylene Chloride	5.8	5.2	B	1.0	MW-210-VP11	U
8260	VBLK-092711YW	GW	Methylene Chloride	9.7	9.4	B	1.0	MW-210-VP14	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-092711YW	GW	Methylene Chloride	9.7	12	B	1.0	MW-210-VP15	U
8260	VBLK-092711YW	GW	Methylene Chloride	9.7	11	B	1.0	MW-210-VP17	U
8260	VBLK-092711YW	GW	Methylene Chloride	9.7	10	B	1.0	MW-210-VP20	U
8260	VBLK-092811aYW	GW	Methylene Chloride	9.0	8.7	B	1.0	MW-210-VP21	U
8260	VBLK-092811aYW	GW	Methylene Chloride	9.0	9.0	B	1.0	MW-210-VP23	U
8260	VBLK-092811aYW	GW	Methylene Chloride	9.0	9.0	B	1.0	MW-210-VP912	U
8260	VBLK-092811aYW	GW	Methylene Chloride	9.0	8.0	B	1.0	MW-210-VP25	U
8260	VBLK-092811aYW	GW	Methylene Chloride	9.0	8.2	B	1.0	MW-210-VP27	U
8260	VBLK-092811aYW	GW	Methylene Chloride	9.0	9.4	B	1.0	MW-210-VP29	U
8260	VBLK-092811aYW	GW	Methylene Chloride	9.0	6.2	B	1.0	MW-210-VP31	U
8260	VBLK-092811aYW	GW	Methylene Chloride	9.0	8.3	B	1.0	MW-210-VP33	U
8260	VBLK-092911YW	GW	Methylene Chloride	9.7	6.9	B	1.0	MW-210-VP35	U
8260	VBLK-093011YW	GW	Methylene Chloride	3.2	1.7	B	1.0	MW-210-VP37	U
8260	VBLK-093011YW	GW	Methylene Chloride	3.2	1.6	B	1.0	MW-210-VP39	U
8260	VBLK-093011aYW	GW	Methylene Chloride	4.1	1.5	B	1.0	MW-210-VP42	U
8260	VBLK-093011aYW	GW	Methylene Chloride	4.1	2.4	B	1.0	MW-210-VP43	U
8260	VBLK-093011aYW	GW	Methylene Chloride	4.1	1.5	B	1.0	MW-210-VP45	U
8260	VBLK-100311YW	GW	Methylene Chloride	4.6	3.5	B	1.0	MW-210-VP47	U
8260	VBLK-100311YW	GW	Methylene Chloride	4.6	2.8	B	1.0	MW-210-VP49	U
8260	VBLK-100311YW	GW	Methylene Chloride	4.6	3.3	B	1.0	MW-210-VP50	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	RB-06	GW	Benzene	1.1	1.2		1.0	MW-210-VP14	U
8260	RB-06	GW	Benzene	1.1	0.86	J	1.0	MW-210-VP23	U
8260	RB-06	GW	Benzene	1.1	0.92	J	1.0	MW-210-VP912	U
8260	RB-06	GW	Chloroform	1.2	1.0		1.0	MW-210-VP35	U
8260	RB-06	GW	Benzene	1.1	0.92	J	1.0	MW-210-VP37	U
8260	RB-06	GW	Benzene	1.1	1.5		1.0	MW-210-VP43	U
8260	DW-02	GW	Bromoform	3.1	0.51	J	1.0	MW-210-VP43	U

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
8260	MW-210-VP05	MS	1,1,2-trichloro-1,2,2-trifluoroethane	ND	50.00	0	1	22	120	UJL
8260	MW-210-VP05	MS	1,2,3-Trichlorobenzene	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	1,2,4-Trichlorobenzene	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	1,2-Dibromo-3-chloropropane	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	1,2-Dibromomethane	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	1,4-Dioxane	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	2-Butanone	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	2-Hexanone	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	4-Methyl-2-pentanone	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Acetone	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Bromodichloromethane	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Carbon Disulfide	ND	50.00	0	1	30	120	UJL

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
8260	MW-210-VP05	MS	cis-1,2-Dichloroethene	6.3	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Cyclohexane	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Dichlorodifluoromethane	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Isopropylbenzene	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	m,p-xylene	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Methyl Acetate	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Methyl tert-butyl ether	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Methyl Cyclohexane	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	o-Xylene	ND	50.00	0	1	30	120	UJL
8260	MW-210-VP05	MS	Styrene	ND	50.00	0	1	30	120	UJL

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
8260	MW-210-VP35	MSD	Chloromethane	33.9	20	UJ
8260	MW-210-VP35	MSD	Trans-1,2-Dichloroethene	200	20	UJ

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-210-VP05/911	8260	None Detected	ug/l						

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
	6010	None Detected	ug/l						
MW-210-VP23/912	8260	1,2-Dichlorobenzene	ug/l	1.0	8.1	7.7	5.06	Good	None
	8260	Chloromethane	ug/l	1.0	0.61	ND	NC	NC	NC
	8260	Tetrachloroethene	ug/l	1.0	410	470	13.64	Good	None
	8260	Toluene	ug/l	1.0	0.78	0.83	6.21	Good	None
	8260	Trichloroethene	ug/l	1.0	15	14	6.90	Good	None
	8260	Vinyl Chloride	ug/l	1.0	0.50	ND	NC	NC	NC
	8260	cis-1,2-Dichloroethene	ug/l	1.0	14	12	15.38	Good	None
	6010	Nickel	ug/l	20.0	44.0	45.0	2.25	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 13, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1109048
	1109063
	1109078
	1109087
	1109117
	1109118
	1109135
	1109136

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1109148	GW	MW-209-VP01	1109048-01	9/9/11			None
1109148	GW	MW-209-VP03	1109148-02	9/9/11			None
1109148	GW	MW-209-VP05	1109148-03	9/9/11			None
1109063	GW	MW-209-VP08	1109063-01	9/12/11			None
1109063	GW	MW-209-VP10	1109063-02	9/12/11			None
1109063	GW	MW-209-VP11	1109063-03	9/12/11			None
1109063	GW	MW-209-VP13	1109063-04	9/12/11			None
1109078	GW	MW-209-VP16	1109078-01	9/13/11			None
1109078	GW	MW-209-VP17	1109078-02	9/13/11	FD1		None
1109078	GW	MW-209-VP17MS	1109078-03	9/13/11		MS	None
1109078	GW	MW-209-VP17MSD	1109078-04	9/13/11		MSD	None
1109078	GW	MW-209-VP908	1109078-05	9/13/11	FD1		None
1109078	GW	RB-04	1109078-06	9/13/11	RB		None
1109078	GW	MW-209-VP19	1109078-07	9/13/11			None
1109078	GW	MW-209-VP21	1109078-08	9/13/11			None
1109078	GW	DW-02	1109078-09	9/13/11	DW		None
1109078	GW	MW-209-VP25	1109078-10	9/13/11			None
1109078	GW	MW-209-VP23	1109078-11	9/13/11			None
1109078	GW	MW-209-VP27	1109078-12	9/13/11			None
1109078	GW	MW-209-VP29	1109078-13	9/13/11			None
1109087	GW	MW-209-VP31	1109087-01	9/13/11			None
1109117	GW	MW-209-VP41	1109117-01	9/15/11			None
1109117	GW	MW-209-VP43	1109117-02	9/16/11			None
1109118	GW	MW-209-VP33	1109118-01	9/16/11	FD2		None
1109118	GW	MW-209-VP33MS	1109118-02	9/16/11		MS	None
1109118	GW	MW-209-VP33MSD	1109118-03	9/16/11		MSD	None
1109118	GW	MW-209-VP909	1109118-04	9/16/11	FD2		None
1109118	GW	MW-209-VP35	1109118-05	9/16/11			None
1109118	GW	MW-209-VP37	1109118-06	9/16/11			None
1109118	GW	MW-209-VP39	1109118-07	9/16/11			None
1109135	GW	MW-209-VP45	1109135-01	9/19/11			None
1109135	GW	MW-209-VP47	1109135-02	9/19/11			None
1109135	GW	MW-209-VP49	1109135-03	9/19/11			None
1109136	GW	MW-209-VP50	1109136-01	9/19/11			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not

considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A. No blank contamination was detected in the rinsate except chloroform and benzene as noted on Table 2. No blank contamination was detected in the drill water except bromoform as noted on Table 2. Results associated with the rinsate and drill water blanks should be qualified "U" for not detected as noted on Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis.

However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-091211LW	Prep Blank	Methylene Chloride	7.5	B	VOC	ug/l	0.5	1.0
8260	VBLK-091311LW	Prep Blank	Methylene Chloride	6.2	B	VOC	ug/l	0.5	1.0
8260	VBLK-091511HS	Prep Blank	Methylene Chloride	5.2	B	VOC	ug/l	0.5	1.0
8260	RB-04	Rinsate	Benzene	1.6		VOC	ug/l	0.5	1.0
8260	RB-04	Rinsate	Chloroform	1.4		VOC	ug/l	0.5	1.0
8260	DW-02	Drill Water	Bromoform	3.1		VOC	ug/l	0.5	1.0
8260	DW-02	Drill Water	Dibromochloromethane	0.56		VOC	ug/l	0.5	1.0
8260	VBLK-091511aHS	Prep Blank	Methylene Chloride	8.0	B	VOC	ug/l	0.5	1.0
8260	VBLK-091611LW	Prep Blank	Methylene Chloride	6.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-091911LW	Prep Blank	Methylene Chloride	4.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-092011LW	Prep Blank	Methylene Chloride	5.2	B	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-091211LW	GW	Methylene Chloride	7.5	7.2	B	1.0	MW-209-VP01	U
8260	VBLK-091211LW	GW	Methylene Chloride	7.5	7.6	B	1.0	MW-209-VP03	U
8260	VBLK-091211LW	GW	Methylene Chloride	7.5	7.2	B	1.0	MW-209-VP05	U
8260	VBLK-091311LW	GW	Methylene Chloride	6.2	4.1	B	1.0	MW-209-VP08	U
8260	VBLK-091311LW	GW	Methylene Chloride	6.2	5.3	B	1.0	MW-209-VP10	U
8260	VBLK-091311LW	GW	Methylene Chloride	6.2	4.3	B	1.0	MW-209-VP11	U
8260	VBLK-091311LW	GW	Methylene Chloride	6.2	4.6	B	1.0	MW-209-VP13	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	4.2	B	1.0	MW-209-VP16	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	4.9	B	1.0	MW-209-VP17	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	3.5	B	1.0	MW-209-VP908	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	3.7	B	1.0	RB-04	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	4.4	B	1.0	MW-209-VP19	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	3.5	B	1.0	MW-209-VP21	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	3.6	B	1.0	DW-02	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	5.0	B	1.0	MW-209-VP25	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	4.8	B	1.0	MW-209-VP23	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	3.1	B	1.0	MW-209-VP27	U
8260	VBLK-091511HS	GW	Methylene Chloride	5.2	5.4	B	1.0	MW-209-VP29	U
8260	VBLK-091511aHS	GW	Methylene Chloride	8.0	5.3	B	1.0	MW-209-VP31	U
8260	VBLK-091611LW	GW	Methylene Chloride	6.7	6.4	B	1.0	MW-209-VP41	U
8260	VBLK-091611LW	GW	Methylene Chloride	6.7	6.0	B	1.0	MW-209-VP43	U
8260	VBLK-091911LW	GW	Methylene Chloride	4.7	6.1	B	1.0	MW-209-VP33	U
8260	VBLK-091911LW	GW	Methylene Chloride	4.7	6.8	B	1.0	MW-209-VP909	U
8260	VBLK-091911LW	GW	Methylene Chloride	4.7	6.0	B	1.0	MW-209-VP35	U
8260	VBLK-091911LW	GW	Methylene Chloride	4.7	8.3	B	1.0	MW-209-VP37	U
8260	VBLK-091911LW	GW	Methylene Chloride	4.7	5.8	B	1.0	MW-209-VP39	U
8260	VBLK-092011LW	GW	Methylene Chloride	5.2	6.6	B	1.0	MW-209-VP45	U
8260	VBLK-092011LW	GW	Methylene Chloride	5.2	6.3	B	1.0	MW-209-VP47	U
8260	VBLK-092011LW	GW	Methylene Chloride	5.2	6.4	B	1.0	MW-209-VP49	U
8260	VBLK-092011LW	GW	Methylene Chloride	5.2	6.9	B	1.0	MW-209-VP50	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	RB-04	GW	Chloroform	1.4	0.66	J	1.0	MW-209-VP19	U
8260	RB-04	GW	Chloroform	1.4	1.3		1.0	MW-209-VP21	U
8260	RB-04	GW	Chloroform	1.4	1.9		1.0	MW-209-VP25	U
8260	RB-04	GW	Chloroform	1.4	2.2		1.0	MW-209-VP23	U
8260	RB-04	GW	Chloroform	1.4	2.0		1.0	MW-209-VP27	U
8260	RB-04	GW	Chloroform	1.4	16		1.0	MW-209-VP29	JH
8260	RB-04	GW	Chloroform	1.4	6.0		1.0	MW-209-VP31	U
8260	RB-04	GW	Chloroform	1.4	2.4		1.0	MW-209-VP33	U
8260	RB-04	GW	Chloroform	1.4	1.9		1.0	MW-209-VP909	U
8260	RB-04	GW	Benzene	1.6	1.4		1.0	MW-209-VP33	U
8260	RB-04	GW	Benzene	1.6	1.3		1.0	MW-209-VP909	U
8260	RB-04	GW	Benzene	1.6	0.80		1.0	MW-209-VP47	U
8260	RB-04	GW	Benzene	1.6	0.52		1.0	MW-209-VP49	U
8260	RB-04	GW	Benzene	1.6	1.5		1.0	MW-209-VP50	U

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
8260	MW-209-VP17	MS	1,1,2-trichloro-1,2,2-trifluoroethane	ND	50.00	0	1	22	120	UJL
8260	MW-209-VP17	MS	1,2,3-Trichlorobenzene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	1,2,4-Trichlorobenzene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	1,2-Dibromo-3-chloropropane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	1,2-Dibromomethane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	1,4-Dioxane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	2-Butanone	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	2-Hexanone	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	4-Methyl-2-pentanone	ND	50.00	0	1	30	120	UJL

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
8260	MW-209-VP17	MS	Acetone	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Benzene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Bromodichloromethane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Carbon Disulfide	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	cis-1,2-Dichloroethene	6.3	50.00	12.6%	1	30	120	JL
8260	MW-209-VP17	MS	Cyclohexane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Dichlorodifluoromethane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Isopropylbenzene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	m,p-xylene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Methyl Acetate	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Methyl tert-butyl ether	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Methyl Cyclohexane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	o-Xylene	ND	50.00	1.36%	1	30	120	UJL

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
8260	MW-209-VP17	MS	Styrene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP17	MS	Trichloroethene	77	50.00	154%		24	122	JH
8260	MW-209-VP33	MS	1,1,2-trichloro-1,2,2-trifluoroethane	2.2	50.00	0.300%	1	22	120	JL
8260	MW-209-VP33	MS	1,2,3-Trichlorobenzene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	1,2,4-Trichlorobenzene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	1,2-Dibromo-3-chloropropane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	1,2-Dibromomethane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	1,4-Dioxane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	2-Butanone	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	2-Hexanone	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	4-Methyl-2-pentanone	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Acetone	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Benzene	ND	50.00	0	1	30	120	UJL

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
8260	MW-209-VP33	MS	Bromodichloromethane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Carbon Disulfide	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	cis-1,2-Dichloroethene	100	50.00	9.02%	1	30	120	JL
8260	MW-209-VP33	MS	cis-1,3-Dichloropropene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Cyclohexane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Dichlorodifluoromethane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Isopropylbenzene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	m,p-xylene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Methyl Acetate	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Methyl tert-butyl ether	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Methyl Cyclohexane	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	o-Xylene	ND	50.00	0	1	30	120	UJL
8260	MW-209-VP33	MS	Styrene	ND	50.00	0	1	30	120	UJL

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
8260	MW-209-VP33	MSD	1,1,2-Trichloroethane	20.9	20.0	UJ
8260	MW-209-VP33	MSD	Bromoform	22.0	20.0	UJ
8260	MW-209-VP33	MSD	Trans-1,3-Dichloropropene	24.1	20.0	UJ

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-209-VP17/908	8260	Carbon Tetrachloride	ug/l	1.0	1.0	0.83	18.58	Good	None
	8260	Cis-1,2-Dichloroethene	ug/l	1.0	5.8	4.8	18.87	Good	None
	8260	Tetrachloroethene	ug/l	1.0	8.6	7.0	20.51	Good	None
	8260	Trichloroethene	ug/l	1.0	44	38	14.63	Good	None
	6010	Nickel	ug/l	20.0	11	12	8.70	Good	None

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-202-VP33/909	8260	1,1,1-Trichlorothane	ug/l	1.0	2.9	2.9	0.00	Good	None
	8260	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	1.0	2.0	1.9	5.13	Good	None
	8260	1,1-Dichloroethene	ug/l	1.0	7.1	7.0	1.42	Good	None
	8260	Benzene	ug/l	1.0	1.4	1.3	7.41	Good	None
	8260	Carbon Tetrachloride	ug/l	1.0	19	19	0.00	Good	None
	8260	Chloroform	ug/l	1.0	2.4	1.9	23.26	Good	None
	8260	cis-1,2-Dichloroethene	ug/l	1.0	98	92	6.32	Good	None
	8260	Tetrachloroethene	ug/l	1.0	40	39	2.53	Good	None
	8260	Trichloroethene	ug/l	10.0	450	430	4.55	Good	None
	6010	Nickel	ug/l	20.0	11.0	6.00	NC	NC	NC

Note: Blank spaces indicate analytes was not analyzed or ND.
Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 12, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1111168
	1112001
	1112010
	1112017
	1112018
	1112051
	1112056
	1112060
	1112065
	1112114
	1112118
	1112121
	1112142
	1112156
	1112171

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for

compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1112001	GW	MW-208-VP11	1112001-01	11/30/2011	FD4		None
1112001	GW	MW-208-VP922	1112001-02	11/30/2011	FD4		None
1112001	GW	MW-208-VP13	1112001-03	11/30/2011			None
1112001	GW	MW-208-VP15	1112001-04	11/30/2011			None
1112001	GW	MW-208-VP923	1112001-05	11/30/2011	FD1		None
1112001	GW	MW-208-VP17	1112001-06	11/30/2011	FD1		None
1112001	GW	MW-208-VP19	1112001-07	11/30/2011			None
1112001	GW	MW-208-VP21	1112001-08	11/30/2011			None
1112001	GW	MW-208-VP23	1112001-09	11/30/2011			None
1111168	GW	MW-208-VP02	1111168-01	11/29/2011			None
1111168	GW	MW-208-VP03	1111168-02	11/29/2011			None
1111168	GW	MW-208-VP05	1111168-03	11/29/2011	FD2		None
1111168	GW	MW-208-VP921	1111168-04	11/29/2011	FD2		None
1111168	GW	MW-208-VP08	1111168-05	11/29/2011			None
1111168	GW	MW-208-VP08MS	1111168-06	11/29/2011		MS	None
1111168	GW	MW-208-VP08MSD	1111168-07	11/29/2011		MSD	None
1111168	GW	MW-208-VP09	1111168-08	11/29/2011			None
1111168	GW	RB-13	1111168-09	11/29/2011	RB		None
1112010	GW	MW-208-VP25	1112010-01	12/1/2011	FD3		None
1112010	GW	MW-208-VP924	1112010-02	12/1/2011	FD3		None
1112010	GW	MW-208-VP27	1112010-03	12/1/2011			None
1112010	GW	MW-208-VP29	1112010-04	12/1/2011			None
1112010	GW	MW-208-VP31	1112010-05	12/1/2011			None
1112017	GW	MW-208-VP35	1112017-01	12/2/2011			None
1112017	GW	MW-208-VP37	1112017-02	12/2/2011			None
1112018	GW	MW-208-VP33	1112018-01	12/2/2011			None
1112051	GW	MW-208-VP39	1112051-01	12/5/2011			None
1112056	GW	MW-208-VP41	1112056-01	12/5/2011			None
1112060	GW	MW-208-VP43	1112060-01	12/06/2011			None
1112060	GW	MW-208-VP45	1112060-02	12/06/2011			None
1112065	GW	MW-208-VP47	1112065-01	12/7/2011			Resample

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1112114	GW	MW-208-VP37	1112114-01	12/13/2011			Resample
1112114	GW	MW-208-VP39	1112114-02	12/13/2011			Resample
1112118	GW	MW-208-VP41	1112118-01	12/18/2011			Resample
1112121	GW	MW-208-VP43	1112121-01	12/14/2011			Resample
1112142	GW	MW-208-VP47	1112142-01	12/15/2011			Resample
1112156	GW	MW-208-VP49	1112156-01	12/16/2011			None
1112171	GW	MW-208-VP51	1112171-01	12/19/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A. No blank contamination was detected in the rinsate except chloroform and benzene as noted on Table 2. Results associated with these rinsate blanks should be qualified "U" for not detected as noted on Table 2B. Results associated with the drill water blank should be qualified "U" for not detected as noted on Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate

compounds added to the sample, only target analytes associated with that surrogate are flagged “J” as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-120511LW	Prep Blank	Methylene Chloride	4.3	B	VOC	ug/l	0.5	1.0
8260	RB-13	Rinsate	Benzene	0.71	J	VOC	ug/l	0.5	1.0
8260	RB-13	Rinsate	Chloroform	1.0		VOC	ug/l	0.5	1.0
8260	VBLK-113011LW	Prep Blank	Methylene Chloride	4.5	B	VOC	ug/l	0.5	1.0
8260	VBLK-120511LW	Prep Blank	Methylene Chloride	4.3	B	VOC	ug/l	0.5	1.0
8260	VBLK-120211LW	Prep Blank	Methylene Chloride	3.4	B	VOC	ug/l	0.5	1.0
8260	VBLK-120611LW	Prep Blank	Methylene Chloride	3.8	B	VOC	ug/l	0.5	1.0
8260	VBLK-120711LW	Prep Blank	Methylene Chloride	12	B	VOC	ug/l	0.5	1.0
8260	VBLK-121311aLW	Prep Blank	Methylene Chloride	5.5	B	VOC	ug/l	0.5	1.0
8260	VBLK-121411LW	Prep Blank	Methylene Chloride	5.6	B	VOC	ug/l	0.5	1.0
8260	VBLK-121411aLW	Prep Blank	Methylene Chloride	5.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-121611YW	Prep Blank	Methylene Chloride	4.1	B	VOC	ug/l	0.5	1.0
8260	VBLK-122011YW	Prep Blank	Methylene Chloride	7.5	B	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.8	B	1.0	MW-208-VP11	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.8	B	1.0	MW-208-VP22	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.8	B	1.0	MW-208-VP13	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.8	B	1.0	MW-208-VP15	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.7	B	1.0	MW-208-VP923	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.8	B	1.0	MW-208-VP17	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.8	B	1.0	MW-208-VP19	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.8	B	1.0	MW-208-VP21	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.9	B	1.0	MW-208-VP23	U
8260	VBLK-113011LW	GW	Methylene Chloride	4.5	4.0	B	1.0	MW-208-VP02	U
8260	VBLK-113011LW	GW	Methylene Chloride	4.5	4.0	B	1.0	MW-208-VP03	U
8260	VBLK-113011LW	GW	Methylene Chloride	4.5	3.9	B	1.0	MW-208-VP05	U
8260	VBLK-113011LW	GW	Methylene Chloride	4.5	3.9	B	1.0	MW-208-VP921	U
8260	VBLK-113011LW	GW	Methylene Chloride	4.5	3.9	B	1.0	MW-208-VP08	U
8260	VBLK-113011LW	GW	Methylene Chloride	4.5	2.8	B	1.0	MW-208-VP09	U
8260	VBLK-113011LW	GW	Methylene Chloride	4.5	4.0	B	1.0	RB-13	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	3.4	B	1.0	MW-208-VP25	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	3.3	B	1.0	MW-208-VP924	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	3.7	B	1.0	MW-208-VP27	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	4.3	B	1.0	MW-208-VP29	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	3.8	B	1.0	MW-208-VP31	U
8260	VBLK-120211LW	GW	Methylene Chloride	3.4	3.4	B	1.0	MW-208-VP35	U
8260	VBLK-120211LW	GW	Methylene Chloride	3.4	3.4	B	1.0	MW-208-VP37	U
8260	VBLK-120211LW	GW	Methylene Chloride	3.4	3.5	B	1.0	MW-208-VP33	U
8260	VBLK-120611LW	GW	Methylene Chloride	3.8	3.1	B	1.0	MW-208-VP39	U
8260	VBLK-120611LW	GW	Methylene Chloride	3.8	3.1	B	1.0	MW-208VP41	U
8260	VBLK-120711LW	GW	Methylene Chloride	12	4.6	B	1.0	MW-208-VP43	U
8260	VBLK-120711LW	GW	Methylene Chloride	12	4.4	B	1.0	MW-208-VP45	U
8260	VBLK-120711LW	GW	Methylene Chloride	12	4.8	B	1.0	MW-208-VP47	U
8260	VBLK-121311aLW	GW	Methylene Chloride	5.5	6.6	B	1.0	MW-208-VP37	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-121311aLW	GW	Methylene Chloride	5.5	5.3	B	1.0	MW-208-VP39	U
8260	VBLK-121411LW	GW	Methylene Chloride	5.6	4.3	B	1.0	MW-208-VP41	U
8260	VBLK-121411aLW	GW	Methylene Chloride	5.7	3.6	B	1.0	MW-208-VP43	U
8260	VBLK-121611YW	GW	Methylene Chloride	4.1	3.1	B	1.0	MW-208-VP47	U
8260	VBLK-121611YW	GW	Methylene Chloride	4.1	3.4	B	1.0	MW-208-VP49	U
8260	VBLK-122011YW	GW	Methylene Chloride	7.5	5.2	B	1.0	MW-208-VP51	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	RB-13	GW	Chloroform	1.0	1.3		1.0	MW-208-VP21	U
8260	RB-13	GW	Benzene	0.71	2.1		1.0	MW-208-VP45	U
8260	RB-13	GW	Benzene	0.71	1.2		1.0	MW-208-VP43	U
8260	DW-03	GW	Bromoform	1.2	0.65	J	1.0	MW-208-VP47	U
6010	DW-03	GW	Nickel	14.0	5.63	J	1.0	MW-208-VP45	U
8260	DW-03	GW	Bromoform	1.2	0.65	J	1.0	MW-208-VP43	U
8260	DW-03	GW	Bromoform	1.2	0.65	J	1.0	MW-208-VP41	U
8260	DW-03	GW	Bromoform	1.2	0.75	J	1.0	MW-208-VP39	U
8260	DW-03	GW	Bromoform	1.2	0.80	J	1.0	MW-208-VP37	U
8260	DW-03	GW	Bromoform	1.2	1.1	J	1.0	MW-208-VP924	U
6010	DW-03	GW	Nickel	14.0	15.9	J	1.0	MW-208-VP31	U
6010	DW-03	GW	Nickel	14.0	11.6	J	1.0	MW-208-VP29	U
8260	DW-03	GW	Bromoform	1.2	1.0		1.0	MW-208-VP25	U

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
6010	DW-03	GW	Nickel	14.0	8.76	J	1.0	MW-208-VP27	U
6010	DW-03	GW	Nickel	14.0	5.49	J	1.0	MW-208-VP11	U
6010	DW-03	GW	Nickel	14.0	8.54	J	1.0	MW-208-VP17	U
6010	DW-03	GW	Nickel	14.0	5.07	J	1.0	MW-208-VP23	U
6010	DW-03	GW	Nickel	14.0	17.7	J	1.0	MW-208-VP922	U
6010	DW-03	GW	Nickel	14.0	6.72	J	1.0	MW-208-VP923	U
6010	DW-03	GW	Nickel	14.0	5.17	J	1.0	MW-208-VP02	U
6010	DW-03	GW	Nickel	14.0	5.24	J	1.0	MW-208-VP03	U
6010	DW-03	GW	Nickel	14.0	15.6	J	1.0	MW-208-VP05	U
6010	DW-03	GW	Nickel	14.0	14.4	J	1.0	MW-208-VP08	U
6010	DW-03	GW	Nickel	14.0	9.70	J	1.0	MW-208-VP09	U
6010	DW-03	GW	Nickel	14.0	15.7	J	1.0	MW-208-VP921	U
6010	DW-03	GW	Nickel	14.0	12.4	J	1.0	MW-208-VP51	U

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-208-VP05/921	8260	Tetrachloroethene	ug/l	1.0	3.4	3.2	6.06	Good	None
	6010	Nickel	ug/l	20.0	15.6	15.7	0.64	Good	None
MW-208-VP25/924	8260	Bromoform	ug/l	1.0	1.0	1.1	9.52	Good	None
	8260	Tetrachloroethene	ug/l	1.0	0.84	0.72	15.38	Good	None
MW-208-VP11/922	8260	1,1-Dichloroethane	ug/l	1.0	0.54	ND	NC	NC	NC
	8260	1,1-Dichloroethene	ug/l	1.0	0.77	0.61	23.19	Good	None
	8260	1,2-dichlorobenzene	ug/l	1.0	1.8	1.6	11.76	Good	None
	8260	cis-Dichloroethene	ug/l	1.0	2.9	2.3	23.08	Good	None
	8260	Tetrachloroethene	ug/l	1.0	78	61	24.46	Good	None
	8260	Trichloroethene	ug/l	1.0	17	13	26.67	Good	None
	8260	Vinyl Chloride	ug/l	1.0	1.1	0.86	24.49	Good	None
	8260	Nickel	ug/l	1.0	5.49	17.7	NC	NC	NC
MW-208-VP15/923	8260	1,1-Dichloroethane	ug/l	1.0	0.89	0.95	6.52	Good	None
		Trichloroethene	ug/l	1.0	14	15	6.90	Good	None

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
		Tetrachloroethene	ug/l	1.0	3.2	3.4	6.06	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 11, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1204148
	1204164
	1204174
	1204185
	1204203
	1204212
	1204227
	1204232
	1204238
	1204247

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1204148	GW	MW-207-VP02	1204148-01	4/17/2012			None
1204148	GW	MW-207-VP03	1204148-02	4/17/2012			None
1204164	GW	MW-207-VP05	1204164-01	4/18/2012			None
1204164	GW	DW-04	1204164-02	4/18/2012	DW		None
1204164	GW	MW-207-VP07	1204164-03	4/18/2012			None
1204164	GW	RB-15	1204164-04	4/18/2012	RB		None
1204164	GW	MW-207-VP09	1204164-05	4/18/2012			None
1204164	GW	MW-207-VP929	1204164-06	4/18/2012	FD1		None
1204174	GW	MW-207-VP11	1204174-01	4/19/2012			None
1204174	GW	MW-207-VP13	1204174-02	4/19/2012	FD1		None
1204174	GW	MW-207-VP13MS	1204174-03	4/19/2012		MS	None
1204174	GW	MW-207-VP13MSD	1204174-04	4/19/2012		MSD	None
1204174	GW	MW-207-VP15	1204174-05	4/19/2012			None
1204185	GW	MW-207-VP17	1204185-01	4/20/2012			None
1204185	GW	MW-207-VP19	1204185-02	4/20/2012			None
1204185	GW	MW-207-VP21	1204185-03	4/20/2012			None
1204203	GW	MW-207-VP23	1204203-01	4/23/2012	FD2		None
1204203	GW	MW-207-VP930	1204203-02	4/23/2012	FD2		None
1204203	GW	MW-207-VP25	1204203-03	4/23/2012			None
1204203	GW	MW-207-VP27	1204203-04	4/23/2012			None
1204212	GW	MW-207-VP29	1204212-01	4/24/2012			None
1204212	GW	MW-207-VP31	1204212-02	4/24/2012			None
1204227	GW	MW-207-VP33	1204227-01	4/25/2012			None
1204232	GW	MW-207-VP35	1204232-01	4/25/2012			None
1204238	GW	MW-207-VP38	1204238-01	4/26/2012			None
1204247	GW	MW-207-VP39	1204247-01	4/27/2012			None
1204247	GW	MW-207-VP39MS	1204247-02	4/27/2012		MS	None
1204247	GW	MW-207-VP39MSD	1204247-03	4/27/2012		MSD	None
1204247	GW	MW-207-VP40	1204247-04	4/27/2012			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A. No blank contamination was detected in the rinsate except chloroform and benzene as noted on Table 2. No blank contamination was detected in the drill water except bromomethane as noted on Table 2. Results associated with the rinsate and drill water blanks should be qualified "U" for not detected as noted on Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable

and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved. The samples listed in the table below were analyzed at dilutions with elevated PQLs reported.

ClientSampID	TestNo
NA	NA

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall frequency of 10%. The RPD ratings are listed on Table 7 as "Good" if the RPD is less than field duplicate QC criteria and as "Poor" if the RPD exceeded the field duplicate QC criteria. Field duplicate results with "Poor" are flagged "J" as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-041812YW	Prep Blank	Methylene Chloride	3.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-041912YW	Prep Blank	Methylene Chloride	3.8	B	VOC	ug/l	0.5	1.0
8260	DW-04	Drill Water	Bromoform	0.51	B	VOC	ug/l	0.5	1.0
8260	RB-15	Rinsate	Benzene	0.74	B	VOC	ug/l	0.5	1.0
8260	RB-15	Rinsate	Chloroform	0.99	B	VOC	ug/l	0.5	1.0
8260	VBLK-042012YW	Prep Blank	Methylene Chloride	6.4	B	VOC	ug/l	0.5	1.0
8260	VBLK-042412YW	Prep Blank	Methylene Chloride	3.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-42512YW	Prep Blank	Methylene Chloride	3.4	B	VOC	ug/l	0.5	1.0
8260	VBLK-42512aYW	Prep Blank	Methylene Chloride	3.9	B	VOC	ug/l	0.5	1.0
8260	VBLK-42512aYW	Prep Blank	Methylene Chloride	3.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-042712HS	Prep Blank	Methylene Chloride	3.6	B	VOC	ug/l	0.5	1.0
8260	VBLK-042712bHS	Prep Blank	Methylene Chloride	4.6	B	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-041812YW	GW	Methylene Chloride	3.7	3.6	B	1.0	MW-207-VP02	U
8260	VBLK-041812YW	GW	Methylene Chloride	3.7	2.3	B	1.0	MW-207-VP03	U
8260	VBLK-041912YW	GW	Methylene Chloride	3.8	2.4	B	1.0	MW-207-VP05	U
8260	VBLK-041912YW	GW	Methylene Chloride	3.8	2.3	B	1.0	DW-04	U
8260	VBLK-041912YW	GW	Methylene Chloride	3.8	2.3	B	1.0	MW-207-VP07	U
8260	VBLK-041912YW	GW	Methylene Chloride	3.8	2.0	B	1.0	RB-15	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-041912YW	GW	Methylene Chloride	3.8	2.6	B	1.0	MW-207-VP09	U
8260	VBLK-041912YW	GW	Methylene Chloride	3.8	2.1	B	1.0	MW-207-VP929	U
8260	VBLK-042012YW	GW	Methylene Chloride	6.4	2.1	B	1.0	MW-207-VP11	U
8260	VBLK-042012YW	GW	Methylene Chloride	6.4	1.6	B	1.0	MW-207-VP13	U
8260	VBLK-042012YW	GW	Methylene Chloride	6.4	1.7	B	1.0	MW-207-VP15	U
8260	VBLK-042012YW	GW	Methylene Chloride	6.4	1.6	B	1.0	MW-207-VP17	U
8260	VBLK-042012YW	GW	Methylene Chloride	6.4	2.0	B	1.0	MW-207-VP19	U
8260	VBLK-042012YW	GW	Methylene Chloride	6.4	1.4	B	1.0	MW-207-VP21	U
8260	VBLK-042412YW	GW	Methylene Chloride	3.7	3.3	B	1.0	MW-207-VP23	U
8260	VBLK-042412YW	GW	Methylene Chloride	3.7	1.8	B	1.0	MW-207-VP930	U
8260	VBLK-042412YW	GW	Methylene Chloride	3.7	1.9	B	1.0	MW-207-VP25	U
8260	VBLK-042412YW	GW	Methylene Chloride	3.7	2.9	B	1.0	MW-207-VP27	U
8260	VBLK-42512YW	GW	Methylene Chloride	3.4	2.5	B	1.0	MW-207-VP29	U
8260	VBLK-42512YW	GW	Methylene Chloride	3.4	2.7	B	1.0	MW-207-VP31	U
8260	VBLK-42512aYW	GW	Methylene Chloride	3.9	1.9	B	1.0	MW-207-VP33	U
8260	VBLK-42512aYW	GW	Methylene Chloride	3.7	1.8	B	1.0	MW-207-VP35	U
8260	VBLK-042712HS	GW	Methylene Chloride	3.6	3.6	B	1.0	MW-207-VP38	U
8260	VBLK-042712bHS	GW	Methylene Chloride	4.6	3.3	B	1.0	MW-207-VP39	U
8260	VBLK-042712bHS	GW	Methylene Chloride	4.6	3.8	B	1.0	MW-207-VP40	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
VOC	RB-15	GW	Benzene	0.74	0.74	J	1.0	MW-207-VP03	U
VOC	RB-15	GW	Chloroform	0.99	8.7		1.0	MW-207-VP21	U
VOC	RB-15	GW	Chloroform	0.99	0.62	J		MW-207-VP31	U
VOC	RB-15	GW	Benzene	0.74	0.40	J		MW-207-VP38	U

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
8260	MW-207-VP39	GW	Bromomethane	20.7	20	UJ

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-207-VP13/929	6010	Nickel	ug/l	20.0	10.6	10.9	2.79	Good	None

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-272-VP23 / 930	6010	Nickel	ug/l	20.0	12.7	17.2	30.10	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 14 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1111083
	1111097
	1111107
	1111114
	1111120
	1111129
	1111131
	1111132

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1111083	GW	MW-206-VP02	1111083-01	11/14/2011			None
1111083	GW	MW-206-VP03	1111083-02	11/14/2011			None
1111083	GW	MW-206-VP05	1111083-03	11/14/2011			None
1111083	GW	MW-206-VP07	1111083-04	11/14/2011			None
1111097	GW	MW-206-VP09	1111097-01	11/14/2011			None
1111097	GW	MW-206-VP12	1111097-02	11/15/2011			None
1111097	GW	MW-206-VP13	1111097-03	11/15/2011			None
1111097	GW	MW-206-VP15	1111097-04	11/15/2011			None
1111097	GW	MW-206-VP17	1111097-05	11/15/2011			None
1111107	GW	MW-206-VP20	1111107-01	11/16/2011			None
1111107	GW	MW-206-VP21	1111107-02	11/16/2011			None
1111107	GW	MW-206-VP21MS	1111107-03	11/16/2011		MS	None
1111107	GW	MW-206-VP21MSD	1111107-04	11/16/2011		MSD	None
1111107	GW	MW-206-VP23	1111107-05	11/16/2011	FD1		None
1111107	GW	MW-206-VP920	1111107-06	11/16/2011	FD1		None
1111107	GW	MW-206-VP25	1111107-07	11/16/2011			None
1111107	GW	MW-206-VP27	1111107-08	11/16/2011			None
1111114	GW	MW-206-VP30	1111114-01	11/17/2011			None
1111120	GW	MW-206-VP31	1111120-01	11/17/2011			None
1111120	GW	MW-206-VP34	1111120-02	11/17/2011			None
1111129	GW	RB-12	1111129-01	11/18/2011	RB		None
1111131	GW	MW-206-VP36	1111131-01	11/19/2011			None
1111131	GW	MW-206-VP37	1111131-02	11/19/2011			None
1111131	GW	MW-206-VP39	1111131-03	11/19/2011			None
1111132	GW	MW-206-VP42	1111132-01	11/20/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted in table 2A. No blank contamination was detected in the rinsate except chloroform and benzene as noted on table 2. Results associated with these rinsate blanks should be qualified "U" for not detected as noted in Table 2B. Results associated with the drill water blank should be qualified "U" for not detected as noted in Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable

and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-111511LW	Prep Blank	Methylene Chloride	3.3	B	VOC	ug/l	0.5	1.0
8260	VBLK-111611LW	Prep Blank	Methylene Chloride	5.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-111711LW	Prep Blank	Methylene Chloride	9.2	B	VOC	ug/l	0.5	1.0
8260	VBLK-111711YS	Prep Blank	Methylene Chloride	4.1	B	VOC	ug/l	0.5	1.0
8260	VBLK-111811LW	Prep Blank	Methylene Chloride	8.6	B	VOC	ug/l	0.5	1.0
8260	RB-12	Rinsate	Benzene	1.1	B	VOC	ug/l	0.5	1.0
8260	RB-12	Rinsate	Chloroform	1.5	B	VOC	ug/l	0.5	1.0
8260	VBLK-111911LW	Prep Blank	Methylene Chloride	7.8	B	VOC	ug/l	0.5	1.0
8260	MB-33878	Prep Blank	Methylene Chloride	6.5	B	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-111511LW	GW	Methylene Chloride	3.3	2.3	B	1.0	MW-206-VP02	U
8260	VBLK-111511LW	GW	Methylene Chloride	3.3	2.3	B	1.0	MW-206-VP03	U
8260	VBLK-111511LW	GW	Methylene Chloride	3.3	2.4	B	1.0	MW-206-VP05	U
8260	VBLK-111511LW	GW	Methylene Chloride	3.3	2.4	B	1.0	MW-206-VP07	U
8260	VBLK-111611LW	GW	Methylene Chloride	5.7	2.4	B	1.0	MW-206-VP09	U
8260	VBLK-111611LW	GW	Methylene Chloride	5.7	2.5	B	1.0	MW-206-VP12	U
8260	VBLK-111611LW	GW	Methylene Chloride	5.7	2.6	B	1.0	MW-206-VP13	U
8260	VBLK-111611LW	GW	Methylene Chloride	5.7	2.5	B	1.0	MW-206-VP15	U
8260	VBLK-111611LW	GW	Methylene Chloride	5.7	2.9	B	1.0	MW-206-VP17	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.0	B	1.0	MW-206-VP20	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.0	B	1.0	MW-206-VP21	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.0	B	1.0	MW-206-VP23	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.4	B	1.0	MW-206-VP920	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.2	B	1.0	MW-206-VP25	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.2	B	1.0	MW-206-VP27	U
8260	VBLK-111711YS	GW	Methylene Chloride	4.1	3.1	B	1.0	MW-206-VP30	U
8260	VBLK-111811LW	GW	Methylene Chloride	8.6	8.1	B	1.0	MW-206-VP31	U
8260	VBLK-111811LW	GW	Methylene Chloride	8.6	7.6	B	1.0	MW-206-VP34	U
8260	VBLK-111811LW	GW	Methylene Chloride	8.6	8.4	B	1.0	RB-12	U
8260	VBLK-111911LW	GW	Methylene Chloride	7.8	5.5	B	1.0	MW-206-VP36	U
8260	VBLK-111911LW	GW	Methylene Chloride	7.8	5.7	B	1.0	MW-206-VP37	U
8260	VBLK-111911LW	GW	Methylene Chloride	7.8	5.9	B	1.0	MW-206-VP39	U
8260	MB-33878	GW	Methylene Chloride	6.5	6.2	B	1.0	MW-206-VP42	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	RB-12	GW	Chloroform	1.5	11		1.0	MW-206-VP12	U
8260	RB-12	GW	Chloroform	1.5	9.9		1.0	MW-206-VP13	U
8260	RB-12	GW	Chloroform	1.5	9.7		1.0	MW-206-VP15	U
8260	RB-12	GW	Chloroform	1.5	6.9		1.0	MW-206-VP17	U
8260	RB-12	GW	Chloroform	1.5	2.0		1.0	MW-206-VP20	U

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	RB-12	GW	Chloroform	1.5	1.1		1.0	MW-206-VP21	U
8260	RB-12	GW	Chloroform	1.5	2.9		1.0	MW-206-VP23	U
8260	RB-12	GW	Chloroform	1.5	3.4		1.0	MW-206-VP25	U
8260	RB-12	GW	Chloroform	1.5	2.8		1.0	MW-206-VP920	U
8260	RB-12	GW	Benzene	1.1	5.9		1.0	MW-206-VP31	U
8260	RB-12	GW	Chloroform	1.5	0.51	J	1.0	MW-206-VP36	U
8260	RB-12	GW	Benzene	1.1	0.68	J	1.0	MW-206-VP37	U
8260	RB-12	GW	Chloroform	1.5	1.1		1.0	MW-206-VP39	U
6010	DW-03	GW	Nickel	14.0	6.00	J	1.0	MW-206-VP36	U
6010	DW-03	GW	Nickel	14.0	17.0	J	1.0	MW-206-VP39	U
6010	DW-03	GW	Nickel	14.0	12.0	J	1.0	MW-206-VP34	U
6010	DW-03	GW	Nickel	14.0	5.00	J	1.0	MW-206-VP30	U
6010	DW-03	GW	Nickel	14.0	15.0	J	1.0	MW-206-VP23	U
6010	DW-03	GW	Nickel	14.0	10.0	J	1.0	MW-206-VP25	U
6010	DW-03	GW	Nickel	14.0	16.0	J	1.0	MW-206-VP27	U
6010	DW-03	GW	Nickel	14.0	15.0	J	1.0	MW-206-VP920	U
6010	DW-03	GW	Nickel	14.0	31.0	J	1.0	MW-206-VP09	U
6010	DW-03	GW	Nickel	14.0	37.0	J	1.0	MW-206-VP12	U
6010	DW-03	GW	Nickel	14.0	23.0	J	1.0	MW-206-VP13	U
6010	DW-03	GW	Nickel	14.0	22.0	J	1.0	MW-206-VP15	U
6010	DW-03	GW	Nickel	14.0	62.0	J	1.0	MW-206-VP17	U
6010	DW-03	GW	Nickel	14.0	9.00	J	1.0	MW-206-VP02	U
6010	DW-03	GW	Nickel	14.0	25.0	J	1.0	MW-206-VP03	U
6010	DW-03	GW	Nickel	14.0	10.0	J	1.0	MW-206-VP05	U
6010	DW-03	GW	Nickel	14.0	34.0	J	1.0	MW-206-VP07	U

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-206-VP23/920	8260	Chloroform	ug/l	1.0	2.9	2.8	3.51	Good	None
	8260	Tetrachloroethene	ug/l	1.0	2.0	1.9	5.13	Good	None
	6010	Nickel	ug/l	20.0	15.0	15.0	0.00	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte

NC = Not Calculated

ND = Not Detected

PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 12, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1111082
	1111096
	1111106
	1111115
	1111119
	1111128

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1111082	GW	MW-205-VP02	1111082-01	11/14/2011			None
1111082	GW	MW-205-VP03	1111082-02	11/14/2011			None
1111082	GW	MW-205-VP05	1111082-03	11/14/2011			None
1111082	GW	MW-205-VP07	1111082-04	11/14/2011			None
1111096	GW	MW-205-VP10	1111096-01	11/15/2011			None
1111096	GW	MW-205-VP11	1111096-02	11/15/2011	FD1		None
1111096	GW	MW-205-VP919	1111096-03	11/15/2011	FD1		None
1111096	GW	MW-205-VP13	1111096-04	11/15/2011			None
1111096	GW	MW-205-VP13MS	1111096-05	11/15/2011		MS	None
1111096	GW	MW-205-VP13MSD	1111096-06	11/15/2011		MSD	None
1111096	GW	MW-205-VP15	1111096-07	11/15/2011			None
1111096	GW	MW-205-VP18	1111096-08	11/15/2011			None
1111106	GW	MW-205-VP19	1111106-01	11/16/2011			None
1111106	GW	RB-11	1111106-02	11/16/2011	RB		None
1111106	GW	MW-205-VP23	1111106-03	11/16/2011			None
1111106	GW	MW-205-VP25	1111106-04	11/16/2011			None
1111106	GW	MW-205-VP28	1111106-05	11/16/2011			None
1111106	GW	MW-205-VP29	1111106-06	11/16/2011			None
1111115	GW	MW-205-VP31	1111115-01	11/16/2011			None
1111115	GW	MW-205-VP33	1111115-02	11/17/2011			None
1111119	GW	MW-205-VP35	1111119-01	11/17/2011			None
1111119	GW	MW-205-VP37	1111119-02	11/17/2011			None
1111119	GW	MW-205-VP39	1111119-03	11/17/2011			None
1111128	GW	MW-205-VP42	1111128-01	11/18/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A. No blank contamination was detected in the rinsate except chloroform and benzene as noted on Table 2. Results associated with these rinsate blanks should be qualified "U" for not detected as noted on Table 2B. Results associated with the drill water blank should be qualified "U" as not detected as noted on Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable

and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-111511LW	Prep Blank	Methylene Chloride	3.3	B	VOC	ug/l	0.5	1.0
8260	VBLK-111711LW	Prep Blank	Methylene Chloride	9.2	B	VOC	ug/l	0.5	1.0
8260	RB-11	Rinsate	Benzene	1.1	B	VOC	ug/l	0.5	1.0
8260	RB-11	Rinsate	Chloroform	1.4	B	VOC	ug/l	0.5	1.0
8260	VBLK-111711YS	Prep Blank	Methylene Chloride	4.1	B	VOC	ug/l	0.5	1.0
8260	VBLK-111811LW	Prep Blank	Methylene Chloride	8.6	B	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-111511LW	GW	Methylene Chloride	3.3	2.4	B	1.0	MW-205-VP02	U
8260	VBLK-111511LW	GW	Methylene Chloride	3.3	2.2	B	1.0	MW-205-VP03	U
8260	VBLK-111511LW	GW	Methylene Chloride	3.3	2.3	B	1.0	MW-205-VP05	U
8260	VBLK-111511LW	GW	Methylene Chloride	3.3	2.5	B	1.0	MW-205-VP07	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	2.3	B	1.0	MW-205-VP10	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	2.4	B	1.0	MW-205-VP11	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	2.7	B	1.0	MW-205-VP919	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	2.4	B	1.0	MW-205-VP13	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	2.3	B	1.0	MW-205-VP15	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	2.6	B	1.0	MW-205-VP18	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	7.6	B	1.0	MW-205-VP19	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	7.6	B	1.0	RB-11	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	7.9	B	1.0	MW-205-VP23	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.7	B	1.0	MW-205-VP25	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.3	B	1.0	MW-205-VP28	U
8260	VBLK-111711LW	GW	Methylene Chloride	9.2	8.1	B	1.0	MW-205-VP29	U
8260	VBLK-111711YS	GW	Methylene Chloride	4.1	2.4	B	1.0	MW-205-VP31	U
8260	VBLK-111711YS	GW	Methylene Chloride	4.1	2.7	B	1.0	MW-205-VP33	U
8260	VBLK-111811LW	GW	Methylene Chloride	8.6	7.8	B	1.0	MW-205-VP35	U
8260	VBLK-111811LW	GW	Methylene Chloride	8.6	7.9	B	1.0	MW-205-VP37	U
8260	VBLK-111811LW	GW	Methylene Chloride	8.6	8.2	B	1.0	MW-205-VP39	U
8260	VBLK-111811LW	GW	Methylene Chloride	8.6	8.0	B	1.0	MW-205-VP42	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	RB-11	GW	Chloroform	1.4	1.6		1.0	MW-205-VP25	U
8260	RB-11	GW	Chloroform	1.4	1.3		1.0	MW-205-VP28	U
8260	RB-11	GW	Chloroform	1.4	1.2		1.0	MW-205-VP29	U
8260	RB-11	GW	Chloroform	1.4	0.59	J	1.0	MW-205-VP39	U
8260	RB-11	GW	Chloroform	1.4	0.53	J	1.0	MW-205-VP31	U
8260	RB-11	GW	Benzene	1.1	0.75	J	1.0	MW-205-VP33	U
8260	RB-11	GW	Chloroform	1.4	0.51	J	1.0	MW-205-VP18	U
6010	DW-03	GW	Nickel	14.0	7.00	J	20.0	MW-205-VP37	U

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
6010	DW-03	GW	Nickel	14.0	28.0		20.0	MW-205-VP39	U
6010	DW-03	GW	Nickel	14.0	11.0	J	20.0	MW-205-VP33	U
8260	DW-03	GW	Bromoform	1.2	1.2		1.0	MW-205-VP19	U
6010	DW-03	GW	Nickel	14.0	6.00	J	20.0	MW-205-VP23	U
6010	DW-03	GW	Nickel	14.0	9.00	J	20.0	MW-205-VP28	U
6010	DW-03	GW	Nickel	14.0	6.00	J	20.0	MW-205-VP29	U
6010	DW-03	GW	Nickel	14.0	7.00	J	20.0	MW-205-VP10	U
6010	DW-03	GW	Nickel	14.0	8.00	J	20.0	MW-205-VP11	U
6010	DW-03	GW	Nickel	14.0	9.00	J	20.0	MW-205-VP13	U
6010	DW-03	GW	Nickel	14.0	8.00	J	20.0	MW-205-VP15	U
6010	DW-03	GW	Nickel	14.0	13.0	J	20.0	MW-205-VP18	U
6010	DW-03	GW	Nickel	14.0	10.0	J	20.0	MW-205-VP919	U
6010	DW-03	GW	Nickel	14.0	13.0	J	20.0	MW-205-VP02	U
6010	DW-03	GW	Nickel	14.0	15.0	J	20.0	MW-205-VP03	U
6010	DW-03	GW	Nickel	14.0	9.00	J	20.0	MW-205-VP05	U
6010	DW-03	GW	Nickel	14.0	9.00	J	20.0	MW-205-VP07	U

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-205-VP11/919	8260	Tetrachloroethene	ug/l	1.0	8.9	8.3	6.98	Good	None
	6010	Nickel	ug/l	20.0	8.00	10.0	22.22	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 13, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1112011
	1112019
	1112052
	1112061
	1112062
	1112066
	1112079

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1112011	GW	MW-204-VP02	1112011-01	12/1/2011			None
1112011	GW	MW-204-VP03	1112011-02	12/1/2011			None
1112011	GW	MW-204-VP05	1112011-03	12/1/2011			None
1112011	GW	MW-204-VP07	1112011-04	12/1/2011			None
1112011	GW	MW-204-VP09	1112011-05	12/1/2011			None
1112011	GW	MW-204-VP11	1112011-06	12/1/2011			None
1112011	GW	MW-204-VP13	1112011-07	12/1/2011			None
1112019	GW	MW-204-VP16	1112019-01	12/2/2011			None
1112019	GW	MW-204-VP17	1112019-02	12/2/2011	FD1		None
1112019	GW	MW-204-VP925	1112019-03	12/2/2011	FD1		None
1112019	GW	RB-14	1112019-04	12/2/2011	RB		None
1112052	GW	MW-204-VP22	1112052-01	12/5/2011	FD2		None
1112052	GW	VP926	1112052-02	12/5/2011	FD2		MW-204-VP926
1112052	GW	MW-204-VP23	1112052-03	12/5/2011	FD3		None
1112052	GW	VP927	1112052-04	12/5/2011	FD3		MW-204-VP927
1110061	GW	MW-204-VP27	1110061-01	12/6/2011	FD4		None
1110061	GW	MW-204-VP29	1110061-02	12/6/2011			None
1110061	GW	MW-204-VP31	1110061-03	12/6/2011			None
1112062	GW	MW-204-VP26	1112062-01	12/6/2011			None
1112062	GW	MW-204-VP26MS	1112062-02	12/6/2011		MS	None
1112062	GW	MW-204-VP26MSD	1112062-03	12/6/2011		MSD	None
1112062	GW	VP928	1112062-04	12/6/2011	FD4		MW-204-VP928
1112066	GW	MW-204-VP33	1112066-01	12/7/2011			None
1112066	GW	MW-204-VP35	1112066-02	12/7/2011			None
1112066	GW	MW-204-VP37	1112066-03	12/7/2011			None
1112079	GW	MW-204-VP42	1112079-01	12/9/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A. No blank contamination was detected in the rinsate except chloroform as noted on table 2. Results associated with these rinsate blanks should be qualified "U" as not detected as noted on Table 2B. Results associated with the drill water blank should be qualified "U" as not detected as noted on Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable

and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “U” as not detected.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-120511LW	Prep Blank	Methylene Chloride	4.3	B	VOC	ug/l	0.5	1.0
8260	VBLK-120211LW	Prep Blank	Methylene Chloride	3.4	B	VOC	ug/l	0.5	1.0
8260	VBLK-120611aLW	Prep Blank	Methylene Chloride	4.3	B	VOC	ug/l	0.5	1.0
8260	VBLK-120711LW	Prep Blank	Methylene Chloride	12	B	VOC	ug/l	0.5	1.0
8260	VBLK-120811LW	Prep Blank	Methylene Chloride	5.7	B	VOC	ug/l	0.5	1.0
8260	VBLK-120911LW	Prep Blank	Methylene Chloride	4.9	B	VOC	ug/l	0.5	1.0
8260	RB-14	Rinsate	Chloroform	1.8	VOC	ug/l	0.5	1.0	VOC

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	3.5	B	1.0	MW-204-VP02	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	3.4	B	1.0	MW-204-VP03	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	3.6	B	1.0	MW-204-VP05	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	3.4	B	1.0	MW-204-VP07	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.9	B	1.0	MW-204-VP09	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.9	B	1.0	MW-204-VP11	U
8260	VBLK-120511LW	GW	Methylene Chloride	4.3	2.8	B	1.0	MW-204-VP13	U
8260	VBLK-120211LW	GW	Methylene Chloride	3.4	3.4	B	1.0	MW-204-VP16	U
8260	VBLK-120211LW	GW	Methylene Chloride	3.4	3.4	B	1.0	MW-204-VP17	U
8260	VBLK-120211LW	GW	Methylene Chloride	3.4	3.5	B	1.0	MW-204-VP925	U
8260	VBLK-120211LW	GW	Methylene Chloride	3.4	3.4	B	1.0	RB-14	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-120611aLW	GW	Methylene Chloride	4.3	3.7	B	1.0	MW-204-VP22	U
8260	VBLK-120611aLW	GW	Methylene Chloride	4.3	3.6	B	1.0	VP926	U
8260	VBLK-120611aLW	GW	Methylene Chloride	4.3	3.4	B	1.0	MW-204-VP23	U
8260	VBLK-120611aLW	GW	Methylene Chloride	4.3	4.2	B	1.0	VP927	U
8260	VBLK-120711LW	GW	Methylene Chloride	12	4.5	B	1.0	MW-204-VP27	U
8260	VBLK-120711LW	GW	Methylene Chloride	12	4.4	B	1.0	MW-204-VP29	U
8260	VBLK-120711LW	GW	Methylene Chloride	12	4.6	B	1.0	MW-204-VP31	U
8260	VBLK-120711LW	GW	Methylene Chloride	12	4.6	B	1.0	MW-204-VP26	U
8260	VBLK-120811LW	GW	Methylene Chloride	5.7	4.4	B	1.0	MW-204-VP33	U
8260	VBLK-120811LW	GW	Methylene Chloride	5.7	4.2	B	1.0	MW-204-VP35	U
8260	VBLK-120811LW	GW	Methylene Chloride	5.7	4.4	B	1.0	MW-204-VP37	U
8260	VBLK-120911LW	GW	Methylene Chloride	4.9	3.9	B	1.0	MW-204-VP42	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	RB-14	GW	Chloroform	1.8	0.90		1.0	MW-204-VP23	U
8260	RB-14	GW	Chloroform	1.8	0.85		1.0	MW-204-VP927	U
6010	DW-03	GW	Nickel	14.0	14.0	J	1.0	MW-204-VP33	U
6010	DW-03	GW	Nickel	1.8	16.5	J	1.0	MW-204-VP35	U
6010	DW-03	GW	Nickel	1.8	7.30	J	1.0	MW-204-VP26	U
6010	DW-03	GW	Nickel	1.8	13.0	J	1.0	MW-204-VP928	U
6010	DW-03	GW	Nickel	1.8	20.8		1.0	MW-204-VP27	U

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
6010	DW-03	GW	Nickel	1.8	7.96	J	1.0	MW-204-VP29	U
6010	DW-03	GW	Nickel	1.8	10.9	J	1.0	MW-204-VP31	U
6010	DW-03	GW	Nickel	1.8	6.46	J	1.0	MW-204-VP22	U
6010	DW-03	GW	Nickel	1.8	19.3	J	1.0	MW-204-VP23	U
6010	DW-03	GW	Nickel	1.8	9.21	J	1.0	MW-204-VP926	U
6010	DW-03	GW	Nickel	1.8	24.5		1.0	MW-204-VP927	U
6010	DW-03	GW	Nickel	1.8	13.8	J	1.0	MW-204-VP17	U
6010	DW-03	GW	Nickel	1.8	13.0	J	1.0	MW-204-VP925	U
6010	DW-03	GW	Nickel	1.8	19.1	J	1.0	MW-204-VP02	U
6010	DW-03	GW	Nickel	1.8	46.7		1.0	MW-204-VP03	U
6010	DW-03	GW	Nickel	1.8	6.35	J	1.0	MW-204-VP05	U
6010	DW-03	GW	Nickel	1.8	14.5	J	1.0	MW-204-VP07	U
6010	DW-03	GW	Nickel	1.8	9.10	J	1.0	MW-204-VP09	U
6010	DW-03	GW	Nickel	1.8	10.8	J	1.0	MW-204-VP11	U
6010	DW-03	GW	Nickel	1.8	11.8	J	1.0	MW-204-VP13	U

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-204-VP17/925	8260	Benzene	ug/l	1.0	0.87	0.96	9.84	Good	None
	8260	Trichloroethene	ug/l	1.0	4.1	4.4	7.06	Good	None
MW-204-VP22 / 926	8260	cis-1,2-Dichloroethene	ug/l	1.0	7.5	7.8	3.92	Good	None
	8260	Tetrachloroethene	ug/l	1.0	2.3	2.4	4.26	Good	None
	8260	Trichloroethene	ug/l	1.0	100	110	9.52	Good	None
MW-204-VP23 / 927	8260	Chloroform	ug/l	1.0	0.90	0.85	5.71	Good	None
	8260	Tetrachloroethene	ug/l	1.0	2.1	2.0	4.88	Good	None
	8260	Trichloroethene	ug/l	1.0	3.0	2.4	22.22	Good	None
	6010	Nickel	ug/l	20.0	19.3	24.5	23.74	Good	None
MW-204-VP27 / 928	8260	Tetrachloroethene	ug/l	1.0	18	16	11.76	Good	None
	8260	Trichloroethene	ug/l	1.0	19	16	17.14	Good	None
	8260	cis-1,2-dichloroethene	ug/l	1.0	0.81	0.76	6.37	Good	None
	6010	Nickel	ug/l	20.0	20.8	13.0	46.15	NC	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte

NC = Not Calculated

ND = Not Detected

PQL = Practical Quantitation Limit

RPD = Relative Percent Difference

T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 11, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1110151
	1110180
	1110183
	1110194
	1110212

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1110151	GW	MW-203-VP02	1110151-01	10/20/2011			None
1110151	GW	MW-203-VP04	1110151-02	10/20/2011			None

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1110151	GW	MW-203-VP05	1110151-03	10/21/2011			None
1110151	GW	MW-203-VP07	1110151-04	10/21/2011			None
1110151	GW	MW-203-VP09	1110151-05	10/21/2011			None
1110151	GW	MW-203-VP11	1110151-06	10/21/2011			None
1110151	GW	MW-203-VP13	1110151-07	10/21/2011			None
1110151	GW	MW-203-VP15	1110151-08	10/21/2011			None
1110180	GW	MW-203-VP18	1110180-01	10/24/2011			None
1110180	GW	MW-203-VP20	1110180-02	10/24/2011			None
1110180	GW	MW-203-VP24	1110180-03	10/25/2011			None
1110180	GW	RB-09	1110180-04	10/25/2011			None
1110180	GW	MW-203-VP26	1110180-05	10/25/2011			None
1110183	GW	MW-203-VP27	1110183-01	10/26/2011			None
1110183	GW	MW-203-VP29	1110183-02	10/26/2011	FD1		None
1110183	GW	MW-203-VP29MS	1110183-03	10/26/2011		MS	None
1110183	GW	MW-203-VP29MSD	1110183-04	10/26/2011		MSD	None
1110183	GW	MW-203-VP918	1110183-05	10/26/2011	FD1		None
1110183	GW	MW-203-VP31	1110183-06	10/26/2011			None
1110183	GW	MW-203-VP33	1110183-07	10/26/2011			None
1110194	GW	MW-203-VP35	1110194-01	10/27/2011			None
1110194	GW	MW-203-VP38	1110194-02	10/27/2011			None
1110194	GW	MW-203-VP39	1110194-03	10/27/2011			None
1110212	GW	MW-203-VP40	1110212-01	10/28/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified “U” as not detected as noted on Table 2A. No blank contamination was detected in the rinsate. No blank contamination was detected in the drill water blanks with the exception of nickel, bromoform, and dibromochloromethane. Results associated with this drill water should be qualified “U” as not detected as noted on Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged “J” as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical

field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-102411YW	Prep Blank	Methylene Chloride	6.9	B	VOC	ug/l	0.5	1.0
8260	VBLK-102611YW	Prep Blank	Methylene Chloride	10	B	VOC	ug/l	0.5	1.0
8260	VBLK-102711YW	Prep Blank	Methylene Chloride	8.8	B	VOC	ug/l	0.5	1.0
8260	VBLK-102811YW	Prep Blank	Methylene Chloride	8.9	B	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-102411YW	GW	Methylene Chloride	6.9	4.8	B	1.0	MW-203-VP02	U
8260	VBLK-102411YW	GW	Methylene Chloride	6.9	5.2	B	1.0	MW-203-VP04	U
8260	VBLK-102411YW	GW	Methylene Chloride	6.9	4.3	B	1.0	MW-203-VP05	U
8260	VBLK-102411YW	GW	Methylene Chloride	6.9	4.0	B	1.0	MW-203-VP07	U
8260	VBLK-102411YW	GW	Methylene Chloride	6.9	4.6	B	1.0	MW-203-VP09	U
8260	VBLK-102411YW	GW	Methylene Chloride	6.9	4.6	B	1.0	MW-203-VP11	U
8260	VBLK-102411YW	GW	Methylene Chloride	6.9	4.6	B	1.0	MW-203-VP13	U
8260	VBLK-102411YW	GW	Methylene Chloride	6.9	4.5	B	1.0	MW-203-VP15	U
8260	VBLK-102611YW	GW	Methylene Chloride	10	9.2	B	1.0	MW-203-VP18	U
8260	VBLK-102611YW	GW	Methylene Chloride	10	9.9	B	1.0	MW-203-VP20	U
8260	VBLK-102611YW	GW	Methylene Chloride	10	9.8	B	1.0	MW-203-VP24	U
8260	VBLK-102611YW	GW	Methylene Chloride	10	10	B	1.0	RB-09	U
8260	VBLK-102611YW	GW	Methylene Chloride	10	9.6	B	1.0	MW-203-VP26	U
8260	VBLK-102711YW	GW	Methylene Chloride	8.8	8.0	B	1.0	MW-203-VP27	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-102711YW	GW	Methylene Chloride	8.8	7.3	B	1.0	MW-203-VP29	U
8260	VBLK-102711YW	GW	Methylene Chloride	8.8	7.8	B	1.0	MW-203-VP918	U
8260	VBLK-102711YW	GW	Methylene Chloride	8.8	8.8	B	1.0	MW-203-VP31	U
8260	VBLK-102711YW	GW	Methylene Chloride	8.8	6.9	B	1.0	MW-203-VP33	U
8260	VBLK-102811YW	GW	Methylene Chloride	8.9	7.0	B	1.0	MW-203-VP35	U
8260	VBLK-102811YW	GW	Methylene Chloride	8.9	6.2	B	1.0	MW-203-VP38	U
8260	VBLK-102811YW	GW	Methylene Chloride	8.9	8.0	B	1.0	MW-203-VP39	U
8260	VBLK-1110212YW	GW	Methylene Chloride	8.9	7.6	B	1.0	MW-203-VP40	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW6010C	DW-03	DW	Nickel	14.0	21.0	NA	20	MW-203-VP18	U FLAG
SW6010C	DW-03	DW	Nickel	14.0	14.0	J	20	MW-203-VP20	U FLAG
SW6010C	DW-03	DW	Nickel	14.0	9.00	J	20	MW-203-VP27	U FLAG
SW6010C	DW-03	DW	Nickel	14.0	47.0		20	MW-203-VP31	U FLAG
SW6010C	DW-03	DW	Nickel	14.0	10.0	J	20	MW-203-VP33	U FLAG
SW6010C	DW-03	DW	Nickel	14.0	10.0	J	20	MW-203-VP35	U FLAG
SW6010C	DW-03	DW	Nickel	14.0	6.00	J	20	MW-203-VP38	U FLAG
SW6010C	DW-03	DW	Nickel	14.0	8.00	J	20	MW-203-VP39	U FLAG
SW6010C	DW-03	DW	Nickel	14.0	12.0	J	20	MW-203-VP40	U FLAG

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-203-VP29/918	8260	1,1,1-Trichloroethane	ug/l	1.0	0.57	ND	NC	NC	NC
	8260	cis-1,2-Dichloroethene	ug/l	1.0	0.82	0.87	5.92	Good	None
	8260	Tetrachloroethene	ug/l	1.0	1.1	0.95	14.63	Good	None
	8260	Trichloroethene	ug/l	1.0	17	14	19.35	Good	None
	6010	Nickel	ug/l	20.0	82.0	80.0	2.47	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 12, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1205113
	1205115
	1205128
	1205136
	1205151
	1205162
	1205163
	1205209
	1205222
	1205225

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1205113	GW	MW-202-VP03	1205113-01	5/9/2012			None
1205113	GW	MW-202-VP05	1205113-02	5/10/2012			None
1205113	GW	MW-202-VP07	1205113-03	5/10/2012			None
1205113	GW	MW-202-VP10	1205113-04	5/10/2012			None
1205115	GW	MW-202-VP11	1205115-01	5/11/2012			None
1205115	GW	RB-10	1205115-02	5/11/2012			None
1205115	GW	MW-202-VP931	1205115-03	5/11/2012	FD1		None
1205115	GW	MW-202-VP13	1205115-04	5/11/2012	FD1		None
1205128	GW	MW-202-VP16	1205128-01	5/14/2012			None
1205128	GW	MW-202-VP16MS	1205128-02	5/14/2012		MS	None
1205128	GW	MW-202-VP16MSD	1205128-03	5/14/2012		MSD	None
1205128	GW	MW-202-VP17	1205128-04	5/14/2012			None
1205136	GW	MW-202-VP19	1205136-01	5/14/2012			None
1205136	GW	MW-202-VP21	1205136-02	5/15/2012			None
1205136	GW	MW-202-VP23	1205136-03	5/15/2012			None
1205151	GW	MW-202-VP26	1205151-01	5/15/2012	FD2		None
1205151	GW	MW-202-VP932	1205151-02	5/15/2012	FD2		None
1205151	GW	MW-202-VP27	1205151-03	5/16/2012			None
1205151	GW	MW-202-VP29	1205151-04	5/16/2012			None
1205162	GW	MW-202-VP35	1205162-01	5/17/2012			None
1205163	GW	MW-202-VP31	1205163-01	5/17/2012			None
1205163	GW	MW-202-VP933	1205163-02	5/17/2012	FD3		None
1205163	GW	MW-202-VP33	1205163-03	5/17/2012	FD3		None
1205209	GW	MW-202-VP41	1205209-01	5/21/2012			None
1205222	GW	MW-202-VP43	1205222-01	5/22/2012			None
1205225	GW	MW-202-VP45	1202225-01	5/22/2012			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A. No blank contamination was detected in the rinsate.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce

similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable).

The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-051412YW	Prep Blank	Methylene Chloride	3.3	B	VOC	ug/l	0.5	1.0
8260	VBLK-051612YW	Prep Blank	Methylene Chloride	3.9	B	VOC	ug/l	0.5	1.0
8260	VBLK-051712YW	Prep Blank	Methylene Chloride	4.8	B	VOC	ug/l	0.5	1.0
8260	VBLK-051812YW	Prep Blank	Methylene Chloride	3.8	B	VOC	ug/l	0.5	1.0
8260	VBLK-051812YW	Prep Blank	Methylene Chloride	4.6	B	VOC	ug/l	0.5	1.0
8260	VBLK-052212YW	Prep Blank	Methylene Chloride	3.9	B	VOC	ug/l	0.5	1.0
8260	VBLK-052212YW	Prep Blank	Methylene Chloride	3.4	B	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-051412YW	GW	Methylene Chloride	3.3	2.4	B	1.0	MW-202-VP03	U
8260	VBLK-051412YW	GW	Methylene Chloride	3.3	2.9	B	1.0	MW-202-VP05	U
8260	VBLK-051412YW	GW	Methylene Chloride	3.3	3.0	B	1.0	MW-202-VP07	U
8260	VBLK-051412YW	GW	Methylene Chloride	3.3	2.8	B	1.0	MW-202-VP10	U
8260	VBLK-051412YW	GW	Methylene Chloride	3.3	2.8	B	1.0	MW-202-VP11	U
8260	VBLK-051412YW	GW	Methylene Chloride	3.3	2.4	B	1.0	RB-10	U
8260	VBLK-051412YW	GW	Methylene Chloride	3.3	2.0	B	1.0	MW-202-VP931	U
8260	VBLK-051412YW	GW	Methylene Chloride	3.3	2.5	B	1.0	MW-202-VP13	U
8260	VBLK-051612YW	GW	Methylene Chloride	3.9	6.7	B	1.0	MW-202-VP16	U
8260	VBLK-051612YW	GW	Methylene Chloride	3.9	5.7	B	1.0	MW-202-VP17	U
8260	VBLK-051612YW	GW	Methylene Chloride	3.9	4.2	B	1.0	MW-202-VP19	U

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-051612YW	GW	Methylene Chloride	3.9	4.4	B	1.0	MW-202-VP21	U
8260	VBLK-051612YW	GW	Methylene Chloride	3.9	4.7	B	1.0	MW-202-VP23	U
8260	VBLK-051712YW	GW	Methylene Chloride	3.9	6.0	B	1.0	MW-202-VP26	U
8260	VBLK-051712YW	GW	Methylene Chloride	3.9	4.9	B	1.0	MW-202-VP932	U
8260	VBLK-051712YW	GW	Methylene Chloride	3.9	5.4	B	1.0	MW-202-VP27	U
8260	VBLK-051712YW	GW	Methylene Chloride	3.9	8.3	B	1.0	MW-202-VP29	U
8260	VBLK-051812YW	GW	Methylene Chloride	3.8	3.7	B	1.0	MW-202-VP35	U
8260	VBLK-051812YW	GW	Methylene Chloride	4.6	2.7	B	1.0	MW-202-VP31	U
8260	VBLK-051812YW	GW	Methylene Chloride	4.6	3.0	B	1.0	MW-202-VP933	U
8260	VBLK-051812YW	GW	Methylene Chloride	4.6	2.8	B	1.0	MW-202-VP33	U
8260	VBLK-052212YW	GW	Methylene Chloride	3.9	4.1	B	1.0	MW-202-VP41	U
8260	VBLK-052212YW	GW	Methylene Chloride	3.4	3.2	B	1.0	MW-202-VP43	U
8260	VBLK-052212YW	GW	Methylene Chloride	3.4	3.1	B	1.0	MW-202-VP45	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
8260	MW-202-VP16	MSD	1,1,2,2-Tetrachloroethane	21.4	20	J
8260	MW-202-VP16	MSD	1,1-Dichloroethane	21.2	20	J
8260	MW-202-VP16	MSD	1,1-Dichloroethene	28.5	20	J
8260	MW-202-VP16	MSD	1,2-Dichloropropane	20.3	20	J
8260	MW-202-VP16	MSD	1,4-Dichlorobenzene	21.0	20	J
8260	MW-202-VP16	MSD	Benzene	21.2	20	J
8260	MW-202-VP16	MSD	trans-1,2-Dichloroethene	28.7	20	J
8260	MW-202-VP16	MSD	Trichloroethene	22.0	20	J

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
6010	LCSW051812AD	Nickel	102000	80	120	3	J

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-202-VP26/932	8260	1,1,1-Trichloroethane	ug/l	1.0	0.36	0.43	17.72	Good	None
	8260	1,1,2-Trichloro-1,2,2,-trifluoraethane	ug/l	1.0	0.45	0.43	4.55	Good	None
	8260	1,1-Dichloroethene	ug/l	1.0	0.66	0.53	21.85	Good	None
	6010	Nickel	ug/l	20.0	11.9	39.7	107.75	Poor	J
MW-202-VP33 / 933	8260	1,1,1-Trichloroethane	ug/l	1.0	4.0	0.96	122.58	Poor	J
		1,1,2-Trichloro-1,2,2,-trifluoraethane	ug/l	1.0	0.75	ND	NC	NC	NC
		1,1-Dichloroethane	ug/l	1.0	ND	1.7	NC	NC	NC
		1,1-Dichloroethene	ug/l	1.0	5.8	1.5	117.81	Poor	J
		cis-1,2-Dichloroethene	ug/l	1.0	2.4	ND	NC	NC	NC
		Tetrachloroethene	ug/l	2.0	ND	0.52	NC	NC	NC
		Trichloroethene	ug/l	1.0	270	28	162.42	Poor	J
		Nickel	ug/l	20.0	ND	37.5	NC	NC	NC

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 10, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling – MW201	1109152
	1109157
	1109164
	1109166

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1109152	GW	MW-201-VP02	11109152-01	9/21/11			None
1109152	GW	MW-201-VP04	11109152-02	9/21/11			None
1109152	GW	MW-201-VP04MS	11109152-03	9/21/11		MS	None
1109152	GW	MW-201-VP04MSD	11109152-04	9/21/11		MSD	None

Work Order	Matrix	Sample ID	Lab ID	Sample Date	QC	MS/ MSD	ID Corrections
1109152	GW	MW-201-VP06	11109152-05	9/21/11	FD		None
1109152	GW	MW-201-VP910	11109152-06	9/21/11	FD		None
1109152	GW	MW-201-VP08	11109152-07	9/21/11			None
1109157	GW	MW-201-VP10	1109157-01	9/21/11			None
1109157	GW	MW-201-VP12	1109157-02	9/21/11			None
1109157	GW	MW-201-VP14	1109157-03	9/21/11			None
1109157	GW	RB-05	1109157-04	9/21/11	RB		None
1109157	GW	MW-201-VP15	1109157-05	9/22/11			None
1109164	GW	MW-201-VP17	1109164-01	9/22/11			None
1109164	GW	MW-201-VP19	1109164-02	9/23/11			None
1109166	GW	MW-201-VP21	1109156-01	9/23/11			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A. No blank contamination was detected in the rinsate except chloroform and benzene as noted on Table 2. Results associated with these rinsate blanks should be qualified "U" for not detected as noted on Table 2B.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall project frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated. One field duplicate was analyzed for MW-201 and no analytes were detected in either sample.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK-092211LW	Prep Blank	Methylene Chloride	4.1	B	VOC	ug/l	0.5	1.0
8260	VBLK-092211HS	Prep Blank	Methylene Chloride	3.4	B	VOC	ug/l	0.5	1.0
8260	VBLK-092311HS	Prep Blank	Methylene Chloride	3.5	B	VOC	ug/l	0.5	1.0
8260	RB-05	Rinsate	Benzene	1.1		VOC	ug/l	0.5	1.0
8260	RB-05	Rinsate	Chloroform	1.2		VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-092211LW	GW	Methylene Chloride	4.1	5.6	B	1.0	MW-201-VP02	U
8260	VBLK-092211LW	GW	Methylene Chloride	4.1	4.1	B	1.0	MW-201-VP04	U
8260	VBLK-092211LW	GW	Methylene Chloride	4.1	5.1	B	1.0	MW-201-VP06	U
8260	VBLK-092211LW	GW	Methylene Chloride	4.1	4.4	B	1.0	MW-201-VP910	U
8260	VBLK-092211LW	GW	Methylene Chloride	4.1	4.4	B	1.0	MW-201-VP08	U
8260	VBLK-092211HS	GW	Methylene Chloride	3.4	4.2	B	1.0	MW-201-VP10	U
8260	VBLK-092211HS	GW	Methylene Chloride	3.4	5.3	B	1.0	MW-201-VP12	U
8260	VBLK-092211HS	GW	Methylene Chloride	3.4	5.7	B	1.0	MW-201-VP14	U
8260	VBLK-092211HS	GW	Methylene Chloride	3.4	5.5	B	1.0	RB-05	U
8260	VBLK-092211HS	GW	Methylene Chloride	3.4	5.3	B	1.0	MW-201-VP15	U
8260	VBLK-092311HS	GW	Methylene Chloride	3.5	5.2	B	1.0	MW-201-VP17	U
8260	VBLK-092311HS	GW	Methylene Chloride	3.5	5.8	B	1.0	MW-201-VP19	U
8260	VBLK-092311HS	GW	Methylene Chloride	3.5	4.5	B	1.0	MW-201-VP21	U

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	RB-05	GW	Benzene	1.1	2.5		1.0	MW-201-VP02	U

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
8260	MW-201-VP04	MS	1,1,2-trichloro-1,2,2-trifluoroethane	ND	50.00	0	1	22	120	UJ
8260	MW-201-VP04	MS	1,2,3-Trichlorobenzene	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	1,2,4-Trichlorobenzene	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	1,2-Dibromo-3-chloropropane	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	1,2-Dibromomethane	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	1,4-Dioxane	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	2-Butanone	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	2-Hexanone	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	4-Methyl-2-pentanone	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	Acetone	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	Benzene	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	Bromodichloromethane	ND	50.00	0	1	30	120	UJ

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
8260	MW-201-VP04	MS	Carbon Disulfide	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	cis-1,2-Dichloroethene	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	cis-1,3-Dichloropropene	ND	50.00	0	1	27	110	UJ
8260	MW-201-VP04	MS	Cyclohexane	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	Dichlorodifluoromethane	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	Isopropylbenzene	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	m,p-xylene	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	Methyl Acetate	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	Methyl tert-butyl ether	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	Methyl Cyclohexane	ND	50.00	0	1	30	120	UJ
8260	MW-201-VP04	MS	o-Xylene	ND	50.00	1.36	1	30	120	UJ
8260	MW-201-VP04	MS	Styrene	ND	50.00	0	1	30	120	UJ

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
MW-201-VP06/910	8260	None Detected	ug/l						

Sample / Dup	Method	Analyte	Unit	PQL	Sample Result	Dup Result	RPD	RPD Rating	Qualifier
	6010	None Detected	ug/l						

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 10, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling – MW57	1110043
	1110044
	1110053
	1110054
	1110057
	1110058

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
1110043	GW	MW-57-VP02	1110043-01	10/5/11			None
1110043	GW	MW-57-VP03	1110043-02	10/5/11			None

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
1110043	GW	MW-57-VP04	1110043-03	10/5/11			None
1110043	GW	MW-57-VP05	1110043-04	10/5/11			None
1110044	GW	MW-57-VP02	1110044-01	10/5/11			None
1110044	GW	MW-57-VP03	1110044-02	10/5/11			None
1110044	GW	MW-57-VP04	1110044-03	10/5/11			None
1110044	GW	MW-57-VP05	1110044-04	10/5/11			None
1110053	GW	MW-57-VP06	1110053-01	10/5/11			None
1110053	GW	MW-57-VP07	1110053-02	10/5/11			None
1110053	GW	MW-57-VP08	1110053-03	10/6/11			None
1110053	GW	MW-57-VP09	1110053-04	10/6/11			None
1110054	GW	MW-57-VP06	1110054-01	10/5/11			None
1110054	GW	MW-57-VP07	1110054-02	10/5/11			None
1110054	GW	MW-57-VP08	1110054-03	10/6/11			None
1110054	GW	MW-57-VP09	1110054-04	10/6/11			None
1110057	GW	MW-57-VP10	1110057-01	10/6/11			None
1110057	GW	MW-57-VP11	1110057-02	10/6/11			None
1110057	GW	MW-57-VP12	1110057-03	10/6/11			None
1110057	GW	MW-57-VP13	1110057-04	10/6/11			None
1110057	GW	MW-57-VP14	1110057-05	10/6/11			None
1110057	GW	MW-57-VP15	1110057-06	10/6/11			None
1110058	GW	MW-57-VP10	1110058-01	10/6/11			None
1110058	GW	MW-57-VP11	1110058-02	10/6/11			None
1110058	GW	MW-57-VP12	1110058-03	10/6/11			None
1110058	GW	MW-57-VP13	1110058-04	10/6/11			None
1110058	GW	MW-57-VP14	1110058-05	10/6/11			None
1110058	GW	MW-57-VP15	1110058-06	10/6/11			None
1110058	GW	RB-07	1110058-07A	10/6/11			None
1110058	GW	RB-07	1110058-07B	10/6/11			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2A. Results associated with these method blanks should be qualified "U" as not detected. No blank contamination was detected in the rinsate except chloroform as noted on Table 2B. Results associated with these rinsate blanks should be qualified "U" as not detected.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the

precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall frequency of 10%. The RPD ratings are listed on Table 7 as "Good" if the RPD is less than field duplicate QC criteria and as "Poor" if the RPD exceeded the field duplicate QC criteria. Field duplicate results with "Poor" are flagged "J" as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	VBLK100611YW	Prep Blank	Methylene Chloride	3.5		VOC	ug/l	0.5	1.0
8260	VBLK100611HS	Prep Blank	Methylene Chloride	3.3		VOC	ug/l	0.5	1.0
8260	RB07	Rinsate	Chloroform	0.61	J	VOC	ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK100611YW	GW	Methylene Chloride	3.5	1.7	B	1.0	MW-57-VP02	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	1.8	B	1.0	MW-57-VP03	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	2.2	B	1.0	MW-57-VP04	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	2.2	B	1.0	MW-57-VP05	U
8260	VBLK100611HS	GW	Methylene Chloride	3.3	2.4	B	1.0	MW-57-VP06	U
8260	VBLK100611HS	GW	Methylene Chloride	3.3	2.1	B	1.0	MW-57-VP07	U
8260	VBLK100611HS	GW	Methylene Chloride	3.3	2.2	B	1.0	MW-57-VP08	U
8260	VBLK100611HS	GW	Methylene Chloride	3.3	2.6	B	1.0	MW-57-VP09	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	2.0	B	1.0	MW-57-VP10	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	2.0	B	1.0	MW-57-VP11	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	2.4	B	1.0	MW-57-VP12	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	2.0	B	1.0	MW-57-VP13	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	2.3	B	1.0	MW-57-VP14	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	1.7	B	1.0	MW-57-VP15	U
8260	VBLK100611YW	GW	Methylene Chloride	3.5	1.9	B	1.0	RB-07	U

Table 2B - List of Samples Qualified for Field Blank Contamination

None

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 9, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Stephanie Chaffe, Chemist, E & E, Dallas

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	1110223

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
1110223	AQ	FB01	1110223-01	10/31/2011			None

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method blanks except for methylene chloride as noted on Table 2. Results associated with these method blanks should be qualified "U" as not detected as noted on Table 2A.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the affects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar

results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgement was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates for this vertical profile sampling event were performed on 30 sets of samples collected for an overall frequency of 10%. The RPD ratings are listed on Table 7 as "Good" if the RPD is less than field duplicate QC criteria and as "Poor" if the RPD exceeded the field duplicate QC criteria. Field duplicate results with "Poor" are flagged "J" as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
8260	FB01	AQ	Methylene Chloride	4.2	U		ug/l	0.5	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
8260	VBLK-110111YW	AQ	Methylene Chloride	3.7	4.2	B	1.0	FB01	U

Table 2B - List of Samples Qualified for Field Blank Contamination

None

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Reanalyzed

None

Table 7 – Summary of Field Duplicate Results

None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 16, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Joanna Christopher, Sr. Radiation Scientist, E & E, Buffalo

SUBJ: Data Review – Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	292019

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to GEL Laboratories, Charleston, SC for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
292019	GW	MW-204-VP02	292019001	12/1/11			
292019	GW	MW-204-VP03	292019002	12/1/11			
292019	GW	MW-204-VP05	292019003	12/1/11			
292019	GW	MW-204-VP07	292019004	12/1/11			
292019	GW	MW-204-VP09	292019005	12/1/11			
292019	GW	MW-204-VP11	292019006	12/1/11			
292019	GW	MW-204-VP13	292019007	12/1/11			
292019	GW	MW-204-VP16	292019008	12/2/11			
292019	GW	MW-204-VP17	292019009	12/2/11			

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
292019	GW	VP925	292019010	12/2/11			MW-204-VP925
292019	W	RB-14	292019011	12/2/11			
292019	GW	MW-204-VP22	292019012	12/5/11			
292019	GW	VP926	292019013	12/5/11			MW-204-VP926
292019	GW	MW-204-VP23	292019014	12/5/11			
292019	GW	VP927	292019015	12/5/11			MW-204-VP927
292019	GW	MW-204-VP26	292019016	12/6/11		MS/MSD	
292019	GW	MW-204-VP27	292019017	12/6/11			
292019	GW	MW-204-VP928	292019018	12/6/11			
292019	GW	MW-204-VP29	292019019	12/6/11			
292019	GW	MW-204-VP31	292019020	12/6/11			
292019	GW	MW-204-VP33	292019021	12/6/11			
292019	GW	MW-204-VP35	292019022	12/7/11			
292019	GW	MW-204-VP37	292019023	12/7/11			
292019	GW	MW-204-VP42	292019024	12/9/11			

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time except for those listed on the table below.

Method	Sample ID	Sample Date	Matrix	Sample Date	Sample Type	Prep HT	Prep Date	AnalHT	Analysis Date	Sample Qual

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method or field blanks except as noted on Tables 2A and 2B. Results associated with these method blanks should be qualified "U" as not detected.

3.0 SURROGATE SPIKE RECOVERY (N/A)

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the effects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in

Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved. The samples listed in the table below were analyzed at dilutions with elevated PQLs reported.

ClientSampID	TestNo

V FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgment was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were performed for an overall frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
ASTM D 5174	QC1202561167	MB	Uranium	0.0812	none		ug/L	0.0697	0.100

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
ASTM D 5174	QC1202561167	GW	Uranium	0.0812	2.19		0.100	MW-204-VP11	none
ASTM D 5174	QC1202561167	GW	Uranium	0.0812	1.40		0.100	MW-204-VP17	none
ASTM D 5174	QC1202561167	GW	Uranium	0.0812	0.0772		0.100	MW-204-VP925	U
ASTM D 5174	QC1202561167	GW	Uranium	0.0812	1.57		0.100	MW-204-VP22	none

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag

Table 3 - List of Samples with Surrogates outside Control Limits (N/A)

Method	Sample ID	Sample Type	Analyte	Rec.	Low Limit	High Limit	Dil Fac	Sample Qual.

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual

Table 6 –Samples that were Reanalyzed

Sample ID	Lab ID	Method	Sample Type	Action

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	MW-204-VP17	VP925	RPD	RPD Rating	Qualifier
ASTM D 5174	Uranium	ug/L	1.40	ND	NA	poor	J

Method	Analyte	Unit	MW-204-VP22	VP926	RPD	RPD Rating	Qualifier
ASTM D 5174	Uranium	ug/L	1.57	ND	NA	poor	J

Method	Analyte	Unit	MW-204-VP23	VP927	RPD	RPD Rating	Qualifier
ASTM D 5174	Uranium	ug/L	ND	ND	NA	good	none

Method	Analyte	Unit	MW-204-VP27	MW-204-928	RPD	RPD Rating	Qualifier
ASTM D 5174	Uranium	ug/L	0.135	ND	NA	poor	J

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 16, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Joanna Christopher, Sr. Radiation Scientist, E & E, Buffalo

SUBJ: Data Review – Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	289318

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to GEL Laboratories, Charleston, SC for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
289318	GW	MW-203-VP02	289318001	10/20/11			
289318	GW	MW-203-VP04	289318002	10/20/11			
289318	GW	MW-203-VP05	289318003	10/21/11			
289318	GW	MW-203-VP07	289318004	10/21/11			
289318	GW	MW-203-VP09	289318005	10/21/11			
289318	GW	MW-203-VP11	289318006	10/21/11			
289318	GW	MW-203-VP13	289318007	10/21/11			
289318	GW	MW-203-VP15	289318008	10/21/11			
289318	GW	MW-203-VP18	289318009	10/24/11			

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
289318	GW	MW-203-VP20	289318010	10/24/11			
289318	GW	MW-203-VP24	289318011	10/25/11			
289318	GW	MW-203-VP26	289318012	10/25/11			
289318	W	RB-09	289318013	10/25/11			
289318	GW	MW-203-VP27	289318014	10/26/11			
289318	GW	MW-203-VP29	289318015	10/26/11		MS/MSD	
289318	GW	MW-203-VP918	289318016	10/26/11	FD		
289318	GW	MW-203-VP31	289318017	10/26/11			
289318	GW	MW-203-VP33	289318018	10/25/11			
289318	GW	MW-203-VP35	289318019	10/27/11			
289318	GW	MW-203-VP38	289318020	10/27/11			
289318	GW	MW-203-VP39	289318021	10/27/11			
289318	GW	MW-203-VP40	289318022	10/28/11			

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time except for those listed on the table below.

Method	Sample ID	Sample Date	Matrix	Sample Date	Sample Type	Prep HT	Prep Date	AnalHT	Analysis Date	Sample Qual

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method or field blanks except as noted on Table 2A. Results associated with these method blanks should be qualified "U" as not detected.

3.0 SURROGATE SPIKE RECOVERY (N/A)

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the effects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in

Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved. The samples listed in the table below were analyzed at dilutions with elevated PQLs reported.

ClientSampID	TestNo
MW-203-VP20	ASTM D 5174
MW-203-VP31	ASTM D 5174
MW-203-VP38	ASTM D 5174

V FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data

qualification based on poor field duplicate precision. Professional judgment was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were performed for an overall frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag

Table 3 - List of Samples with Surrogates outside Control Limits (N/A)

Method	Sample ID	Sample Type	Analyte	Rec.	Low Limit	High Limit	Dil Fac	Sample Qual.

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual

Table 6 –Samples that were Reanalyzed

Sample ID	Lab ID	Method	Sample Type	Action

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	MW-203-VP29	MW-203-VP918	RPD	RPD Rating	Qualifier
ASTM D 5174	Uranium	ug/L	ND	ND	NA	good	none

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 16, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Joanna Christopher, Sr. Radiation Scientist, E & E, Buffalo

SUBJ: Data Review – Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	286935

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to GEL Laboratories, Charleston, SC for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
286935	GW	MW-201-VP17	286935001	9/22/11			
286935	GW	MW-201-VP19	286935002	9/23/11			
286935	GW	MW-201-VP21	286935003	9/23/11			

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time except for those listed on the table below.

Method	Sample ID	Sample Date	Matrix	Sample Date	Sample Type	Prep HT	Prep Date	AnalHT	Analysis Date	Sample Qual

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not

considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method or field blanks except as noted on Tables 2A and 2B. Results associated with these method blanks should be qualified "U" as not detected.

3.0 SURROGATE SPIKE RECOVERY (N/A)

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the effects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the

precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved. The samples listed in the table below were analyzed at dilutions with elevated PQLs reported.

ClientSampID	TestNo

V FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgment was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were performed for an overall frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag

Table 3 - List of Samples with Surrogates outside Control Limits (N/A)

Method	Sample ID	Sample Type	Analyte	Rec.	Low Limit	High Limit	Dil Fac	Sample Qual.

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual

Table 6 –Samples that were Reanalyzed

Sample ID	Lab ID	Method	Sample Type	Action

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit			RPD	RPD Rating	Qualifier

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: October 16, 2012

TO: Dan Kennedy, Project Manager, E & E, Buffalo

FROM: Joanna Christopher, Sr. Radiation Scientist, E & E, Buffalo

SUBJ: Data Review – Sylvania Vertical Profile Sampling

REFERENCE:

ProjectID	Lab Work Order
Sylvania Vertical Profile Sampling	286934

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included. All samples were sent to GEL Laboratories, Charleston, SC for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
286934	GW	MW-201-VP02	286934001	9/21/11			
286934	GW	MW-201-VP04	286934002	9/21/11		MS/MSD	
286934	GW	MW-201-VP06	286934003	9/21/11			
286934	GW	MW-201-VP910	286934004	9/21/11			
286934	GW	MW-201-VP08	286934005	9/21/11			
286934	GW	MW-201-VP10	286934006	9/21/11			
286934	GW	MW-201-VP12	286934007	9/21/11			
286934	GW	MW-201-VP14	286934008	9/21/11			
286934	GW	MW-201-VP15	286934009	9/22/11			

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
286934	W	RB-05	286934010	9/21/11			

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan.

REVIEW RESULTS:

All sample procedures were followed and the sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time except for those listed on the table below.

Method	Sample ID	Sample Date	Matrix	Sample Date	Sample Type	Prep HT	Prep Date	AnalHT	Analysis Date	Sample Qual

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels,

then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. No blank contamination was detected in the method or field blanks except as noted on Tables 2A and 2B. Results associated with these method blanks should be qualified "U" as not detected.

3.0 SURROGATE SPIKE RECOVERY (N/A)

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. No additional data qualifiers were added if the samples were analyzed at dilutions. If the case of multiple surrogate compounds added to the sample, only target analytes associated with that surrogate are flagged "J" as estimated.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the effects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a

laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For inorganic analyses, all samples in the MS/MSD batch are qualified.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

All compound identification and quantitation criteria were achieved. The samples listed in the table below were analyzed at dilutions with elevated PQLs reported.

ClientSampID	TestNo

V FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgment was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were performed for an overall frequency of 10%. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than field duplicate QC criteria and as “Poor” if the RPD exceeded the field duplicate QC criteria. Field duplicate results with “Poor” are flagged “J” as estimated.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
ASTM D 5174	RB-05	FB	Uranium	0.314	none		ug/L	0.0703	0.100

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
ASTM D 5174	RB-05	W	Uranium	0.314	1.93	none	0.100	MW-201-VP02	none

Table 3 - List of Samples with Surrogates outside Control Limits (N/A)

Method	Sample ID	Sample Type	Analyte	Rec.	Low Limit	High Limit	Dil Fac	Sample Qual.

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual

Table 6 –Samples that were Reanalyzed

Sample ID	Lab ID	Method	Sample Type	Action

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	MW-201-VP06	MW-201-VP910	RPD	RPD Rating	Qualifier
ASTM D 5174	Uranium	ug/L	ND	ND	NA	good	none

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F300409
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes For Rad sample MW-818-GW-R1 the sample time is not listed on the COC but the laboratory sample tracking form states that the sample time is 1200. The Rad COC lists sample MW-202-495-R1 as the MS/MSD but the laboratory used a sample from a different SDG (S-1-32-R1).
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F300409
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Several compounds present in method and trip blanks at low levels.
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Acetone was qualified as non-detect in all field samples due to method blank contamination. Methylene Chloride was qualified as non-detect in several samples due to trip blank contamination. There is no impact on data usability because the compounds found were common laboratory and field contaminants.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes - Recoveries of 1,1,2-Trichloro-1,2,2-Trifluoroethane and Cyclohexane were high, associated sample MW-202-495-R1 is qualified "J" as estimated for these compounds.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No – Recoveries of 1,1,2-Trichloro-1,2,2-Trifluoroethane and Cyclohexane were high, no positive detections of these compounds found in environmental samples so no qualification of the data is required.

Data Usability Summary Report	**Project: Sylvania Phase IV**
Laboratory: TestAmerica	**LAB SDG ID: F2F300409**
Date Completed: 9/30/2012	**Data Validation Chemist: B. Kroon and J. Christopher**
Date Performed: 10/2/2012	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – MW-202-380-R1 and PW-6-7-R1 were diluted/reanalyzed at dilutions due to high concentrations of target analytes.
Do field duplicate results show good precision for all compounds? See Table 6	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. No field blanks were included with this SDG.
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F300409
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	Yes.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	No – MW-202-495-R1 IS 1,4-Dichlorobenzene-d4 recovery high, all associated compounds are qualified "J" as estimated in this sample.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	Yes
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F300409
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
Acetone and Methylene Chloride were qualified as non-detect in several samples due to method and trip blank contamination. 1,1,2-Trichloro-1,2,2-Trifluoroethane and Cyclohexane qualified “J” as estimated due to MS/MSD recovery non-conformance. Several compounds qualified “J” as estimated due to Internal Standard (1,4-dichlorobenzene-d4) recovery in MW-202-495-R1.

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F300409
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F300409	GW	MW-202-220-R1	F2F300409-001	6/26/12			None
F2F300409	GW	MW-818-GW-R1	F2F300409-002	6/26/12			None
F2F300409	GW	MW-202-495-R1	F2F300409-003	6/26/12	MS/MSD	*	None
F2F300409	GW	MW-202-380-R1	F2F300409-004	6/25/12			None
F2F300409	GW	PW-6-1-R1	F2F300409-005	6/28/12	MS/MSD	*	None
F2F300409	GW	PW-6-2-R1	F2F300409-006	6/29/12			None
F2F300409	GW	PW-6-3-R1	F2F300409-007	6/29/12			None
F2F300409	GW	PW-6-4-R1	F2F300409-008	6/29/12	MS/MSD	*	None
F2F300409	GW	PW-6-5-R1	F2F300409-009	6/27/12			None
F2F300409	GW	PW-6-6-R1	F2F300409-010	6/27/12			None
F2F300409	GW	PW-6-7-R1	F2F300409-011	6/27/12			None
F2F300409	GW	TB-10-R1	F2F300409-012	6/29/12			None

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F300409	GW	SW8260B	Volatile Organics, GC/MS	12	N/TB
F2F300409	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	12	N/TB
F2F300409	GW	SW6010B	Nickel	11	N
307183	GW	ASTM D5174	KPA, Total U, Liquid	11	N

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	F2G060000-093	MB	Acetone	0.45	J	A	ug/L	0.34	2.0
SW8260B	F2G060000-093	MB	1,2,3-Trichlorobenzene	0.17	J	A	ug/L	0.087	2.0
SW8260B	F2G060000-093	MB	1,2,4-Trichlorobenzene	0.14	J	A	ug/L	0.078	5.0
SW8260B	TB-10-R1	TB	Chloroethane	0.15	J	A	ug/L	0.099	2.0
SW8260B	TB-10-R1	TB	Methylene Chloride	0.27	J	A	ug/L	0.27	1.0

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F300409
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	TB-10-R1	TB	Acetone	1.0	JB	A	ug/L	0.34	2.0

Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	0.90	J	2.0	MW-202-220-R1	U Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	1.4	JB	2.0	MW-818-GW-R1	U Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	1.5	JB	2.0	PW-6-1-R1	U Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	0.98	JB	2.0	PW-6-3-R1	U Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	0.71	JB	2.0	PW-6-4-R1	U Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	2.3	B	2.0	PW-6-5-R1	U Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	0.56	JB	2.0	PW-6-6-R1	U Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	0.56	JB	2.0	PW-6-7-R1	U Flag
SW8260B	F2G060000-093	GW	Acetone	0.45	1.0	JB	2.0	TB-10-R1	U Flag

Table 3B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	TB-10-R1	GW	Methylene Chloride	0.27	0.30	J	1.0	MW-202-495-R1	U Flag
SW8260B	TB-10-R1	GW	Methylene Chloride	0.27	0.34	J	1.0	PW-6-1-R1	U Flag
SW8260B	TB-10-R1	GW	Methylene Chloride	0.27	0.31	J	1.0	PW-6-2-R1	U Flag
SW8260B	TB-10-R1	GW	Methylene Chloride	0.27	0.37	J	1.0	PW-6-5-R1	U Flag
SW8260B	TB-10-R1	GW	Methylene Chloride	0.27	0.30	J	1.0	PW-6-6-R1	U Flag
SW8260B	TB-10-R1	GW	Methylene	0.27	0.34	J	1.0	PW-6-7-R1	U Flag

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Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
			Chloride						

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.	REPORTABLE
SW8260B	MW-202-495-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	127	1	72	123	J	Yes
SW8260B	MW-202-495-R1	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	133	1	72	123	J	Yes
SW8260B	MW-202-495-R1	MS	Cyclohexane	ND	122	1	85	115	J	Yes
SW8260B	MW-202-495-R1	MSD	Cyclohexane	ND	121	1	85	115	J	Yes

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
SW8260B	F2G060000-093	1,1,2-Trichloro-1,2,2-Trifluoroethane	135	72	123	0	None
SW8260B	F2G060000-093	Cyclohexane	127	85	115	0	None

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	MW-202-220-R1	MW-818-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	0.0933	0.084	10.2	Good	None
SW8260B	1,1,1-Trichloroethane	ug/L	0.45	0.43	4.5	Good	None
SW8260B	1,1-Dichloroethane	ug/L	1.0	1.0	0.0	Good	None
SW8260B	1,1-Dichloroethene	ug/L	0.65	0.66	1.5	Good	None
SW8260B	Chloroform	ug/L	0.16	0.14	13.3	Good	None
SW8260B	Tetrachloroethylene	ug/L	0.64	0.60	6.5	Good	None

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Key:

AP	=	Acid Phenol
BN	=	Base Neutral
CCV	=	Continuing calibration verification
COC	=	Chain-of-custody
CVAA	=	Cold Vapor Automatic Absorption
GC	=	Gas Chromatography
GC/MS	=	Gas Chromatography/Mass Spectrometry
ICP	=	Inductively Coupled Plasma Argon Spectrometry
ICS	=	Interference check standard
ICV	=	Initial calibration verification
NA	=	Not Applicable
LCS	=	Laboratory Control Sample
MS/MSD	=	Matrix Spike/Matrix Spike Duplicate
QAPP	=	Quality Assurance Project Plan
QC	=	Quality Control
SD	=	Serial Dilution
TIC	=	Tentatively Identified Compound
VOCs	=	Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F230409
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F230409
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes- Acetone and Chloroethane were detected in the method blank at low levels. Acetone, 1,2,3-Trichlorobenzene, and 1,2,4-Trichlorobenzene were detected at low levels in the trip blank.
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Acetone was qualified "U" as non-detect in three samples due to the detection of Acetone in the method blank. There is no impact on data usability because the compounds found were common laboratory and field contaminants.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – 1,1,2-Trichloro-1,2,2-Trifluoroethane and Cyclohexane were recovered high in batch QC MS/MSD. Cyclohexane qualified "J" as estimated in MW-207-250-R1 due to positive detection of compound. Cyclohexane was recovered high in MW-207-320-R1 MS/MSD. No qualification of the data necessary due to no positive detection of the compound in the parent sample. RPD for Methyl Acetate in MW-207-320-R1 MS/MSD was out of compliance, no qualification of the data necessary due to target analyte being non-detect in parent sample.

Data Usability Summary Report	**Project: Sylvania Phase IV**
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Date Performed: 10/2/2012	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No – 1,1,2-Trichloro-1,2,2-Trifluoroethane and Cyclohexane was out of criteria for several LCS's. Cyclohexane was qualified "J" as estimated in MW-207-250-R1 due to this non-conformance.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – MW-207-170-R1, MW-29S-R1, and MW-33S-R1 were reanalyzed at dilution due to high concentrations of target analytes.
Do field duplicate results show good precision for all compounds? See Table 6	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. No field blanks were included with this SDG.
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes

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Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 6	No The RPD for the field duplicate sample pair is 170; therefore the results for the field duplicate sample pair are qualified with J.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes

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Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No – 1,1,2-Trichloro-1,2,2-Trifluoroethane, 1,1,2-Trichlorofluoroethane had %D greater than 20%, associated compounds with batch 2185112 are qualified "J" as estimated.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
The RPD for uranium for the field duplicate sample pair is outside criteria; therefore the field duplicate sample pair results are qualified with J. Several analytes qualified "U" as non-detect due to method blank contamination, also several analytes qualified "J" as estimated due to MS/MSD recovery, and LCS recovery.

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Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F230409	GW	MW-207-170-R1	F2F230409-003	6/21/12			None
F2F230409	GW	MW-207-250-R1	F2F230409-009	6/21/12	MS/MSD	*	None
F2F230409	GW	MW-207-320-R1	F2F230409-002	6/21/12	MS/MSD	*	None
F2F230409	GW	MW-29S-R1	F2F230409-001	6/21/12			None
F2F230409	GW	MW-30D-R1	F2F230409-004	6/21/12	MS/MSD	*	None
F2F230409	GW	MW-31D-R1	F2F230409-006	6/21/12			None
F2F230409	GW	MW-33S-R1	F2F230409-007	6/21/12			None
F2F230409	GW	MW-55S-R1	F2F230409-005	6/21/12			None
F2F230409	GW	MW-817-GW-R1	F2F230409-008	6/21/12			None
F2F230409	GW	PW-4-2-R1	F2F230409-010	6/21/12			None
F2F230409	GW	TB-09-R1	F2F230409-011	6/22/12			None

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F230409	GW	SW8260B	Volatile Organics, GC/MS	11	N/TB
F2F230409	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	11	N/TB
F2F230409	GW	SW6010B	Nickel	10	N
306627	GW	ASTM D5174	KPA, Total U, Liquid	10	N

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	TB-09-R1	TB	Chloroethane	0.13	J	A	ug/L	0.099	2.0
SW8260B	TB-09-R1	TB	Acetone	1.3	JB	A	ug/L	0.34	2.0
SW8260B	F2F250000-058	MB	Acetone	0.62	J	A	ug/L	0.34	2.0
SW8260B	F2F250000-058	MB	1,2,3-Trichlorobenzene	0.32	J	A	ug/L	0.087	2.0
SW8260B	F2F250000-058	MB	1,2,4-Trichlorobenzene	0.16	J	A	ug/L	0.078	5.0
SW8260B	F2G030000-023	MB	1,2,3-Trichlorobenzene	0.17	J	A	ug/L	0.087	2.0

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Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	F2G030000-023	MB	1,2,4-Trichlorobenzene	0.10	J	A	ug/L	0.078	5.0
SW8260B	F2G030000-112	MB	Acetone	0.66	J	A	ug/L	0.34	2.0
SW8260B	F2G030000-112	MB	1,2,4-Trichlorobenzene	0.10	J	A	ug/L	0.078	5.0

Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2G030000-112	GW	Acetone	0.66	0.71	JB	2.0	PW-4-2-R1	U Flag
SW8260B	F2F250000-058	GW	Acetone	0.62	1.3	JB	2.0	TB-09-R1	U Flag

Table 3B - List of Samples Qualified for Field Blank Contamination

Not Applicable

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	MW-817-GW-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	128	1	72	123	None
SW8260B	MW-817-GW-R1	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	131	1	72	123	None
SW8260B	Batch QC	MS	Cyclohexane	ND	127	1	85	115	J Flag 1 Sample
SW8260B	Batch QC	MSD	Cyclohexane	ND	122	1	85	115	J Flag 1 Sample

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Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
SW8260B	F2F250000-058	1,1,2-Trichloro-1,2,2-Trifluoroethane	134	72	123	0	None
SW8260B	F2F250000-058	Cyclohexane	127	85	115	0	None
SW8260B	F2F250000-023	1,1,2-Trichloro-1,2,2-Trifluoroethane	143	72	123	0	None
SW8260B	F2F250000-023	Cyclohexane	131	85	115	0	None
SW8260B	F2G030000-112	Cyclohexane	80	85	115	1	J Flag

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	MW-55S-R1	MW-817-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	0.00873	0.107	170	Poor	UJ/J
SW8260B	Tetrachloroethylene	ug/L	1.1	1.1	0.0	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F220444
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F220444
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Several compounds were detected in the method, field (rinsate), and trip blanks.
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several analytes were flagged for trip and method blank contamination. Rinsate blank contamination did not qualify any results in this data set. There is no impact on data usability because the compounds found were common laboratory and field contaminants.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – Batch QC used for MS/MSD results, several compounds out of compliance for selected samples. All samples in associated batches qualified for analytes shown on Table 4.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No – 1,1,2-Trichloro-1,2,2-Trifluoroethane and Cyclohexane were out of criteria for multiple LCS samples. 1,1,2-Trichloro-1,2,2-Trifluoroethane was qualified "J" as estimated due to detection of this compound in sample W-36-448-R1.

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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Several samples were diluted/reanalyzed at dilution due to high concentrations of target analytes.
Do field duplicate results show good precision for all compounds? See Table 6	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (Rinsate blank sample RB-05-R1 met criteria.)
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Total U Analysis - Approval by Data Validation Chemist Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	Yes.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	No VOCs – IS #4 (1,4-Dichlorobenzene-d4) was recovered low for MW-52D-R1 and MW-31I-R1, associated compounds with this internal standard are qualified "J" as estimated due to this non-conformance.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No – 2-Butanone had %D greater than 20% in CCV 1177 associated sample results are qualified "J" as estimated. 2-Butanone had %D greater than 20% in CCV 1250, associated sample results are qualified "J" as estimated.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F220444
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
MS/MSD, LCS, CCV, and Internal Standard Recoveries qualified several compounds across multiple samples, see Tables for individual samples and compounds qualified.

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F220444
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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F220444	GW	MW-16D-R1	F2F220444-015	6/19/12			None
F2F220444	GW	MW-16S-R1	F2F220444-014	6/19/12			None
F2F220444	GW	MW-211-250-R1	F2F220444-013	6/19/12			None
F2F220444	GW	MW-24DD-R1	F2F220444-002	6/20/12			None
F2F220444	GW	MW-27S-R1	F2F220444-003	6/20/12			None
F2F220444	GW	MW-31I-R1	F2F220444-023	6/20/12			None
F2F220444	GW	MW-33D-R1	F2F220444-009	6/20/12			None
F2F220444	GW	MW-34D-R1	F2F220444-011	6/19/12			None
F2F220444	GW	MW-34S-R1	F2F220444-012	6/19/12			None
F2F220444	GW	MW-39S-R1	F2F220444-010	6/20/12			None
F2F220444	GW	MW-50I-R1	F2F220444-004	6/20/12			None
F2F220444	GW	MW-51I-R1	F2F220444-021	6/20/12			None
F2F220444	GW	MW-52D-R1	F2F220444-007	6/20/12			None
F2F220444	GW	MW-53S-R1	F2F220444-005	6/20/12			None
F2F220444	GW	MW-815-GW-R1	F2F220444-016	6/19/12			None
F2F220444	GW	MW-816-GW-R1	F2F220444-006	6/20/12			None
F2F220444	GW	PW-4-1-R1	F2F220444-008	6/20/12			None
F2F220444	GW	PW-4-3-R1	F2F220444-024	6/20/12	MS/MSD	*	None
F2F220444	GW	PW-4-4-R1	F2F220444-025	6/20/12			None
F2F220444	GW	PW-4-5	F2F220444-019	6/20/12			PW-4-5-R1
F2F220444	GW	PW-4-6-R1	F2F220444-022	6/20/12			None
F2F220444	GW	PW-4-7	F2F220444-018	6/19/12			PW-4-7-R1
F2F220444	GW	RB-05-R1	F2F220444-020	6/20/12			None
F2F220444	GW	TB-08-R1	F2F220444-026	6/21/12			None
F2F220444	GW	W-24-260-R1	F2F220444-017	6/19/12			None
F2F220444	GW	W-36-448-R1	F2F220444-001	6/20/12	MS/MSD	*	None

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F220444	GW	SW8260B	Volatile Organics, GC/MS	26	N/TB/RB
F2F220444	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	26	N/TB/RB

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Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F220444	GW	SW6010B	Nickel	25	N/RB
306594	GW	ASTM D5174	KPA, Total U, Liquid	25	N/RB

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	RB-05-R1	RB	Toluene	0.28	J	A	ug/L	0.072	1.0
SW8260B	RB-05-R1	RB	Acetone	10	B	A	ug/L	0.34	2.0
SW8260B	RB-05-R1	RB	Methylene Chloride	0.39	J	A	ug/L	0.27	1.0
SW8260B	RB-05-R1	RB	Methyl Ethyl Ketone	1.2	J	A	ug/L	0.52	5.0
SW8260B	TB-08-R1	TB	Acetone	1.0	JB	A	ug/L	0.34	2.0
SW8260B	TB-08-R1	TB	Chloroethane	0.14	J	A	ug/L	0.099	2.0
SW8260B	TB-08-R1	TB	Methylene Chloride	0.31	J	A	ug/L	0.27	1.0
SW8260B	F2F250000-058	MB	Acetone	0.62	J	A	ug/L	0.34	2.0
SW8260B	F2F250000-058	MB	1,2,3-Trichlorobenzene	0.32	J	A	ug/L	0.087	2.0
SW8260B	F2F250000-058	MB	1,2,4-Trichlorobenzene	0.16	J	A	ug/L	0.078	5.0
SW8260B	F2F270000-100	MB	1,2,4-Trichlorobenzene	0.11	J	A	ug/L	0.078	5.0
SW8260B	F2F280000-080	MB	Acetone	0.49	J	A	ug/L	0.34	2.0
SW8260B	F2G030000-023	MB	1,2,3-Trichlorobenzene	0.17	J	A	ug/L	0.087	2.0
SW8260B	F2G030000-023	Mb	1,2,4-Trichlorobenzene	0.10	J	A	ug/L	0.078	5.0

Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F250000-058	GW	Acetone	0.62	1.0	JB	2.0	TB-08-R1	U Flag
SW8260B	F2F280000-080	GW	Acetone	0.49	0.82	JB	2.0	MW-24DD-R1	U Flag
SW8260B	F2F280000-080	GW	Acetone	0.49	0.51	JB	2.0	MW-27S-R1	U Flag
SW8260B	F2F280000-080	GW	Acetone	0.49	1.2	JB	2.0	MW-52D-R1	U Flag

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Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F280000-080	GW	Acetone	0.49	1.2	JB	2.0	MW-816-GW-R1	U Flag
SW8260B	F2F280000-080	GW	Acetone	0.49	0.88	JB	2.0	PW-4-3-R1	U Flag
SW8260B	F2F280000-080	GW	Acetone	0.49	0.51	JB	2.0	PW-4-5-R1	U Flag
SW8260B	F2F280000-080	GW	Acetone	0.49	1.1	JB	2.0	W-24-260-R1	U Flag
SW8260B	F2F280000-080	GW	Acetone	0.49	0.69	J	2.0	W-36-448-R1	U Flag

Table 3B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	RB-05-R1	GW	Methylene Chloride	0.39	0.27	J	1.0	W-24-260-R1	U Flag

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	Batch QC	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	128	1	72	123	J Flag
SW8260B	Batch QC	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	131	1	72	123	J Flag
SW8260B	Batch QC	MS	Cyclohexane	ND	127	1	85	115	J Flag
SW8260B	Batch QC	MSD	Cyclohexane	ND	122	1	85	115	J Flag
SW8260B	Batch QC	MS	Acetone	21	0	1	40	140	J Flag
SW8260B	Batch QC	MSD	Acetone	21	0	1	40	140	J Flag
SW8260B	Batch QC	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	124	1	72	123	J Flag
SW8260B	Batch	MSD	1,1,2-Trichloro-	ND	130	1	72	123	J Flag

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
	QC		1,2,2-Trifluoroethane						
SW8260B	Batch QC	MS	Cyclohexane	ND	124	1	85	115	J Flag
SW8260B	Batch QC	MSD	Cyclohexane	ND	125	1	85	115	J Flag
SW8260B	Batch QC	MSD	Methyl Acetate	ND	123	1	66	121	J Flag
SW8260B	PW-4-3-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	130	1	72	123	J Flag
SW8260B	PW-4-3-R1	MS	Cyclohexane	ND	128	1	85	115	J Flag

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
SW8260B	F2F250000-058	1,1,2-Trichloro-1,2,2-Trifluoroethane	134	72	123	0	None
SW8260B	F2F250000-058	Cyclohexane	127	85	115	0	None
SW8260B	F2F270000-100	1,1,2-Trichloro-1,2,2-Trifluoroethane	131	72	123	0	None
SW8260B	F2F270000-100	Cyclohexane	126	85	115	0	None
SW8260B	F2G030000-023	1,1,2-Trichloro-1,2,2-Trifluoroethane	143	72	123	1	J Flag
SW8260B	F2G030000-023	Cyclohexane	131	85	115	0	None

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	MW-211-250-R1	MW-815-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	0.57	0.56	1.8	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	0.19	0.15	23.5	Good	None
SW8260B	TERT-BUTYL METHYL ETHER	ug/L	0.52	0.48	8.0	Good	None
SW8260B	ACETONE	ug/L	0.95	1.3	31.1	Good	None
SW8260B	1,1-DICHLOROETHANE	ug/L	0.21	0.23	9.1	Good	None

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Method	Analyte	Units	MW-211-250-R1	MW-815-GW-R1	RPD	Rating	Sample Qualifier
SW8260B	1,4-DIOXANE (P-DIOXANE)	ug/L	1.9	1.6	17.1	Good	None

Method	Analyte	Units	MW-52D-R1	MW-816-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	0.0475	0.0505	6.12	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	0.34	0.31	9.2	Good	None
SW8260B	METHYLENE CHLORIDE	ug/L	0.41	0.43	4.8	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	0.38	0.43	12.3	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	58	59	1.7	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F200416
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F200416
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Multiple compounds were detected in method, trip, and rinsate blanks associated with samples in this SDG.
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples had analytes qualified as non-detect due to method, and rinsate blank contamination. There is no impact on data usability because the compounds found were common laboratory and field contaminants, and not compounds of concern for this site.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – Batch QC samples, and MS/MSD from this SDG were non-compliant with QC criteria, and qualified analytes in multiples samples as estimated.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No – Multiple analytes were outside of QC criteria. Only 1,1,2-Trichloro-1,2,2-Trifluoroethane was qualified as estimated in a sample.

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Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Multiple samples had to be run at dilution/reanalyzed at a dilution due to high concentrations of target analytes. Only one result is reported from these analyses.
Do field duplicate results show good precision for all compounds? See Table 6	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (Rinsate blank sample RB-04-R1 met criteria.)
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
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Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported except for sample S-1-325-R1, for which the reanalyzed results are reported. The RDL was not met for this sample due to matrix interferences (MDL =0.1153; RDL = 0.100).

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No – 2-Butanone had %D greater than 20% for batch 2179100, all results from this batch are qualified "J" as estimated for this compound.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F200416
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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
RDL for total uranium analysis not met for one sample due to interferences – DL only slightly elevated. Precision for total uranium for one field duplicate sample pair outside criteria; field duplicate sample pair results qualified UJ/J. For VOC analysis, blank contamination, MS/MSD recovery and RPD non-conformance, LCS non-conformance, and Continuing Calibration Verification qualified multiple analytes across multiple samples. No data was rejected due to these non-conformances.

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Laboratory: TestAmerica	LAB SDG ID: F2F200416
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F200416	GW	W20-160-R1	F2F200416-001	6/18/12			W-20-160-R1
F2F200416	GW	W20-120-R1	F2F200416-002	6/18/12			W-20-120-R1
F2F200416	GW	MW-208-540-R1	F2F200416-003	6/18/12	MS/MSD	*	
F2F200416	GW	MW-212-580-R1	F2F200416-004	6/18/12			
F2F200416	GW	PW-7-7-R1	F2F200416-005	6/18/12			
F2F200416	GW	W19-150-R1	F2F200416-006	6/18/12	MS/MSD	*	W-19-150-R1
F2F200416	GW	PW-7-5-R1	F2F200416-007	6/18/12			
F2F200416	GW	S-1-450-R1	F2F200416-008	6/18/12			
F2F200416	GW	S-1-325-R1	F2F200416-009	6/18/12			
F2F200416	GW	PW-7-2-R1	F2F200416-010	6/18/12			
F2F200416	GW	PW-7-3N	F2F200416-011	6/18/12			PW-7-3-R1
F2F200416	GW	MW-812-GW-R1	F2F200416-012	6/18/12			
F2F200416	GW	W25-150-R1	F2F200416-013	6/18/12	MS/MSD	*	W-25-150-R1
F2F200416	GW	MW-210-470-R1	F2F200416-014	6/18/12			
F2F200416	GW	MW-210-380-R1	F2F200416-015	6/19/12			
F2F200416	GW	PW-7-4-R1	F2F200416-016	6/19/12	MS/MSD	*	
F2F200416	GW	MW-814-GW-R1	F2F200416-017	6/19/12			
F2F200416	GW	MW-813-GW-R1	F2F200416-018	6/19/12			

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F200416
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F200416	GW	W25-188-R1	F2F200416-019	6/19/12			W-25-188-R1
F2F200416	GW	W-18-150-R1	F2F200416-020	6/19/12	MS/MSD	*	
F2F200416	GW	RB-04-R1	F2F200416-021	6/19/12			
F2F200416	GW	PW-7-6-R1	F2F200416-022	6/19/12			
F2F200416	GW	TB-07-R1	F2F200416-023	6/19/12			
F2F200416	GW	MW-210-280-R1	F2F200416-024	6/19/12			
F2F200416	GW	PW-7-7-R1 (DISSOLVED)	F2F200416-025	6/18/12	MS/MSD	*	

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F220416	GW	SW8260B	Volatile Organics, GC/MS	25	N/TB/RB
F2F220416	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	25	N/TB/RB
F2F220416	GW	SW6010B	Nickel	24	N/RB
306434	GW	ASTM D5174	KPA, Total U, Liquid	24	N/RB

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	F2F250000-058	MB	Acetone	0.62	J	A	ug/L	0.34	2.0
SW8260B	F2F250000-058	MB	1,2,3-Trichlorobenzene	0.32	J	A		0.087	2.0
SW8260B	F2F250000-058	MB	1,2,4-Trichlorobenzene	0.16	J	A		0.078	5.0
SW8260B	F2F260000-103	MB	Acetone	0.84	J	A		0.34	2.0
SW8260B	F2F260000-103	MB	Methylene Chloride	0.31	J	A		0.087	2.0
SW8260B	F2F260000-103	MB	1,2,4-Trichlorobenzene	0.17	J	A		0.078	5.0

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Method	Sample ID	Sample Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	F2F270000-100	MB	1,2,4-Trichlorobenzene	0.11	J	A		0.078	5.0
SW8260B	F2F280000-080	MB	Acetone	0.49	J	A		0.34	2.0

Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F250000-058	WG	Acetone	0.62	1.1	JB	2.0	TB-07-R1	UJ
SW8260B	F2F260000-103	WG	Acetone	0.84	3.1	B	2.0	MW-208-540-R1	U
SW8260B	F2F260000-103	WG	Acetone	0.84	7.7	BD	2.0	MW-210-380-R1	U
SW8260B	F2F260000-103	WG	Acetone	0.84	7.9	B	2.0	MW-210-470-R1	U
SW8260B	F2F260000-103	WG	Acetone	0.84	1.8	JB	2.0	MW-212-580-R1	UJ
SW8260B	F2F260000-103	WG	Acetone	0.84	3.4	B	2.0	MW-812-GW-R1	U
SW8260B	F2F260000-103	WG	Acetone	0.84	4.4	B	2.0	PW-7-2-R1	U
SW8260B	F2F260000-103	WG	Acetone	0.84	7.6	B	2.0	PW-7-5-R1	U
SW8260B	F2F260000-103	WG	Acetone	0.84	0.95	JB	2.0	PW-7-7-R1	UJ
SW8260B	F2F260000-103	WG	Acetone	0.84	2.1	B	2.0	S-1-325-R1	U
SW8260B	F2F260000-103	WG	Acetone	0.84	2.2	B	2.0	S-1-450-R1	U
SW8260B	F2F260000-103	WG	Acetone	0.84	1.9	JB	2.0	W-20-160-R1	UJ
SW8260B	F2F260000-103	WG	Acetone	0.84	2.3	B	2.0	W-25-150-R1	U
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.75	JB	2.0	MW-208-540-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	1.4	JBD	2.0	MW-210-380-R1	UJ
SW8260B	F2F260000-	WG	Methylene	0.31	0.67	JB	2.0	MW-210-	UJ

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Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
	103		Chloride					470-R1	
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.75	JB	2.0	MW-212-580-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.76	JB	2.0	MW-812-GW-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.92	JB	2.0	PW-7-2-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.59	JB	2.0	PW-7-3-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.92	JB	2.0	PW-7-5-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.77	JB	2.0	PW-7-7-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.70	JB	2.0	S-1-325-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.61	JB	2.0	S-1-450-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	2.5	JBD	2.0	W-19-150-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.47	JB	2.0	W-20-160-R1	UJ
SW8260B	F2F260000-103	WG	Methylene Chloride	0.31	0.54	JB	2.0	W-25-150-R1	UJ
SW8260B	F2F260000-103	WG	1,2,4-Trichlorobenzene	0.17	0.13	JB	2.0	MW-212-580-R1	UJ
SW8260B	F2F260000-103	WG	1,2,4-Trichlorobenzene	0.17	0.18	JB	2.0	W-20-160-R1	UJ
SW8260B	F2F270000-100	WG	1,2,4-Trichlorobenzene	0.11	0.34	JB	2.0	MW-210-280-R1	UJ
SW8260B	F2F270000-100	WG	1,2,4-Trichlorobenzene	0.11	0.52	JB	2.0	W-25-188-R1	UJ
SW8260B	F2F280000-080	WG	Acetone	0.49	0.87	J	2.0	MW-813-GW-R1	UJ
SW8260B	F2F280000-080	WG	Acetone	0.49	0.95	J	2.0	W-25-188-R1	UJ

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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Table 3B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	RB-04-R1	WG	METHYLENE CHLORIDE	0.34	0.71	J	1.0	W-20-120-R1	UJ
SW8260B	RB-04-R1	WG	METHYLENE CHLORIDE	0.34	0.47	JB	1.0	W-20-160-R1	UJ
SW8260B	RB-04-R1	WG	ACETONE	7.4	8.1	JBD	2.0	W-19-150-R1	UJ
SW8260B	RB-04-R1	WG	ACETONE	7.4	3.5		2.0	W-20-120-R1	U
SW8260B	RB-04-R1	WG	ACETONE	7.4	1.9	JB	2.0	W-20-160-R1	UJ
SW8260B	RB-05-R1	WG	METHYLENE CHLORIDE	0.39	1.7	JD	1.0	W-18-150-R1	UJ

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	F2F160407-008 (Batch QC)	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	128	1	72	123	J Flag Positive Results
SW8260B	F2F160407-008 (Batch QC)	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	131	1	72	123	J Flag Positive Results
SW8260B	F2F160407-008 (Batch QC)	MS	Cyclohexane	ND	127	1	85	115	None
SW8260B	F2F160407-008 (Batch QC)	MSD	Cyclohexane	ND	122	1	85	115	None
SW8260B	PW-7-4-R1	MS	Acetone	21	0.0	1	40	140	J Flag Positive Results
SW8260B	PW-7-4-R1	MSD	Acetone	21	0.0	1	40	140	J Flag Positive Results
SW8260B	PW-7-4-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	124	1	72	123	None
SW8260B	PW-7-4-R1	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	130	1	72	123	None
SW8260B	PW-7-4-R1	MS	Cyclohexane	ND	124	1	85	115	None

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Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	PW-7-4-R1	MSD	Cyclohexane	ND	125	1	85	115	None
SW8260B	F2F220444-024 (Batch QC)	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	130	1	72	123	J Flag Positive Results
SW8260B	F2F220444-024 (Batch QC)	MS	Cyclohexane	ND	128	1	85	115	None

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8260B	MW-208-540-R1	MSD	Acetone	21	20	J Flag
SW8260B	MW-208-540-R1	MSD	2-Butanone	24	20	J Flag

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
SW8260B	F2F250000-058	1,1,2-Trichloro-1,2,2-Trifluoroethane	134	72	123	0	None
SW8260B	F2F260000-103	Cyclohexane	117	85	115	0	None
SW8260B	F2F270000-100	1,1,2-Trichloro-1,2,2-Trifluoroethane	131	72	123	1	J Flag
SW8260B	F2F270000-100	Cyclohexane	117	85	115	0	None

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	PW-7-2-R1	MW-812-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	0.0606	N/A	poor	UJ/J
SW8260B	Acetone	ug/L	4.4	3.4	25.6	Good	None
SW8260B	Methylene Chloride	ug/L	0.92	0.76	19.0	Good	None

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Method	Analyte	Units	W-25-188-R1	MW-813-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	Good	None
SW8260B	1,4-DICHLOROBENZENE	ug/L	3.7	3.6	2.7	Good	None
SW8260B	CHLOROBENZENE	ug/L	3.4	3.3	3.0	Good	None
SW8260B	1,2,4-TRICHLOROBENZENE	ug/L	0.57	0.52	9.2	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	5.2	5.2	0.0	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	22	21	4.7	Good	None
SW8260B	TRANS-1,2-DICHLOROETHENE	ug/L	0.23	0.22	4.4	Good	None
SW8260B	TERT-BUTYL METHYL ETHER	ug/L	0.44	0.46	4.4	Good	None
SW8260B	ACETONE	ug/L	0.87	0.95	8.8	Good	None
SW8260B	VINYL CHLORIDE	ug/L	13	12	8.0	Good	None
SW8260B	1,1-DICHLOROETHANE	ug/L	0.13	0.12	8.0	Good	None
SW8260B	1,1-DICHLOROETHENE	ug/L	0.89	0.92	3.3	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	13	13	0.0	Good	None
SW8260B	O-XYLENE (1,2-DIMETHYLBENZENE)	ug/L	0.25	0.26	3.9	Good	None
SW8260B	ISOPROPYLBENZENE (CUMENE)	ug/L	0.18	0.14	25.0	Good	None
SW8260B	1,2-DICHLOROBENZENE	ug/L	120	120	0.0	Good	None

Method	Analyte	Units	W-18-150-R1	MW-814-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	good	None
SW8260B	NICKEL	ug/L	73.3	73.3	0.0	good	None
SW8260B	TRANS-1,2-DICHLOROETHENE	ug/L	2.8	2.7	3.6	good	None
SW8260B	TERT-BUTYL METHYL ETHER	ug/L	1.2	1.1	8.7	good	None
SW8260B	ACETONE	ug/L	4.4	6.3	35.5	good	None
SW8260B	VINYL CHLORIDE	ug/L	34	36	5.7	good	None
SW8260B	METHYLENE CHLORIDE	ug/L	2.1	1.7	21.1	good	None
SW8260B	1,1-DICHLOROETHENE	ug/L	5.1	5.1	0.0	good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	180	190	5.4	good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	900	880	2.2	good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	480	510	6.1	good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption

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GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	**Project: Sylvania Phase IV**
Laboratory: TestAmerica	**LAB SDG ID: F2F160407**
Date Completed: 9/30/2012	**Data Validation Chemist: B. Kroon and J. Christopher**
Date Performed: 10/2/2012	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	Project: Sylvania Phase IV
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Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Multiple analytes were detected in the method, rinsate, and trip blanks.
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes - Acetone, Methylene Chloride, and 1,2,4-Trichlorobenzene were qualified as non-detect in multiple samples due to blank contamination. There is no impact on data usability because the compounds found were common laboratory and field contaminants, and not contaminants of concern for this project.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – MW-205-470-R1 MS/MSD analysis had multiple outliers, no data was qualified as there were no positive detections in the parent sample.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No – LCS F2F250000-058 had multiple analytes out of QC criteria. Positive detections of 1,1,2-Trichloro-1,2,2-Trifluoroethane associated with this LCS are qualified "J" as estimated.

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Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Multiple samples for SW8260B analysis were diluted due to high concentrations of target analytes.
Do field duplicate results show good precision for all compounds? See Table 6	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blank samples included in this SDG.)
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

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Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported except for sample MW-23I-R1, for which the diluted reanalyzed results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	No – 1,4-Dioxane RSD is greater than 15%, all results in SDG are qualified "J" as estimated due to this non-conformance.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes

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Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
None for Uranium analysis. VOC analysis was affected by method, trip, and rinsate blank contamination, MS/MSD recovery, LCS recovery, and Initial Calibration analysis.

Data Usability Summary Report	Project: Sylvania Phase IV
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Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F160407	WG	MW-204-470-R1	F2F160407-005	2012/06/14 11:50:00			
F2F160407	WG	MW-205-470-R1	F2F160407-008	2012/06/14 15:40:00	MS/MSD	*	
F2F160407	WG	MW-206-470-R1	F2F160407-007	2012/06/14 17:55:00			
F2F160407	WG	MW-23D-R1	F2F160407-001	2012/06/14 14:30:00			
F2F160407	WG	MW-23I-R1	F2F160407-002	2012/06/14 16:45:00			
F2F160407	WG	MW-27D-R1	F2F160407-015	2012/06/15 14:10:00			
F2F160407	WG	MW-27DD-R1	F2F160407-014	2012/06/15 09:30:00			
F2F160407	WG	MW-28S-R1	F2F160407-006	2012/06/14 11:50:00			
F2F160407	WG	MW-811-GW-R1	F2F160407-010	2012/06/15 00:00:00			
F2F160407	WG	PW-2-1N	F2F160407-011	2012/06/15 09:20:00			PW-2-1-R1
F2F160407	WG	PW-7-1-R1	F2F160407-012	2012/06/15 13:55:00			
F2F160407	WG	TB-06-R1	F2F160407-016	2012/06/15 16:00:00			
F2F160407	WG	W-36-390-R1	F2F160407-013	2012/06/15 11:15:00	MS/MSD	*	
F2F160407	WG	W-37-385-R1	F2F160407-003	2012/06/14 15:30:00			
F2F160407	WG	W10-120-R1	F2F160407-017	2012/06/15 16:45:00			W-10-120-R1
F2F160407	WG	W16-148-R1	F2F160407-004	2012/06/14 15:05:00			W-16-148-R1
F2F160407	WG	W19-110-R1	F2F160407-009	2012/06/15 09:55:00			W-19-110-R1

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Laboratory: TestAmerica	LAB SDG ID: F2F160407
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F160407	GW	SW8260B	Volatile Organics, GC/MS	17	N/TB
F2F160407	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	17	N/TB
F2F160407	GW	SW6010B	Nickel	16	N
306288	GW	ASTM D5174	KPA, Total U, Liquid	16	N

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	F2F240000018B	MB	ACETONE	0.67	J	A	ug/l	0.34	2.0
SW8260B	F2F240000018B	MB	METHYLENE CHLORIDE	0.37	J	A	ug/l	0.27	1.0
SW8260B	F2F250000058B	MB	1,2,4-TRICHLOROBENZENE	0.16	J	A	ug/l	0.078	5.0
SW8260B	F2F250000058B	MB	ACETONE	0.62	J	A	ug/l	0.34	2.0
SW8260B	F2F250000058B	MB	1,2,3-TRICHLOROBENZENE	0.32	J	A	ug/l	0.087	2.0

Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F240000-018	WG	ACETONE	0.67	4.4	B	2.0	MW-204-470-R1	U
SW8260B	F2F240000-018	WG	ACETONE	0.67	0.90	JB	2.0	MW-206-470-R1	UJ
SW8260B	F2F240000-018	WG	ACETONE	0.67	0.52	JB	2.0	MW-23D-R1	UJ
SW8260B	F2F250000-058	WG	ACETONE	0.62	1.7	JB	2.0	MW-27D-R1	UJ
SW8260B	F2F250000-058	WG	ACETONE	0.62	0.85	JB	2.0	MW-27DD-R1	UJ
SW8260B	F2F250000-058	WG	ACETONE	0.62	2.1	JBD	2.0	MW-811-GW-R1	UJ
SW8260B	F2F250000-058	WG	ACETONE	0.62	0.94	JB	2.0	PW-2-1-R1	UJ
SW8260B	F2F250000-058	WG	ACETONE	0.62	5.8	B	2.0	PW-7-1-R1	U

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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F250000-058	WG	ACETONE	0.62	1.4	JB	2.0	TB-06-R1	UJ
SW8260B	F2F250000-058	WG	ACETONE	0.62	1.5	JB	2.0	W-10-120-R1	UJ
SW8260B	F2F250000-058	WG	ACETONE	0.62	2.7	JBD	2.0	W-19-110-R1	UJ
SW8260B	F2F250000-058	WG	1,2,4-TRICHLOROBENZENE	0.16	0.13	JB	5.0	TB-06-R1	UJ

Table 3B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	TB-06-R1	WG	ACETONE	1.4	4.4	B	2.0	MW-204-470-R1	U
SW8260B	TB-06-R1	WG	ACETONE	1.4	0.90	JB	2.0	MW-206-470-R1	UJ
SW8260B	TB-06-R1	WG	ACETONE	1.4	0.52	JB	2.0	MW-23D-R1	UJ
SW8260B	TB-06-R1	WG	ACETONE	1.4	1.7	JB	2.0	MW-27D-R1	UJ
SW8260B	TB-06-R1	WG	ACETONE	1.4	0.85	JB	2.0	MW-27DD-R1	UJ
SW8260B	TB-06-R1	WG	ACETONE	1.4	2.1	JBD	5.0	MW-811-GW-R1	UJ
SW8260B	TB-06-R1	WG	ACETONE	1.4	0.94	JB	2.0	PW-2-1-R1	UJ
SW8260B	TB-06-R1	WG	ACETONE	1.4	5.8	B	2.0	PW-7-1-R1	U
SW8260B	TB-06-R1	WG	ACETONE	1.4	1.5	JB	2.0	W-10-120-R1	UJ
SW8260B	TB-06-R1	WG	ACETONE	1.4	2.7	JBD	5.0	W-19-110-R1	UJ
SW8260B	RB-04-R1	WG	ACETONE	7.4	1.5	JB	2.0	W-10-120-R1	UJ
SW8260B	RB-04-R1	WG	ACETONE	7.4	2.7	JBD	5.0	W-19-110-R1	UJ
SW8260B	RB-04-R1	WG	METHYLENE CHLORIDE	0.34	0.73	JD	2.5	W-19-110-R1	UJ
SW8260B	RB-05-R1	WG	ACETONE	10	13	JBD	20	W-36-390-R1	UJ

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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	MW-205-470-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	128	1	72	123	None
SW8260B	MW-205-470-R1	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	131	1	72	123	None
SW8260B	MW-205-470-R1	MS	Cyclohexane	ND	127	1	85	115	None
SW8260B	MW-205-470-R1	MSD	Cyclohexane	ND	122	1	85	115	None

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
SW8260B	F2F250000-058	1,1,2-Trichloro-1,2,2-Trifluoroethane	134	72	123	1	J Flag
SW8260B	F2F250000-058	Cyclohexane	127	85	115	0	None

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	W-19-110-R1	MW-811-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	0.280	0.233	18.3	good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	2.9	2.5	14.8	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	4	3.4	16.2	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	570	510	11.1	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry

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ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Phase IV
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Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes One sample bottle was received at GEL for uranium analysis without a sample ID or time; the laboratory determined it to be W17-130-R1 because it was the only sample ID on the COC that did not have an accompanying sample.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes The laboratory used samples W-27-240-R1 and W-36-390-R1 for the uranium MS/MSDs although the COC listed sample W-27-285-R1 as MS/MSD.
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F150421
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Multiple analytes were present in method, and rinsate blanks. TB-05-R1 was only run for SIM analysis (1,4-Dioxane), not the full SW8260B list.
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Multiple samples had analytes qualified as non-detect due to method and rinsate blank contamination. There is no impact on data usability because the compounds found were common laboratory and field contaminants, and not a contaminant of concern for the site.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – Cyclohexane was non-compliant in a Batch QC MS/MSD, positive detections of this compound in this SDG are qualified "J" as estimated.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes.

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Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Multiple samples were run at dilution due to high concentrations of target analytes.
Do field duplicate results show good precision for all compounds? See Table 6	No.

Compliance Review Total U Analysis - Approval by Data Validation Chemist Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (Rinsate blank sample RB-03-R1 met criteria.)
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

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Compliance Review Total U Analysis - Approval by Data Validation Chemist Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	No – 1,4-Dioxane had RSD >15%, sample results for this SDG are qualified "J" as estimated.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes

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Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
Precision for uranium for a field duplicate sample pair was outside criteria; results for field duplicate sample pair qualified with J. Multiple analytes were flagged as non-detect due to method and rinsate blank contamination. MS/MSD non-conformance qualified cyclohexane as estimated in one sample, and multiple analytes are flagged as estimated due to field duplicate RPDs.

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Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F150421	WG	MW-204-320-R1	F2F150421-021	2012/06/14 09:50:00			
F2F150421	WG	MW-205-285-R1	F2F150421-016	2012/06/13 16:20:00			
F2F150421	WG	MW-206-320-R1	F2F150421-010	2012/06/13 13:50:00			
F2F150421	WG	MW-208-350-R1	F2F150421-011	2012/06/13 11:30:00			
F2F150421	WG	MW-28D-R1	F2F150421-005	2012/06/12 16:10:00			
F2F150421	WG	MW-807-GW-R1	F2F150421-004	2012/06/12 00:00:00	MS/MSD	*	
F2F150421	WG	MW-809-GW-R1	F2F150421-015	2012/06/13 00:00:00	MS/MSD	*	
F2F150421	WG	MW-810-GW-R1	F2F150421-019	2012/06/14 00:00:00			
F2F150421	WG	PW-2-3-R1	F2F150421-006	2012/06/13 15:20:00			
F2F150421	WG	PW-2-4-R1	F2F150421-007	2012/06/13 15:50:00			
F2F150421	WG	PW-2-5-R1	F2F150421-003	2012/06/12 14:25:00			
F2F150421	WG	PW-2-6-R1	F2F150421-012	2012/06/13 11:15:00			
F2F150421	WG	RB-03-R1	F2F150421-018	2012/06/14 07:55:00	MS/MSD	*	
F2F150421	WG	TB20120614	F2F150421-025	2012/06/14 15:00:00			TB-05-R1
F2F150421	WG	W-26-270-R1	F2F150421-024	2012/06/14 09:40:00			
F2F150421	WG	W-27-240-R1	F2F150421-001	2012/06/12 15:25:00			
F2F150421	WG	W-27-285-R1	F2F150421-013	2012/06/13 10:45:00	MS/MSD	*	
F2F150421	WG	W-30-285-R1	F2F150421-009	2012/06/13 14:10:00			
F2F150421	WG	W-37-325-R1	F2F150421-	2012/06/14			

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Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
			020	12:55:00			
F2F150421	WG	W12-120-R1	F2F150421-014	2012/06/13 11:10:00			W-12-120-R1
F2F150421	WG	W14-150-R1	F2F150421-002	2012/06/12 17:00:00			W-14-150-R1
F2F150421	WG	W23-110-R1	F2F150421-017	2012/06/13 17:25:00			W-23-110-R1
F2F150421	WG	W31-95-R1	F2F150421-022	2012/06/14 11:45:00			W-31-95-R1
F2F150421	WG	W32-110-R1	F2F150421-008	2012/06/13 15:25:00			W-32-110-R1

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F150421	GW	SW8260B	Volatile Organics, GC/MS	25	N/TB/RB
F2F150421	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	25	N/TB/RB
F2F150421	GW	SW6010B	Nickel	24	N/RB
306228	GW	ASTM D5174	KPA, Total U, Liquid	24	N/RB

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	F2F220000022B	MB	1,2,4-TRICHLOROBENZENE	0.090	J	A	ug/l	0.078	5.0
SW8260B	F2F220000022B	MB	ACETONE	0.51	J	A	ug/l	0.34	2.0
SW8260B	F2F240000018B	MB	ACETONE	0.67	J	A	ug/l	0.34	2.0
SW8260B	F2F240000018B	MB	METHYLENE CHLORIDE	0.37	J	A	ug/l	0.27	1.0

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Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F220000-002	WG	ACETONE	0.51	0.53	JB	2.0	W-27-240-R1	U Flag
SW8260B	F2F220000-002	WG	ACETONE	0.51	0.37	JB	2.0	W-14-150-R1	U Flag
SW8260B	F2F220000-002	WG	1,2,4-TRICHLOROBENZENE	0.09	0.25	JB	5.0	W-27-240-R1	U Flag
SW8260B	F2F240000-018	WG	ACETONE	0.67	6.0	B	2.0	MW-810-GW-R1	U Flag

Table 3B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	RB-05-R1	WG	METHYLENE CHLORIDE	0.39	0.67	J		W-27-285-R1	UJ
SW8260B	RB-05-R1	WG	METHYLENE CHLORIDE	0.39	0.66	J		W-30-285-R1	UJ
SW8260B	RB-05-R1	WG	METHYLENE CHLORIDE	0.39	0.34	JB		W-37-325-R1	UJ
SW8260B	RB-05-R1	WG	ACETONE	10	0.53	JB		W-27-240-R1	UJ
SW8260B	RB-05-R1	WG	ACETONE	10	0.77	J		W-27-285-R1	UJ
SW8260B	RB-05-R1	WG	ACETONE	10	1.7	J		W-30-285-R1	UJ
SW8260B	RB-05-R1	WG	ACETONE	10	0.38	JB		W-37-325-R1	UJ
SW8260B	RB-04-R1	WG	ACETONE	7.4	0.77	JB		W-31-95-R1	UJ
SW8260B	RB-03-R1	WG	METHYLENE CHLORIDE	0.35	0.65	J		W-12-120-R1	UJ
SW8260B	RB-03-R1	WG	METHYLENE CHLORIDE	0.35	0.62	J		W-23-110-R1	UJ
SW8260B	RB-03-R1	WG	METHYLENE CHLORIDE	0.35	0.59	J		W-32-110-R1	UJ

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F150421
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	RB-03-R1	WG	ACETONE	8.5	0.86	J		W-12-120-R1	UJ
SW8260B	RB-03-R1	WG	ACETONE	8.5	0.37	JB		W-14-150-R1	UJ
SW8260B	RB-03-R1	WG	ACETONE	8.5	1.6	J		W-23-110-R1	UJ
SW8260B	RB-03-R1	WG	ACETONE	8.5	0.49	J		W-32-110-R1	UJ

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.	Sample Affected
SW8260B	Batch QC	MS	Cyclohexane	ND	77	1	85	115	J	MW-28D-R1
SW8260B	Batch QC	MSD	Cyclohexane	ND	83	1	85	115	J	MW-28D-R1

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	MW-28D-R1	MW-807-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	0.250	0.250	0	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	6.1	6.4	4.8	Good	None
SW8260B	ACETONE	ug/L	0.37	0.46	21.7	Good	None
SW8260B	CHLOROFORM	ug/L	5.9	5.8	1.7	Good	None
SW8260B	METHYLENE CHLORIDE	ug/L	0.7	0.78	10.8	Good	None
SW8260B	1,1-DICHLOROETHANE	ug/L	0.069	0.075	8.3	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	0.29	0.26	10.9	Good	None

Method	Analyte	Units	W-12-120-R1	MW-809-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	Good	None
SW8260B	NICKEL	ug/L	27.8	26.7	4.0	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	13	12	8.0	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	1.3	0.59	75.1	Poor	J

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F150421
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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Analyte	Units	MW-204-320-R1	MW-810-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	1.20	0.072	177	Poor	J
SW8260B	TOLUENE	ug/L	0.11	0.12	8.7	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	0.48	0.28	52.6	Poor	J
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	0.93	0.87	6.7	Good	None
SW8260B	BENZENE	ug/L	0.14	0.14	0.0	Good	None
SW8260B	CARBON DISULFIDE	ug/L	0.9	0.9	0.0	Good	None
SW8260B	1,1-DICHLOROETHANE	ug/L	0.16	0.12	28.6	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	5.4	4.4	20.4	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F130434
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes Sample W-6-79-R1 for uranium analysis was mislabeled as W-6-76-R1 and was corrected by the laboratory.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes The laboratory used samples other than those listed on the COC for the uranium MS/MSDs.
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	**Project: Sylvania Phase IV**
Laboratory: TestAmerica	**LAB SDG ID: F2F130434**
Date Completed: 9/30/2012	**Data Validation Chemist: B. Kroon and J. Christopher**
Date Performed: 10/2/2012	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Multiple compounds present in method, trip, and rinsate blanks.
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Multiple samples were flagged as non-detect due to method, trip, and rinsate blank contamination. There is no impact on data usability because the compounds found were common laboratory and field contaminants, and not compounds of concern for this project.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – Batch QC MS/MSD, and MS/MSD for this SDG were non-compliant. Cyclohexane was recovered low in MS/MSD for PW-2-2-R1 and results were qualified "UJ" as estimated.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes.

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Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Several samples were run at a dilution due to high concentrations of Tetrachloroethylene.
Do field duplicate results show good precision for all compounds? See Table 6	Yes.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (Rinsate blank sample RB-02-R1 met criteria.)
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

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Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	No – 1,4-Dioxane had RSD greater than 15%, all results for this SDG are qualified "J" as estimated.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	Yes
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes

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Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
Precision for uranium for a field duplicate sample pair was outside criteria; results for field duplicate sample pair qualified with J. VOC analysis was affected by method blank, trip blank, rinsate blank contamination, as well as MS/MSD recovery, and Initial Calibration RSD.

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F130434
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
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Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F130434	WG	MW-22D-R1	F2F130434011	2012/06/11 17:05:00			
F2F130434	WG	MW-22I-R1	F2F130434010	2012/06/11 09:50:00			
F2F130434	WG	MW-32D-R1	F2F130434021	2012/06/12 11:20:00			
F2F130434	WG	MW-806-GW-R1	F2F130434002	2012/06/11 00:00:00			
F2F130434	WG	MW-808-GW-R1	F2F130434022	2012/06/12 00:00:00			
F2F130434	WG	PW-2-2-R1	F2F130434019	2012/06/12 10:00:00	MS/MSD	*	
F2F130434	WG	PW-2-7-R1 (DISSOLVED)	F2F130434016	2012/06/11 18:05:00	MS/MSD	*	
F2F130434	WG	PW-2-7-R1	F2F130434015	2012/06/11 18:05:00			
F2F130434	WG	PW-3-2-R1	F2F130434008	2012/06/11 11:50:00			
F2F130434	WG	PW-3-4-R1	F2F130434009	2012/06/11 11:05:00			
F2F130434	WG	RB02-R1	F2F130434003	2012/06/11 08:30:00			RB-02-R1
F2F130434	WG	TB20120612	F2F130434017	2012/06/12 12:15:00			TB-04-R1
F2F130434	WG	W-03-112-R1	F2F130434018	2012/06/12 11:05:00			
F2F130434	WG	W-05-78-R1	F2F130434004	2012/06/11 10:40:00			
F2F130434	WG	W-1-75-R1	F2F130434023	2012/06/12 09:15:00			
F2F130434	WG	W-10-71-R1	F2F130434006	2012/06/11 10:15:00			
F2F130434	WG	W-11-70-R1	F2F130434001	2012/06/11 15:05:00			
F2F130434	WG	W-12-70-R1	F2F130434012	2012/06/11 15:30:00	MS/MSD	*	
F2F130434	WG	W-2-70-R1	F2F130434014	2012/06/11 16:55:00			
F2F130434	WG	W-22-95-R1	F2F130434007	2012/06/11 12:30:00			

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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F130434	WG	W-3-72-R1	F2F130434020	2012/06/12 09:00:00	MS/MSD	*	
F2F130434	WG	W-6-79-R1	F2F130434005	2012/06/11 12:10:00			
F2F130434	WG	W-8-71-R1	F2F130434013	2012/06/11 17:05:00	MS/MSD	*	
F2F130434	WG	W01-120-R1	F2F130434024	2012/06/12 12:25:00			W-01-120-R1

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F130434	GW	SW8260B	Volatile Organics, GC/MS	24	N/TB/RB
F2F130434	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	24	N/TB/RB
F2F130434	GW	SW6010B	Nickel	23	N/RB
306078	GW	ASTM D5174	KPA, Total U, Liquid	23	N/RB

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	TB-04-R1	TB	TOLUENE	0.33	JB	A	ug/l	0.072	1.0
SW8260B	TB-04-R1	TB	ACETONE	1.6	JB	A	ug/l	0.34	2.0
SW8260B	TB-04-R1	TB	CHLOROETHANE	0.14	J	A	ug/l	0.099	2.0
SW8260B	TB-04-R1	TB	METHYLENE CHLORIDE	0.31	JB	A	ug/l	0.27	1.0
SW8260B	RB-02-R1	RB	TOLUENE	0.43	JB	A	ug/l	0.072	1.0
SW8260B	RB-02-R1	RB	ACETONE	7.7	B	A	ug/l	0.34	2.0
SW8260B	RB-02-R1	RB	METHYLENE CHLORIDE	0.49	JB	A	ug/l	0.27	1.0
SW8260B	RB-02-R1	RB	METHYL ETHYL KETONE (2-BUTANONE)	1.6	J	A	ug/l	0.52	5.0
SW8260B	RB-03-R1	RB	METHYLENE CHLORIDE	0.35	JB	A	ug/l	0.27	1.0
SW8260B	RB-03-R1	RB	TOLUENE	0.25	J	A	ug/l	0.072	1.0
SW8260B	RB-03-R1	RB	1,2,3-TRICHLOROBENZENE	0.19	J	A	ug/l	0.087	2.0

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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Sample ID	Sample Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	RB-03-R1	RB	2-BUTANONE	1.2	J	A	ug/l	0.52	5.0
SW8260B	F2F170000013B	MB	TOLUENE	0.30	J	A	ug/l	0.072	1.0
SW8260B	F2F170000013B	MB	ACETONE	1.4	J	A	ug/l	0.34	2.0
SW8260B	F2F170000013B	MB	METHYLENE CHLORIDE	0.32	J	A	ug/l	0.27	1.0
SW8260B	F2F170000013B	MB	1,2,3-TRICHLOROBENZENE	0.18	J	A	ug/l	0.087	2.0
SW8260B	F2F220000022B	MB	1,2,4-TRICHLOROBENZENE	0.090	J	A	ug/l	0.078	5.0
SW8260B	F2F220000022B	MB	ACETONE	0.51	J	A	ug/l	0.34	2.0

Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.4	JB	2.0	MW-22D-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	0.94	JB	2.0	MW-22I-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.6	JB	2.0	MW-806-GW-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.9	JB	2.0	PW-3-2-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.4	JB	2.0	PW-3-4-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	7.7	B	2.0	RB-02-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.6	JB	2.0	TB-04-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.6	JB	2.0	W-05-78-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.4	JB	2.0	W-10-71-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.4	JB	2.0	W-11-70-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.2	JB	2.0	W-12-70-R1	UJ

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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F170000-013	GW	ACETONE	1.4	2.0	B	2.0	W-2-70-R1	U
SW8260B	F2F170000-013	GW	ACETONE	1.4	2.7	B	2.0	W-22-95-R1	U
SW8260B	F2F170000-013	GW	ACETONE	1.4	1.1	JB	2.0	W-6-79-R1	UJ
SW8260B	F2F170000-013	GW	ACETONE	1.4	2.5	B	2.0	W-8-71-R1	U
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.29	JB	1.0	MW-22D-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.31	JB	1.0	MW-22I-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.30	JB	1.0	MW-806-GW-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.32	JB	1.0	PW-3-2-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.41	JB	1.0	PW-3-4-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.49	JB	1.0	RB-02-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.31	JB	1.0	TB-04-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.30	JB	1.0	W-12-70-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.32	JB	1.0	W-2-70-R1	UJ
SW8260B	F2F170000-013	GW	METHYLENE CHLORIDE	0.32	0.34	JB	1.0	W-8-71-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.30	JB	1.0	MW-22D-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.30	JB	1.0	MW-22I-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	MW-806-GW-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	PW-3-2-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	PW-3-4-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.43	JB	1.0	RB-02-R1	UJ

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Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.33	JB	1.0	TB-04-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	W-05-78-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	W-10-71-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.30	JB	1.0	W-11-70-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	W-12-70-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	W-2-70-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	W-22-95-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.30	JB	1.0	W-6-79-R1	UJ
SW8260B	F2F170000-013	GW	TOLUENE	0.30	0.29	JB	1.0	W-8-71-R1	UJ
SW8260B	F2F220000-022	GW	ACETONE	0.51	0.44	JB	2.0	MW-32D-R1	UJ
SW8260B	F2F220000-022	GW	ACETONE	0.51	0.44	JB	2.0	MW-808-GW-R1	UJ
SW8260B	F2F220000-022	GW	ACETONE	0.51	0.59	JB	2.0	PW-2-2-R1	UJ
SW8260B	F2F220000-022	GW	ACETONE	0.51	0.41	JB	2.0	PW-2-7-R1	UJ
SW8260B	F2F220000-022	GW	ACETONE	0.51	0.63	J	2.0	W-3-72-R1	UJ
SW8260B	F2F220000-022	GW	ACETONE	0.51	0.85	JB	2.0	W-01-120-R1	UJ

Table 3B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	RB-03-R1	GW	METHYLENE CHLORIDE	0.35	0.30	JB	1.0	W-12-70-R1	UJ
SW8260B	RB-03-R1	GW	METHYLENE CHLORIDE	0.35	0.32	JB	1.0	W-2-70-R1	UJ
SW8260B	RB-03-R1	GW	METHYLENE CHLORIDE	0.35	0.34	JB	1.0	W-8-71-R1	UJ

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F130434
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	RB-03-R1	GW	ACETONE	8.5	1.4	JB	2.0	W-10-71-R1	UJ
SW8260B	RB-03-R1	GW	ACETONE	8.5	1.4	JB	2.0	W-11-70-R1	UJ
SW8260B	RB-03-R1	GW	ACETONE	8.5	1.2	JB	2.0	W-12-70-R1	UJ
SW8260B	RB-03-R1	GW	ACETONE	8.5	2.0	B	2.0	W-2-70-R1	U
SW8260B	RB-03-R1	GW	ACETONE	8.5	2.7	B	2.0	W-22-95-R1	U
SW8260B	RB-03-R1	GW	ACETONE	8.5	1.1	JB	2.0	W-6-79-R1	UJ
SW8260B	RB-03-R1	GW	ACETONE	8.5	2.5	B	2.0	W-8-71-R1	U
SW8260B	RB-03-R1	GW	ACETONE	8.5	0.85	JB	2.0	W-01-120-R1	UJ
SW8260B	RB-03-R1	GW	TOLUENE		0.29	JB	1.0	W-10-71-R1	UJ
SW8260B	RB-03-R1	GW	TOLUENE		0.30	JB	1.0	W-11-70-R1	UJ
SW8260B	RB-03-R1	GW	TOLUENE		0.29	JB	1.0	W-12-70-R1	UJ
SW8260B	RB-03-R1	GW	TOLUENE		0.29	JB	1.0	W-2-70-R1	UJ
SW8260B	RB-03-R1	GW	TOLUENE		0.29	JB	1.0	W-22-95-R1	UJ
SW8260B	RB-03-R1	GW	TOLUENE		0.30	JB	1.0	W-6-79-R1	UJ
SW8260B	RB-03-R1	GW	TOLUENE		0.29	JB	1.0	W-8-71-R1	UJ
SW8260B	RB-02-R1	GW	TOLUENE	0.43	0.29	JB	1.0	W-05-78-R1	UJ
SW8260B	RB-02-R1	GW	ACETONE	7.7	1.6	JB	2.0	W-05-78-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.4	JB	2.0	MW-22D-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	0.94	JB	2.0	MW-22I-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	0.44	JB	2.0	MW-32D-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.6	JB	2.0	MW-806-GW-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	0.44	JB	2.0	MW-808-GW-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	0.59	JB	2.0	PW-2-2-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	0.41	JB	2.0	PW-2-7-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.9	JB	2.0	PW-3-2-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.4	JB	2.0	PW-3-4-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.6	JB	2.0	W-05-78-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.4	JB	2.0	W-10-71-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.4	JB	2.0	W-11-70-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.2	JB	2.0	W-12-70-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	2.0	B	2.0	W-2-70-R1	U
SW8260B	TB-04-R1	GW	ACETONE	1.6	2.7	B	2.0	W-22-95-R1	U
SW8260B	TB-04-R1	GW	ACETONE	1.6	0.63	J	2.0	W-3-72-R1	UJ
SW8260B	TB-04-R1	GW	ACETONE	1.6	1.1	JB	2.0	W-6-79-R1	UJ

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F130434
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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	TB-04-R1	GW	ACETONE	1.6	2.5	B	2.0	W-8-71-R1	U
SW8260B	TB-04-R1	GW	ACETONE	1.6	0.85	JB	2.0	W-01-120-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.29	JB	1.0	MW-22D-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.31	JB	1.0	MW-22I-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.30	JB	1.0	MW-806-GW-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.28	J	1.0	PW-2-2-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.32	JB	1.0	PW-3-2-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.41	JB	1.0	PW-3-4-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.30	JB	1.0	W-12-70-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.32	JB	1.0	W-2-70-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.67	J	1.0	W-3-72-R1	UJ
SW8260B	TB-04-R1	GW	METHYLENE CHLORIDE	0.31	0.34	JB	1.0	W-8-71-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.30	JB	1.0	MW-22D-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.30	JB	1.0	MW-22I-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	MW-806-GW-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	PW-3-2-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	PW-3-4-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	W-05-78-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	W-10-71-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.30	JB	1.0	W-11-70-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	W-12-70-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	W-2-70-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	W-22-95-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.30	JB	1.0	W-6-79-R1	UJ
SW8260B	TB-04-R1	GW	TOLUENE	0.33	0.29	JB	1.0	W-8-71-R1	UJ

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Laboratory: TestAmerica	LAB SDG ID: F2F130434
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	F2F090408-018 (Batch QC)	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	129	1	72	123	None
SW8260B	F2F090408-018 (Batch QC)	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	137	1	72	123	None
SW8260B	F2F090408-018 (Batch QC)	MS	Cyclohexane	ND	124	1	85	115	None
SW8260B	F2F090408-018 (Batch QC)	MSD	Cyclohexane	ND	127	1	85	115	None
SW8260B	PW-2-2-R1	MS	Cyclohexane	ND	77	1	85	115	UJ
SW8260B	PW-2-2-R1	MSD	Cyclohexane	ND	83	1	85	115	UJ

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8260B	PW-2-2-R1	MSD	2-Hexanone	21	20	None
SW8260B	F2F150421-004 (Batch QC)	MSD	1,2,3-Trichlorobenzene	24	20	None

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	W-11-70-R1	MW-806-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	0.118	0.0725	47.8	Poor	J
SW8260B	NICKEL	ug/L	14.7	16.5	11.5	Good	None
SW8260B	1,4-DIOXANE (P-DIOXANE)	ug/L	1.7	1.6	6.1	Good	None

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Method	Analyte	Units	W-03-112-R1	MW-808-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	24	24	0.0	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	1.9	1.8	5.4	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	**Project: Sylvania Phase IV**
Laboratory: TestAmerica	**LAB SDG ID: F2F090408**
Date Completed: 9/30/2012	**Data Validation Chemist: B. Kroon and J. Christopher**
Date Performed: 10/2/2012	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes The laboratory used sample other than that listed on the COC for the uranium MS/MSD.
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F090408
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Several compounds were present in the method, trip, and rinsate blanks
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Acetone, Toluene, and Methylene Chloride were flagged as non-detect due to contamination in the method, trip and rinsate blanks.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – 1,1,2-Trichloro-1,2,2-Trifluoroethane, and Cyclohexane were non-compliant in MS/MSD pairs. No results were qualified as there were no positive detections in the parent samples.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No - 1,1,2-Trichloro-1,2,2-Trifluoroethane, and Cyclohexane were non-compliant in LCS F2F160000-013, no results were qualified due to this non-conformance.

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Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples MW-22S-R1 and MW-R110-440-R1 were diluted due to high concentrations of target analytes.
Do field duplicate results show good precision for all compounds? See Table 6	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blank samples included with this SDG.)
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

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Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	No – 1,4-Dioxane is Qualified "J" in sample MW-211-455-R1 due to low IS recovery
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	No – Chloromethane had RSD greater than 15% samples are qualified "J" as estimated.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No- Cyclohexane had %D greater than 20%, associated samples in batch 2168013 are qualified "J" as estimated.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes

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Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
Precision for uranium for a field duplicate sample pair was outside criteria; results for field duplicate sample pair qualified with UJ or J. VOC samples are qualified due to method, trip, and rinsate blank contamination, internal standard recovery, and continuing calibration %D. No results are rejected due to these non-conformances.

Data Usability Summary Report	Project: Sylvania Phase IV
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Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F090408	WG	MW-211-190-R1	F2F090408015	2012/06/08 10:20:00			
F2F090408	WG	MW-211-455-R1	F2F090408018	2012/06/08 15:30:00	MS/MSD	*	
F2F090408	WG	MW-213-570-R1	F2F090408003	2012/06/08 10:25:00	MS/MSD	*	
F2F090408	WG	MW-214-570-R1	F2F090408012	2012/06/08 13:10:00			
F2F090408	WG	MW-22S-R1	F2F090408007	2012/06/08 09:00:00			
F2F090408	WG	MW-23S-R1	F2F090408008	2012/06/08 11:05:00			
F2F090408	WG	MW-3-5-R1	F2F090408011	2012/06/08 12:10:00			
F2F090408	WG	MW-42I-R1	F2F090408016	2012/06/08 13:30:00			
F2F090408	WG	MW-44S-R1	F2F090408009	2012/06/08 10:05:00			
F2F090408	WG	MW-804-GW-R1	F2F090408014	2012/06/08 00:00:00	MS/MSD	*	
F2F090408	WG	MW-805-GW-R1	F2F090408010	2012/06/08 00:00:00			
F2F090408	WG	MWP-110-440-R1	F2F090408005	2012/06/07 17:00:00			MW-P110-440-R1
F2F090408	WG	PW-3-6-R1	F2F090408004	2012/06/08 08:55:00			
F2F090408	WG	PW-3-7-R1	F2F090408006	2012/06/07 17:55:00			
F2F090408	WG	PW3-1-R1	F2F090408013	2012/06/08 12:15:00			
F2F090408	WG	PW3-3-R1 (DISSOLVED)	F2F090408002	2012/06/08 10:35:00	MS/MSD	*	
F2F090408	WG	PW3-3-R1	F2F090408001	2012/06/08 10:35:00			
F2F090408	WG	TB-03-R1	F2F090408017	2012/06/08 15:00:00			

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Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F090408	GW	SW8260B	Volatile Organics, GC/MS	18	N/TB
F2F090408	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	18	N/TB
F2F090408	GW	SW6010B	Nickel	17	N
305911	GW	ASTM D5174	KPA, Total U, Liquid	17	N

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	TB-03-R1	TB	TOLUENE	0.32	JB	A	ug/l	0.072	1.0
SW8260B	TB-03-R1	TB	ACETONE	1.8	JB	A	ug/l	0.34	2.0
SW8260B	TB-03-R1	TB	CHLOROETHANE	0.19	J	A	ug/l	0.099	2.0
SW8260B	TB-03-R1	TB	METHYLENE CHLORIDE	0.32	JB	A	ug/l	0.27	1.0
SW8260B	F2F160000013B	MB	TOLUENE	0.29	J	A	ug/l	0.072	1.0
SW8260B	F2F160000013B	MB	1,2,4-TRICHLOROBENZENE	0.12	J	A	ug/l	0.078	5.0
SW8260B	F2F160000013B	MB	ACETONE	1.2	J	A	ug/l	0.34	2.0
SW8260B	F2F160000013B	MB	1,2,3-TRICHLOROBENZENE	0.13	J	A	ug/l	0.087	2.0
SW8260B	F2F170000013B	MB	TOLUENE	0.30	J	A	ug/l	0.072	1.0
SW8260B	F2F170000013B	MB	ACETONE	1.4	J	A	ug/l	0.34	2.0
SW8260B	F2F170000013B	MB	METHYLENE CHLORIDE	0.32	J	A	ug/l	0.27	1.0
SW8260B	F2F170000013B	MB	1,2,3-TRICHLOROBENZENE	0.18	J	A	ug/l	0.087	2.0
SW8260B	RB-05-R1	RB	TOLUENE	0.28	J	A	ug/l	0.072	1.0
SW8260B	RB-05-R1	RB	METHYLENE CHLORIDE	0.39	J	A	ug/l	0.27	1.0
SW8260B	RB-05-R1	RB	METHYL ETHYL KETONE (2-BUTANONE)	1.2	J	A	ug/l	0.52	5.0

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Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	MW-211-190-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.31	JB	1.0	MW-213-570-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	MW-214-570-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	MW-23S-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	MW-3-5-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.30	JB	1.0	MW-44S-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	MW-804-GW-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	MW-805-GW-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	PW-3-6-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	PW-3-7-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	PW3-1-R1	UJ
SW8260B	F2F160000013B	WG	TOLUENE	0.29	0.29	JB	1.0	PW3-3-R1	UJ
SW8260B	F2F160000013B	WG	ACETONE	1.2	1.3	JB	2.0	MW-213-570-R1	UJ
SW8260B	F2F160000013B	WG	ACETONE	1.2	1.0	JB	2.0	MW-805-GW-R1	UJ
SW8260B	F2F160000013B	WG	ACETONE	1.2	1.2	JB	2.0	PW-3-6-R1	UJ
SW8260B	F2F170000013B	WG	TOLUENE	0.30	0.34	JB	1.0	MW-211-455-R1	UJ
SW8260B	F2F170000013B	WG	TOLUENE	0.30	0.30	JB	1.0	MW-42I-R1	UJ
SW8260B	F2F170000013B	WG	ACETONE	1.4	4.7	B	2.0	MW-211-455-R1	U
SW8260B	F2F170000013B	WG	ACETONE	1.4	1.4	JB	2.0	MW-42I-R1	UJ

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Table 3B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	MW-211-190-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.34	JB	1.0	MW-211-455-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.31	JB	1.0	MW-213-570-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	MW-214-570-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	MW-23S-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	MW-3-5-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.30	JB	1.0	MW-42I-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.30	JB	1.0	MW-44S-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	MW-804-GW-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	MW-805-GW-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	1.5	JBD	5.0	MW-P110-440-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	PW-3-6-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	PW-3-7-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	PW3-1-R1	UJ
SW8260B	TB-03-R1	WG	TOLUENE	0.32	0.29	JB	1.0	PW3-3-R1	UJ
SW8260B	TB-03-R1	WG	METHYLENE CHLORIDE	0.32	0.35	J	1.0	MW-3-5-R1	UJ
SW8260B	TB-03-R1	WG	METHYLENE CHLORIDE	0.32	1.4	JD	5.0	MW-P110-440-R1	UJ
SW8260B	TB-03-R1	WG	METHYLENE CHLORIDE	0.32	0.30	J	1.0	PW3-1-R1	UJ
SW8260B	TB-03-R1	WG	ACETONE	1.8	4.7	B	2.0	MW-211-455-R1	U
SW8260B	TB-03-R1	WG	ACETONE	1.8	1.3	JB	2.0	MW-213-570-R1	UJ
SW8260B	TB-03-R1	WG	ACETONE	1.8	1.4	JB	2.0	MW-42I-R1	UJ
SW8260B	TB-03-R1	WG	ACETONE	1.8	1.0	JB	2.0	MW-805-GW-R1	UJ
SW8260B	TB-03-R1	WG	ACETONE	1.8	1.2	JB	2.0	PW-3-6-R1	UJ
SW8260B	RB-05-R1	WG	METHYLENE CHLORIDE	0.39	1.4	JD	5.0	MW-P110-440-R1	UJ

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Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	MW-213-570-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	134	1	72	123	None
SW8260B	MW-213-570-R1	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	126	1	72	123	None
SW8260B	MW-213-570-R1	MS	Cyclohexane	ND	128	1	85	112	None
SW8260B	MW-213-570-R1	MSD	Cyclohexane	ND	120	1	85	112	None
SW8260B	MW-211-455-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	129	1	72	123	None
SW8260B	MW-211-455-R1	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	137	1	72	123	None
SW8260B	MW-211-455-R1	MS	Cyclohexane	ND	124	1	85	112	None
SW8260B	MW-211-455-R1	MSD	Cyclohexane	ND	127	1	85	112	None

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
SW8260B	F2F160000-013	1,1,2-Trichloro-1,2,2-Trifluoroethane	130	72	123	0	None
SW8260B	F2F160000-013	Cyclohexane	121	85	115	0	None

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Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	MW-211-190-R1	MW-804-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	Good	None
SW8260B	TETRACHLOROETHYLENE	ug/L	0.63	0.63	0.0	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	0.41	0.4	2.5	Good	None
SW8260B	1,1,1-TRICHLOROETHANE	ug/L	0.13	0.13	0.0	Good	None
SW8260B	1,1-DICHLOROETHANE	ug/L	0.7	0.7	0.0	Good	None
SW8260B	1,1-DICHLOROETHENE	ug/L	0.22	0.2	9.5	Good	None
SW8260B	TRICHLOROETHYLENE	ug/L	3.4	3.3	3.0	Good	None

Method	Analyte	Units	MW-214-570-R1	MW-805-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	0.0867	N/A	poor	UJ/J
SW8260B	CARBON DISULFIDE	ug/L	0.2	0.18	10.5	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	**Project: Sylvania Phase IV**
Laboratory: TestAmerica	**LAB SDG ID: F2F080482**
Date Completed: 9/30/2012	**Data Validation Chemist: B. Kroon and J. Christopher**
Date Performed: 10/2/2012	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes Sample TB-0-R1 was mistakenly added to the COC for the uranium samples and the lab was notified by email.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes The laboratory used sample other than that listed on the COC for the uranium MS/MSD.
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

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Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Several compounds were detected in the method, trip, and rinsate blanks.
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified as non-detect due to method and rinsate blanks.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – 1,1,2-Trichloro-1,2,2-Trifluoroethane and Cyclohexane were non-compliant for MS/MSD recovery. MS/MSD RPD was also non-compliant for multiple analytes causing the analytes to be "J" flagged as estimated in the parent samples. Batch QC samples caused 1,1,2-Trichloro-1,2,2-Trifluoroethane positive results in this SDG to be qualified "J" as estimated as well.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No – 1,1,2-Trichloro-1,2,2-Trifluoroethane and Cyclohexane were non-compliant. 1,1,2-Trichloro-1,2,2-Trifluoroethane was qualified "J" for positive results for samples associated with MT6AN1AC.

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Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Multiple samples were run at a dilution due to high concentration of target analytes, only one result was reported for each sample.
Do field duplicate results show good precision for all compounds? See Table 6	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (Rinsate blank sample RB-01-R1 met criteria.)
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No Several samples were re-prepared and re-analyzed due to method blank contamination; re-prepared results are reported.
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	No The MS/MSD recoveries for sample MW-43S-R1 did not meet criteria but this was due to the sample concentration of uranium being greater than 5 time the spiked concentration; therefore no qualifiers were added.

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Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported. Several samples were diluted and the diluted results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	No – Chloromethane had RSD greater than 15%, all samples in this SDG are qualified "J" as estimated for this analyte.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes

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Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
For VOC analysis, Method blank and Rinsate Blank contamination qualified analytes as non-detect in multiple samples, MS/MSD recovery and RPD qualified analytes as estimated in multiple samples. LCS recovery qualified an analyte as estimated in multiple samples. All samples in this SDG are qualified as estimated for Chloromethane due to Initial Calibration non-conformance.

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Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F080482	WG	MW-10-R1	F2F080482002	2012/06/05 15:15:00			
F2F080482	WG	MW-11-R1	F2F080482001	2012/06/05 17:10:00			
F2F080482	WG	MW-12-R1	F2F080482008	2012/06/06 09:35:00			
F2F080482	WG	MW-14D-R1	F2F080482009	2012/06/06 10:50:00			
F2F080482	WG	MW-14DD-R1	F2F080482003	2012/06/05 15:40:00	MS/MSD	*	
F2F080482	WG	MW-14S-R1	F2F080482005	2012/06/05 16:55:00			
F2F080482	WG	MW-15DD-R1	F2F080482006	2012/06/05 16:35:00			
F2F080482	WG	MW-18I-R1	F2F080482028	2012/06/07 13:25:00			
F2F080482	WG	MW-18S-R1	F2F080482029	2012/06/07 14:20:00			
F2F080482	WG	MW-19D-R1	F2F080482015	2012/06/06 16:10:00			
F2F080482	WG	MW-201-220-R1	F2F080482013	2012/06/06 11:40:00	MS/MSD	*	
F2F080482	WG	MW-203-160-R1	F2F080482020	2012/06/06 17:00:00			
F2F080482	WG	MW-203-360-R1	F2F080482022	2012/06/07 09:20:00			
F2F080482	WG	MW-203-440-R1	F2F080482019	2012/06/06 15:40:00			
F2F080482	WG	MW-209-380-R1	F2F080482031	2012/06/07 16:05:00			
F2F080482	WG	MW-209-530-R1	F2F080482027	2012/06/07 12:20:00			
F2F080482	WG	MW-20D-R1	F2F080482025	2012/06/07 10:05:00			
F2F080482	WG	MW-20I-R1	F2F080482024	2012/06/07 10:45:00			
F2F080482	WG	MW-20S-R1	F2F080482023	2012/06/07 08:40:00			

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Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F080482	WG	MW-24S-R1	F2F080482018	2012/06/06 16:40:00	MS/SMD	*	
F2F080482	WG	MW-26D-R1	F2F080482010	2012/06/06 09:00:00			
F2F080482	WG	MW-26S-R1	F2F080482012	2012/06/06 10:10:00			
F2F080482	WG	MW-28I-R1	F2F080482032	2012/06/07 16:50:00			
F2F080482	WG	MW-30I-R1	F2F080482011	2012/06/06 08:55:00			
F2F080482	WG	MW-30S-R1	F2F080482004	2012/06/05 14:40:00			
F2F080482	WG	MW-41S-R1	F2F080482007	2012/06/06 11:55:00			
F2F080482	WG	MW-43S-R1	F2F080482017	2012/06/06 14:30:00			
F2F080482	WG	MW-803-GW-R1	F2F080482026	2012/06/07 00:00:00			
F2F080482	WG	MW-P114-170-R1	F2F080482014	2012/06/06 14:40:00			
F2F080482	WG	MW-P114-290-R1	F2F080482021	2012/06/06 19:00:00	MS/MSD	*	
F2F080482	WG	MWP-110-355-R1	F2F080482030	2012/06/07 14:05:00			MW-P110-355-R1
F2F080482	WG	RB-01-R1	F2F080482016	2012/06/06 17:10:00			
F2F080482	WG	TB20120607	F2F080482033	2012/06/07 17:30:00			TB-02-R1

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F080482	GW	SW8260B	Volatile Organics, GC/MS	33	N/TB/RB
F2F080482	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	33	N/TB/RB
F2F080482	GW	SW6010B	Nickel	31	N
305866	GW	ASTM D5174	KPA, Total U, Liquid	31	N

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F080482
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	RB-01-R1	RB	TOLUENE	0.35	JB	A	ug/l	0.072	1.0
SW8260B	RB-01-R1	RB	METHYLENE CHLORIDE	0.67	JB	A	ug/l	0.27	1.0
SW8260B	RB-01-R1	RB	METHYL ETHYL KETONE (2-BUTANONE)	1.5	J	A	ug/l	0.52	5.0
SW8260B	TB-02-R1	TB	TOLUENE	0.33	JB	A	ug/l	0.072	1.0
SW8260B	TB-02-R1	TB	ACETONE	1.5	JB	A	ug/l	0.34	2.0
SW8260B	F2F150000074B	MB	TOLUENE	0.30	J	A	ug/l	0.072	1.0
SW8260B	F2F150000074B	MB	1,2,4-TRICHLOROBENZENE	0.14	J	A	ug/l	0.078	5.0
SW8260B	F2F150000074B	MB	ACETONE	1.3	J	A	ug/l	0.34	2.0
SW8260B	F2F150000074B	MB	METHYLENE CHLORIDE	0.39	J	A	ug/l	0.27	1.0
SW8260B	F2F150000074B	MB	1,2,3-TRICHLOROBENZENE	0.22	J	A	ug/l	0.087	2.0
SW8260B	F2F150000074B	MB	ISOPROPYLBENZENE (CUMENE)	0.20	J	A	ug/l	0.083	1.0
SW8260B	F2F160000010B	MB	TOLUENE	0.29	J	A	ug/l	0.072	1.0
SW8260B	F2F160000010B	MB	1,2,4-TRICHLOROBENZENE	0.17	J	A	ug/l	0.078	5.0
SW8260B	F2F160000010B	MB	1,2,3-TRICHLOROBENZENE	0.28	J	A	ug/l	0.087	2.0
SW8260B	F2F160000013B	MB	TOLUENE	0.29	J	A	ug/l	0.072	1.0
SW8260B	F2F160000013B	MB	1,2,4-TRICHLOROBENZENE	0.12	J	A	ug/l	0.078	5.0
SW8260B	F2F160000013B	MB	ACETONE	1.2	J	A	ug/l	0.34	2.0
SW8260B	F2F160000013B	MB	1,2,3-TRICHLOROBENZENE	0.13	J	A	ug/l	0.087	2.0

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F080482
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Table 3A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-10-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	1.5	JBD	5.0	MW-11-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-14D-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-14DD-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-14S-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-15DD-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.30	JB	1.0	MW-19D-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.30	JB	1.0	MW-201-220-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-26D-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-26S-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.30	JB	1.0	MW-30I-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-30S-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.29	JB	1.0	MW-41S-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.76	JBD	2.5	MW-P114-170-R1	UJ
SW8260B	F2F150000-074	WG	TOLUENE	0.30	0.35	JB	2.5	RB-01-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.6	JB	2.0	MW-10-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	7.9	JBD	10	MW-11-R1	UJ

Data Usability Summary Report	Project: Sylvania Phase IV
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Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.4	JB	2.0	MW-14D-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	0.94	JB	2.0	MW-14DD-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.4	JB	2.0	MW-14S-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.3	JB	2.0	MW-15DD-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.9	JB	2.0	MW-19D-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	2.0	B	2.0	MW-201-220-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.2	JB	2.0	MW-26D-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.4	JB	2.0	MW-26S-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.5	JB	2.0	MW-30I-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.7	JB	2.0	MW-30S-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	1.8	JB	2.0	MW-41S-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	3.6	JBD	5.0	MW-P114-170-R1	UJ
SW8260B	F2F150000-074	WG	ACETONE	1.3	7.4	B	2.0	RB-01-R1	U
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.39	JB	1.0	MW-10-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	1.9	JBD	5.0	MW-11-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.46	JB	1.0	MW-14DD-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.35	JB	1.0	MW-14S-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.30	JB	1.0	MW-15DD-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.39	JB	1.0	MW-19D-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.48	JB	1.0	MW-201-220-R1	UJ

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Laboratory: TestAmerica	LAB SDG ID: F2F080482
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.31	JB	1.0	MW-26D-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.30	JB	1.0	MW-30I-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.44	JB	1.0	MW-30S-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.32	JB	1.0	MW-41S-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	1.4	JBD	2.5	MW-P114-170-R1	UJ
SW8260B	F2F150000-074	WG	METHYLENE CHLORIDE	0.39	0.67	JB	1.0	RB-01-R1	UJ
SW8260B	F2F150000-074	WG	1,2,3-TRICHLOROBENZENE	0.22	0.15	JB	2.0	MW-14DD-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.29	JB	1.0	MW-18I-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.29	JB	1.0	MW-18S-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.30	JB	1.0	MW-203-360-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.31	JB	1.0	MW-203-440-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.30	JB	1.0	MW-209-530-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.29	JB	1.0	MW-20D-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.30	JB	1.0	MW-20I-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.29	JB	1.0	MW-20S-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.29	JB	1.0	MW-24S-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.29	JB	1.0	MW-43S-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.29	JB	1.0	MW-803-GW-R1	UJ
SW8260B	F2F160000-010	WG	TOLUENE	0.29	0.29	JB	1.0	MW-P114-290-R1	UJ
SW8260B	F2F160000-	WG	TOLUENE	0.29	0.30	JB	1.0	MW-P110-	UJ

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F080482
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
	010							355-R1	
SW8260B	F2F160000-013	WG	ACETONE	1.2	1.5	JB	2.0	TB-02-R1	UJ
SW8260B	F2F160000-013	WG	TOLUENE	0.29	0.31	JB	1.0	MW-209-380-R1	UJ
SW8260B	F2F160000-013	WG	TOLUENE	0.29	0.29	JB	1.0	MW-28I-R1	UJ
SW8260B	F2F160000-013	WG	TOLUENE	0.29	0.33	JB	1.0	TB-02-R1	UJ

Table 3B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qual	PQL	Affected Samples	Sample Flag
SW8260B	RB-05-R1	WG	TOLUENE	0.28	0.76	JBD	2.5	MW-P114-170-R1	UJ
SW8260B	RB-05-R1	WG	TOLUENE	0.28	0.29	JB	1.0	MW-P114-290-R1	UJ
SW8260B	RB-05-R1	WG	TOLUENE	0.28	0.30	JB	1.0	MW-P110-355-R1	UJ
SW8260B	RB-05-R1	WG	METHYLENE CHLORIDE	0.39	1.4	JBD	2.5	MW-P114-170-R1	UJ
SW8260B	RB-05-R1	WG	ACETONE	10	3.6	JBD	5.0	MW-P114-170-R1	UJ
SW8260B	RB-05-R1	WG	ACETONE	10	1.2	J	2.0	MW-P114-290-R1	UJ
SW8260B	RB-05-R1	WG	ACETONE	10	1.8	J	2.0	MW-P110-355-R1	UJ

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	MW-14DD-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	124	1	72	123	None
SW8260B	MW-14DD-R1	MS	Cyclohexane	ND	119	1	85	115	None

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Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	MW-24S-R1	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	127	1	72	123	None
SW8260B	MW-24S-R1	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	134	1	72	123	None
SW8260B	MW-24S-R1	MS	Cyclohexane	ND	125	1	85	115	None
SW8260B	MW-24S-R1	MSD	Cyclohexane	ND	125	1	85	115	None
SW8260B	F2F090408-003 (Batch QC)	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	134	1	72	123	J Flag Positive Results
SW8260B	F2F090408-003 (Batch QC)	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	126	1	72	123	J Flag Positive Results
SW8260B	F2F090408-003 (Batch QC)	MS	Cyclohexane	ND	128	1	85	115	None
SW8260B	F2F090408-003 (Batch QC)	MSD	Cyclohexane	ND	120	1	85	115	None
SW8260B	F2F090408-018 (Batch QC)	MS	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	134	1	72	123	J Flag Positive Results
SW8260B	F2F090408-018 (Batch QC)	MSD	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	126	1	72	123	J Flag Positive Results

Method	Sample ID	Sample Type	Analyte	RPD	RPD Limit	Sample Qual.
SW8260B	MW-14DD-R1	MSD	1,2,3-Trichlorobenzene	21	20	J Flag
SW8260B	MW-24S-R1	MSD	Acetone	27	20	J Flag

Table 5 - List LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	No. of Affected Samples	Samp Qual
SW8260B	F2F150000-074	1,1,2-Trichloro-1,2,2-Trifluoroethane	125	72	123	0	None
SW8260B	F2F160000-013	1,1,2-Trichloro-1,2,2-Trifluoroethane	130	72	123	1	J
SW8260B	F2F160000-013	Cyclohexane	121	85	115	0	None

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	MW-20S-R1	MW-803-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	462	475	2.77	good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	3	2.8	6.9	Good	None
SW8260B	CHLOROFORM	ug/L	8.5	8.3	2.4	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	**LAB SDG ID: F2F060449**
Date Completed: 9/30/2012	**Data Validation Chemist: B. Kroon and J. Christopher**
Date Performed: 10/2/2012	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Tests and Number of Samples. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes GEL Laboratories will provide a revised data package for the total uranium analyses as chemical rather than radiochemical data because the KPA procedure is a chemical procedure using phosphorescence for quantitation instead of radiological counting.
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JZC/BK

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F060449
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Multiple compounds present in associated Rinsate Blank
Were any analytes flagged for blank contamination? See Table 3A and Table 3B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	No
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – Trichloroethene and cis-1,2-Dichloroethene were recovered low in MS/MSD pairs. Associated parent samples are qualified "J" as estimated for these compounds.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F060449
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Two samples were analyzed at a dilution due to high concentration of target analytes.
Do field duplicate results show good precision for all compounds? See Table 6	No – Multiple analytes had RPDs greater than project goals, associated duplicate and parent samples are qualified "J" as estimated for those compounds.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blanks included with this SDG.)
Were any analytes flagged for blank contamination? See Table 3A and 3B *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F060449
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 6	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported. One sample was diluted and the diluted result is reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F060449
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Indicate any concerns that involve rejected data or data that are may not allow comparison to criteria.
Minor Concerns
MS/MSD recovery and field duplicate precision qualified analytes as estimated “J”. No impact on data usability was observed.

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F060449
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Tables

Table 1 Sample Listing

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F060449	WG	MW-13D-R1	F2F060449014	2012/06/05 12:35:00	MS/MSD	*	
F2F060449	WG	MW-13S-R1	F2F060449009	2012/06/05 10:30:00			
F2F060449	WG	MW-15D-R1	F2F060449021	2012/06/05 15:10:00			
F2F060449	WG	MW-15S-R1	F2F060449019	2012/06/05 13:50:00			
F2F060449	WG	MW-17S-R1	F2F060449010	2012/06/05 11:10:00			
F2F060449	WG	MW-19S-R1	F2F060449002	2012/06/04 16:45:00	MS/MSD	*	
F2F060449	WG	MW-21D-R1	F2F060449008	2012/06/05 09:20:00			
F2F060449	WG	MW-21I-R1	F2F060449004	2012/06/04 18:00:00			
F2F060449	WG	MW-21S-R1	F2F060449003	2012/06/04 16:00:00			
F2F060449	WG	MW-25D-R1	F2F060449012	2012/06/05 10:45:00			
F2F060449	WG	MW-25I-R1	F2F060449011	2012/06/05 09:05:00			
F2F060449	WG	MW-25S-R1	F2F060449013	2012/06/05 12:00:00			
F2F060449	WG	MW-3-R1	F2F060449001	2012/06/04 16:10:00			
F2F060449	WG	MW-4-R1	F2F060449016	2012/06/05 11:00:00			
F2F060449	WG	MW-49S-R1	F2F060449006	2012/06/05 08:45:00			
F2F060449	WG	MW-8-R1	F2F060449015	2012/06/05 09:00:00			
F2F060449	WG	MW-800-GW-R1	F2F060449005	2012/06/04 00:00:00			
F2F060449	WG	MW-801-GW-R1	F2F060449017	2012/06/05 00:00:00			
F2F060449	WG	MW-802-GW-R1	F2F060449020	2012/06/05 00:00:00			

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F060449
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
F2F060449	WG	MW-9-R1	F2F060449018	2012/06/05 13:35:00			
F2F060449	WQ	TB20120604	F2F060449007	2012/06/04 08:00:00			TB-01-R1

Table 2 Tests and Number of Samples

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
F2F060449	GW	SW8260B	Volatile Organics, GC/MS	21	N/TB
F2F060449	GW	SW8260B SIM	Volatile Organics, GC/MS SIM	21	N/TB
F2F060449	GW	SW6010B	Nickel	20	N
305661	GW	ASTM D5174	KPA, Total U, Liquid	20	N

Table 3 - List of Positive Results for Blank Samples

Method	Sample ID	Samp Type	Analyte	Result	Qual	Anal Type	Units	MDL	PQL
SW8260B	RB-01-R1	RB	Toluene	0.35	JB	A	ug/L	0.072	1.0
SW8260B	RB-01-R1	RB	2-Butanone	1.5	J	A	ug/L	0.52	5.0
SW8260B	RB-01-R1	RB	Methylene Chloride	0.67	JB	A	ug/L	0.27	1.0
SW8260B	RB-01-R1	RB	Acetone	7.4	B	A	ug/L	0.34	2.0

Table 3A - List of Samples Qualified for Method Blank Contamination

None

Table 3B - List of Samples Qualified for Field Blank Contamination

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	MW-13D-R1	MS	Trichloroethene	19	42	1	70	125	J Flag Positive Results

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F060449
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Method	Sample ID	Sample Type	Analyte	Orig. Result	Rec.	Dil Fac	Low Limit	High Limit	Sample Qual.
SW8260B	MW-13D-R1	MS	Trichloroethene	19	54	1	70	125	J Flag Positive Results
SW8260B	MW-13D-R1	MS	cis-1,2-Dichloroethene	9.5	66	1	70	125	J Flag Positive Results

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 – Summary of Field Duplicate Results

Method	Analyte	Units	MW-21I-R1	MW-800-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	Good	None
SW8260B	1,1,1-TRICHLOROETHANE	ug/L	0.16	0.18	11.8	Good	None

Method	Analyte	Units	MW-8-R1	MW-801-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	Good	None
SW6010C	NICKEL	ug/L	507	503	0.8	Good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	1.2	1	18.2	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	3.4	1.8	61.5	Good	None
SW8260B	VINYL CHLORIDE	ug/L	0.27	0.19	34.8	Good	None
SW8260B	1,1-DICHLOROETHANE	ug/L	0.51	0.34	40.0	Poor	J
SW8260B	1,1-DICHLOROETHENE	ug/L	0.19	0.15	23.5	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	8.1	4	67.8	Poor	J

Method	Analyte	Units	MW-15S-R1	MW-802-GW-R1	RPD	Rating	Sample Qualifier
ASTM D5174	Uranium	ug/L	ND	ND	N/A	good	None
SW8260B	TETRACHLOROETHYLENE(PCE)	ug/L	0.65	0.42	43.0	Poor	J
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	1.1	0.97	12.6	Good	None
SW8260B	VINYL CHLORIDE	ug/L	0.21	0.19	10.0	Good	None
SW8260B	1,1-DICHLOROETHENE	ug/L	0.17	0.13	26.7	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	2.9	2.5	14.8	Good	None

Data Usability Summary Report	Project: Sylvania Phase IV
Laboratory: TestAmerica	LAB SDG ID: F2F060449
Date Completed: 9/30/2012	Data Validation Chemist: B. Kroon and J. Christopher
Date Performed: 10/2/2012	Data Validation Review: J. Nelson

Key:

AP	=	Acid Phenol
BN	=	Base Neutral
CCV	=	Continuing calibration verification
COC	=	Chain-of-custody
CVAA	=	Cold Vapor Automatic Absorption
GC	=	Gas Chromatography
GC/MS	=	Gas Chromatography/Mass Spectrometry
ICP	=	Inductively Coupled Plasma Argon Spectrometry
ICS	=	Interference check standard
ICV	=	Initial calibration verification
NA	=	Not Applicable
LCS	=	Laboratory Control Sample
MS/MSD	=	Matrix Spike/Matrix Spike Duplicate
QAPP	=	Quality Assurance Project Plan
QC	=	Quality Control
SD	=	Serial Dilution
SVOCs	=	Semivolatile Organic Compounds
TIC	=	Tentatively Identified Compound
VOCs	=	Volatile Organic Compounds

B Analytical Data

Provided on attached CD.

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C Sample Collection Documentation

Daily Activity Summary Reports provided on attached CD.

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FINAL
Quality Control Summary Report
Fall 2012 Sampling Event
for the Sylvania Corning FUSRAP Site
Hicksville, County of Nassau,
New York

June 2013

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
Kansas City District
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Prepared by:

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Certificate of Compliance

On behalf of The Louis Berger Group, Inc. (LBG), the undersigned certify that the document listed below was developed in conformance with LBG's Quality Control Plan, and further, that the work was performed in accordance with acceptable standards of engineering and scientific practice.

Quality Control Summary Report
Fall 2012 Sampling Event
for the Sylvania Corning FUSRAP Site
Hicksville, New York

Dated: June 2013

Contract Numbers: W912DQ-08-D-0017, Task Order No. 0019
W912DQ-11-D-3009, Task Order No. 0012

Prepared for:

U.S. Army Corps of Engineers
Kansas City District
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List of Abbreviations and Acronyms

ADR	Automated Data Review
COC	chain-of-custody
DQOs	data quality objectives
DUSR	Data Usability Summary Report
E & E	Ecology and Environment, Inc.
EDD	electronic data deliverable
EDMS	Environmental Data Management System
EPA	Environmental Protection Agency
ESN	ESN Rocky Mountain
FUSRAP	Formerly Utilized Sites Remedial Action Program
LBG	The Louis Berger Group, Inc.
g/cc	grams per cubic centimeter
IDL	instrument detection limit
IDW	investigation derived waste
LCS	laboratory control sample
MDC	Minimum Detectable Concentration
MDL	Method Detection Limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
µg/kg	micrograms per kilogram
µg/L	micrograms per liter

List of Abbreviations and Acronyms (cont.)

pCi/g	picocuries per gram
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
QC	quality control
QCP	Quality Control Plan
QCSR	Quality Control Summary Report
RER	reported error ratio
RI	Remedial Investigation
RPD	relative percent difference
SDG	sample delivery group
USACE	United States Army Corps of Engineers
WP	Work Plan

Introduction

The Louis Berger Group, Inc. (LBG) and their subcontractor, Ecology and Environment, Inc. (E & E), have been contracted by the United States Army Corps of Engineers (USACE), under Contract Numbers W912DQ-08-D-0017, Task Order No. 0019 and W912DQ-11-D-3009, Task Order No. 0012, to perform an Off-Site Groundwater Characterization and Feasibility Study (FS) at the Sylvania Corning Formerly Utilized Sites Remedial Action Program (FUSRAP) Site (Sylvania Site or the Site) located in Hicksville, Nassau County, New York.

The study objectives are to:

- Characterize the nature and extent of off-site groundwater contamination originating from the Sylvania Site.
- Determine if groundwater contaminants from the Sylvania Site are reaching the municipal water supply wells at the Hicksville Water District Plant 5 and Bowling Green facilities.
- Collect sufficient data to select remedial alternatives and prepare a FS for remediation of the Site.

This quality control summary report (QCSR) presents the results of the sampling and analytical program and provides an opportunity to review the completeness and quality of the data collected.

The purpose of this QCSR is to:

- Summarize sample collection, handling, and analytical procedures for the sampling investigation conducted (see Section 1);
- Identify any deviations from the proposed sampling and analysis procedures (see Sections 1 and 2);
- Present the analytical results for the field samples collected (see Section 3);
- Report on any inspections or audits performed and any findings that that may impact the project data (see Section 4); and

- Discuss the results of the data quality evaluation associated with the sampling events (see Sections 2 and 5).

Evaluation of any contaminants detected will be provided in a separate Data Summary Report and the RI Report. The report also will contain maps of sample locations and summary tables of positive results.

Supporting information is included in appendices to the QCSR. The appendices are located on the attached DVD and include:

- Appendix A –Data Usability Summary Report (DUSR) – The DUSR prepared for each sample delivery group (SDG) in PDF format.

- Appendix B – Analytical Data – All laboratory reports in PDF format which include case narratives and quality control (QC) sample results. The compact disc also includes a database of the final validated data in Electronic Data Management System (EDMS) format.

- Appendix C – Sample Collection Documentation – Daily activity summary reports (on CD), and field adjustment forms which document deviations from the planned activities. This appendix also will include any audits performed.

1 Data Collection

Environmental samples were collected as part of the field characterization in accordance with the final Work Plan, Health and Safety Plan, and Quality Assurance Project Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site (LBG May 2011). Methodologies used for field notebooks; sample labeling, packaging, and custody; equipment decontamination; and containerization of investigation-derived waste (IDW) were performed in accordance with the WP, QAPP, and documents referenced therein. All field QC activities were carried out in accordance with the final Quality Control Plan (QCP) (LBG 2011). The contents of this QCSR summarized the Fall 2012 area wide sampling event that included collection of 175 monitoring well samples.

Quality assurance/quality control (QA/QC) samples were collected on a site-wide basis according to the criteria established in the QAPP. The field QA/QC sample requirements are as follows:

- Field QC duplicates collected at a frequency of 10% of the number of field samples collected;
- Rinsates collected at a frequency of 10% of the number of field samples collected if non-dedicated equipment was used;
- Matrix spike/matrix spike duplicate (MS/MSDs) for laboratory QC collected at a frequency of 5% of the sample collected; and
- Trip blanks sent one per shipment for each cooler that included water samples for volatile analysis. Trip blanks were analyzed for all volatile methods designated for the samples.

Any minor variances in field methodologies that occurred during the characterization are noted on the daily activity summary reports or in the field logbook. Deviations from the WP were noted on field adjustment forms. Copies of these reports and forms are provided in Appendix C. The following sections summarize the deviations and fieldwork activities.

1.1 Off Site Groundwater Characterization Data Collection

This section of the QCSR summarizes the sampling results for the Off Site Groundwater Characterization – Fall 2012 monitoring well sampling event. This consisted of sampling of 91 USACE monitoring wells, 11 wells installed by GTEOSI, 34 wells installed as part of the General Instruments inactive hazardous waste site investigation, and 38 samples collected from 5 multiport wells installed as part of the Anchor Chem inactive hazardous waste site investigation. The sampling event was conducted between 25 October and 17 November 2012. Deviations to sampling procedures are presented in Appendix C. The groundwater sampling procedures were performed in accordance with the final Work Plan (LBG May 2011). Summaries of the exceptions to this are described below:

- Multiport monitoring well PW-5 was scheduled for sampling. However, water levels within the sample ports were nearly dry and depths to water were not indicative of aquifer conditions during the Summer 2012 sampling event. The USACE team decided this well was not appropriate to sample as it does not appear to be operating properly and the condition could not be verified.

- Monitoring well W-10-120 had an obstruction in the well and no sampling equipment could be installed to reach the well screen to allow for low flow sampling. Therefore, this well was sampled after a minimum of three well volumes were removed and groundwater quality parameters had stabilized to ensure that all stagnant water with the well column had been purged prior to sampling.

- The EPA Region 2 low flow sampling techniques do not require any minimum purge volume. Given the depth of the monitoring wells and amount of sample tubing required to reach the monitoring well screen depth (up to 570 feet BGS), the volumes of "stagnant" water contained within sampling devices can be several gallons. Given the purge rates of low flow sampling (less than 500 mls/min) it is conceivable that sample parameters could show stabilization and the well could be sampled prior to evacuating all "stagnant" water contained within the pumping device. This could provide a sample that is not representative of aquifer conditions. After review of USACE KC low flow techniques, the USACE team decided to require that a minimum of two volumes of water contained within the pumping device be removed prior to determining stabilization of parameters for sampling to ensure representative samples are collected.

- The multiport Anchor Chemical wells have seven small ports in a ~two inch well. When a pump is installed to purge the well there is not room to install a water level meter to monitor the water level conditions during purging as required if using low flow sampling techniques. Therefore, this well was sampled after a minimum of three well volumes were removed and groundwater

quality parameters had stabilized to ensure that all stagnant water with the well column had been purged prior to sampling.

- Wells installed for investigation of the General Instruments site are aging and some of them are deteriorating. USACE had planned on sampling 36 of their wells as that is the number of wells that GTEOSI was able to collect samples from 2010 sampling event. Four active wells, W-15-168, W-17-130, W-18-150, and W-34-385, could not be sampled by GTEOSI because of obstructions in the well (W-34-385) or the well was not found (W-15-168). USACE was able to install a pump in W-18-150 and W-17-130 and collect a sample possibly because smaller diameter pumps/equipment was used. The total number of GI wells sampled was 38.

1.1.1 Sample Handling and Sample Custody

Field samples were collected, preserved, and transported to the appropriate laboratory according to the procedures described in the WP (LBG May 2011). There were no deviations from the WP with regards to sample handling or custody except for the following:

- The work plan states that all samples were to be stored on ice at temperatures between 2 and 4 degrees Celsius. The total uranium analysis SOP does not require icing of samples and therefore were not placed or stored on ice.

- In table 3.2-2 of the work plan, the analytical method EPA 200.8 is referred to as the selected method for total uranium analysis. It was decided by the USACE team to use ASTM D5174 (KPA) after the submission of the Final Work Plan.

1.1.2 Equipment Calibration and Maintenance

Calibration procedures for the field and laboratory instruments are presented in LBG's QAPP. There were no deviations from the QAPP with regard to equipment calibration and maintenance.

1.1.3 Equipment Calibration and Maintenance

Samples were shipped to approved laboratories for analysis. Analytical methods in support of the Off Site Groundwater Characterization activities are referenced in the QAPP. GEL Laboratories of Charleston, South Carolina provided total uranium for all monitoring well samples. Test America of Earth City, MO, Edison, NJ, and Buffalo, NY provided analysis for volatile, nickel, and all monitored natural attenuation parameters (MNAs) except hydrogen and *dehalococcoides spp.* The hydrogen analysis was performed by Microseeps in Pittsburgh, PA and the *dehalococcoides spp.* was performed by Microbac in Maryville, Tennessee. r Table 1-1 lists all of the analyses performed and the number of samples collected for methods for the investigation. Any deviations were evaluated as part of the data review process and are described in Section 2.

Table 1-1 Summary of Analytical Methods and Samples Collected for Off Site Groundwater Characterization, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Groundwater – Monitoring Wells	6010B	Method 6010B – Total Metals Ni only	177 samples, 18 dups, and 5 rinse blanks
	6010B	Method 6010B - Dissolved Metals Ni only	4 samples
	8260B	Method 8260B – Volatile Organic Compounds by GC/MS in Water	177 samples, 18 dups, 5 rinse blanks, and 7 trip blanks
	ASTM D 5174	Total Uranium	177 samples, 18 dups, and 5 rinse blanks
	ASTM D 5174	Dissolved Uranium	4 samples
Groundwater - Monitoring Wells - Natural Attenuation Parameters	3810M	Methane, Ethene, Ethan, and Propane using Static Headspace	11
	6010B/DOD	Metals (ICP)	11
	300.0	Anions, Ion Chromatography	11
	310.1	Alkalinity	11
	350.1	Nitrogen, Ammonia	11
	353.1 Preserved	Nitrogen, Nitrate-Nitrite	11
	376.1	Sulfide	11
	9060	Organic Carbon, Dissolved (DOC)	11
	SM 3500 FE D	Iron, Ferrous and Ferric	11
	SM 4500 CO2 D	Carbon Dioxide and Forms of Alkalinity by Calculation	11
	VFA-IC	Volatile Fatty Acids, Ion Chromatography	11
	Local Method	Dehalococcoides by Molecular PCR	11
	AM20GAX	Hydrogen	11

2 Data Analysis and Validation

Data quality evaluations focus on deviations from expected QC activities, problems encountered, and the acceptability of the methodologies used. Sample integrity is based on information provided on the cooler receipt form, COC documents, statements in the laboratory case narratives, and field notebooks. Laboratory activities were conducted in accordance with the QAPP. The target compounds, practical quantitation limits (PQLs), and QC limits for the project were reviewed in accordance with the QAPP. Field duplicate and blank data were used to evaluate the accuracy and precision of the analytical results and field sample collection methods. The final validated data was stored in an Environmental Quality Information Systems (EQuIS) format database.

LBG/E & E performed data review and validation of samples in accordance with the QAPP. The data review tasks completed for this project include:

- **Completeness.** LBG/E & E performed a completeness check on all EDDs and compared the data to the hard copy deliverable to verify the data were reported consistently.

- **Compliance.** LBG/E & E reviewed the laboratory reports and submitted EDDs, checked the hard copy reports and case narratives, and verified the EDD data submitted matched the hard copy data packages. E & E reviewed calibration information and compound identification results in the raw data package and entered the qualifiers.

- **Reporting.** E & E assigned data qualifiers and flagged all reportable data with review from LBG. Results of the data review are summarized in the DUSR in Appendix A. The DUSR contain a summary of the data that was qualified, and tables of the QC samples that did not meet applicable limits.

- **Data Management.** E & E developed a project-specific database with all validated data stored in EQuIS format. E & E developed reporting tables through the use of the EQuIS database. E & E generated summary tables of final qualified data in Excel spreadsheets as shown in Section 3. Databases are provided in Appendix B.

QC samples were collected to assess the quality of the field sampling activities as described in Section 1. The evaluation of these samples was based on complete-

ness of data, positive results of equipment and trip blank analysis, and relative percent differences (RPDs) of field duplicate results. ADR was used to evaluate field duplicates. Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DUSR. The field duplicate QC criteria are 40% for aqueous samples, and 70% for soil samples. The RPD ratings are listed as "Good" if the RPD is less than field duplicate QC criteria and as "Poor" if the RPD exceeded the field duplicate QC criteria. Data were qualified "J" as estimated based on the data reviewers overall evaluation of field precision and accuracy. The qualification of data because of field duplicates is discussed at the end of each DUSR.

Rinse blanks were evaluated for each phase of sampling as described below. Rinse blanks were evaluated manually based on the associated samples and matrices and shipments.

The appropriate qualifiers were added to the data to indicate potential concerns with data usability. These qualifiers were transferred to the data presented on tables in Section 3. The following qualifiers were added:

J – This qualifier indicates an estimated value because the associated QC data indicated a potential laboratory or matrix problem or interference. In addition, J flags assigned by the laboratory to chemical data indicate the results are below the PQL but above the instrument detection limit (IDL) or method detection limit (MDL).

R – The positive results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified. Negative radiochemical results with absolute values greater than their 2-sigma uncertainty were rejected in accordance with the USACE Kansas City guidance document.

U – The result is considered non-detect. The laboratory assigned this flag to analytes not present at detectable concentrations (above the IDL or MDL). The data validator assigned this flag when an analyte was considered non-detect as a result of blank contamination. If the result is above the PQL, the PQL is considered elevated.

UJ – The non-detect value is considered estimated.

UR – The non-detect results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified.

The following sections summarize the data evaluation for each phase of fieldwork.

2.1 Monitoring Well Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DUSR was generated for each SDG reported and a copy of the DUSR is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. Tables 1 and 2 of the DUSR summarize the samples and methods included for each SDG.

Sample Delivery Groups for Monitoring Well (Fall 2012) Sampling	Laboratory for Fall 2012
160-817	TestAmerica St. Louis
160-863	TestAmerica St. Louis
160-888	TestAmerica St. Louis
160-899	TestAmerica St. Louis
160-916	TestAmerica St. Louis
160-933	TestAmerica St. Louis
160-945	TestAmerica St. Louis
160-950	TestAmerica St. Louis

2.1.1 Field Data Quality Evaluation

Table 2.1-1 provides a summary of the field QC samples and the associated field samples. Table 2.1-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.1-1 Field QC Associations for Monitoring Well Sampling (Fall 2012), Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-500-GW-R2	PW-04-07	FD	160-817/863
MW-501-GW-R2	MW-208-350	FD	160-817/863
MW-502-GW-R2	MW-208-540	FD	160-817/863
MW-503-GW-R2	MW-22I	FD	160-888
MW-504-GW-R2	W-23-110	FD	160-888
MW-505-GW-R2	MW-206-470	FD	160-888
MW-506-GW-R2	MW-25S	FD	160-899
MW-507-GW-R2	MW-207-320	FD	160-899
MW-508-GW-R2	MW-18S	FD	160-899/916
MW-509-GW-R2	W-25-150	FD	160-916
MW-510-GW-R2	MW-42I	FD	160-945
MW-511-GW-R2	MW-27S	FD	160-945
MW-512-GW-R2	MW-202-380	FD	160-945
MW-513-GW-R2	MW-14DD	FD	160-945
MW-514-GW-R2	MW-210-280	FD	160-945
MW-515-GW-R2	MW-33S	FD	160-950

Table 2.1-1 Field QC Associations for Monitoring Well Sampling (Fall 2012), Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-516-GW-R2	MW-203-360	FD	160-950
MW-517-GW-R2	MW-30I	FD	160-950
TB01	TB01	TB	160-817
TB-110412	TB-110412	TB	160-863
TB-110812	TB-110812	TB	160-888
TB-1109-12	TB-1109-12	TB	160-899
TB-111312	TB-111312	TB	160-916
TB-111612	TB-111612	TB	160-945
TB-111712	TB-111712	TB	160-950
RB01-R2	RB01-R2	EB	160-888
RB02-R2	RB02-R2	EB	160-899/916
RB03-R2	RB03-R2	EB	160-945
RB04-R2	RB04-R2	EB	160-945
RB05-R2	RB05-R2	EB	160-945

Key:
EB = Equipment Blank.
TB = Trip Blank.
FD = Field Duplicate.

Table 2.1-2 Field QC Samples by Method for Monitoring Well Sampling (Fall 2012), Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
6010B	Groundwater	177	18	10%	NA	5
8260B SIM	Groundwater	177	18	10%	10	5
ASTM D 5174	Groundwater	177	18	10%	NA	5

Key:
NA = Not applicable.

2.2.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DUSR. Field duplicate results are summarized on Table 4 of the DUSR. Overall, field duplicate precision was good. RPD criteria were exceeded for one of the field duplicate samples. Results of 1,4-dichlorobenzene in W-25-150-R2 were qualified as estimated.

2.2.1.2 Rinsate Blanks

Rinsate samples were collected at a rate of one every 35 groundwater samples. The bulk of the groundwater sampling equipment was dedicated pumps and tubing. Low levels of acetone were detected in all five rinsate blanks and 2-butanone, methylene chloride, and toluene were found in several rinsate blanks. In addition, cis-1,2-dichloroethene and trichloroethene were detected in RB-03-R2 and 1,4-dioxane was detected in RB-05-R2. Acetone, toluene, and methylene chloride were also detected in many of the trip blank samples

Acetone, methylene chloride, and toluene were consistently detected in the method blank samples. Acetone and methylene chloride are common laboratory reagents and the presence of acetone and methylene chloride in the rinsate blanks may be attributed to laboratory contamination and not field decontamination procedures. The deionized water used for decontamination or possibly the containers used to ship the water are additional likely sources of acetone in the rinsates not the field decontamination procedures. Acetone was not used in the field as a decontamination agent.

2.2.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DUSR in Appendix A and summarized in a separate section for each analytical method below.

Table 3 in the DUSR provides a list of sample results qualified and the reason for data qualification.

2.2.2.1 Groundwater Samples – Chemical Analysis

Method 8260B SIM

Toluene, methylene chloride, and acetone were detected in method blanks at concentrations below the reporting limits. Associated sample results were qualified "U" at the reporting limit.

Multiple surrogates were out of QC limits for samples MW-50I-R2, MW-507-GW-R2, MW-23S-R2, PW-7-4-R2MS, PW-6-2-R2, PW-6-3-R2, PW-2-6-R2, PW-2-6-R2MSD, MW-21D-R2, and TB-111312. All detections and non-detects are flagged as estimated ("J" or "UJ") in these samples.

The RPD value between laboratory control sample and laboratory control sample duplicate recoveries is outside of QC limits for acetone, 2-butanone, and 1,2,3-trichlorobenzene. Associated sample results were qualified as estimated ("J" qualifier).

Eight samples were analyzed as MS/MSDs. The RPD between the MS/MSD for methyl acetate, 4-methyl-2-pentanone, and 1,2-dibromo-3-chloropropane was outside of QC limits. Associated parent sample results were qualified as estimated ("J" qualifier).

Several sample results were qualified based on continuing calibration criteria outliers. The percent difference between the initial calibration and continuing calibration for dichlorodifluoromethane, chloroethane, chloromethane, trichlorofluoromethane is outside of QC limits for the continuing calibration across several SDGs. Non-detect results were qualified "UJ" if the calibration criteria indicated a low bias. Associated positive results were qualified "J."

Method 6010B

No qualification of the nickel results was performed.

Method ASTM D 5174

No qualification of the uranium results was performed.

Natural Attenuation Parameters

Ferrous iron and carbon dioxide have method defined holding times of 15 minutes and these analyses are typically performed in the field; however, project samples were delivered to the laboratory for ferrous iron and carbon dioxide analysis. Therefore, results of ferrous iron and carbon dioxide were analyzed outside of holding time and have been given the "HF" qualifier to denote that analysis was performed outside of the method defined holding time.

Hydrogen for samples MW-206-302-R2, MW-22S-R2, W-27-285-R2, MW-207-170-R2, W-18-150-R2, and W-10-120-R2 were analyzed outside of the 14-day, but within 2x, the method recommended holding time.

Lactic acid, propionic acid, and pyruvic acid were outside of the QC limits for the MS/MSD prepared with project sample MW-12-R2. Results for MW-12-R2 have been qualified as estimated ("UJ" qualifier).

Alkalinity was detected in the method blank associated with samples MW-207-170-R2, W-10-120-R2, MW-14S-R2, MW-210-380-R2, MW-P110-440-R2, and MW-53S-R2. Results of alkalinity have been negated ("UJ") qualifier as the amount present in the samples was less than 5x the amount present in the associated method blank.

3 Data Summaries

Tables summarizing the complete results for the site samples are provided in this section. Tables summarizing the positive results only will be provided in the associated data summary report that will be submitted under separate cover after completion of Fall 2012 groundwater sampling activities. Field duplicate results are presented along with the field samples. The DUSRs for each SDG, presented in Appendix A, report the RPDs for the field duplicates and provide a summary of positive results for the QC samples outside QC criteria including positive results for method blanks and the associated data qualifiers.

Complete analytical results are provided on the CD in Appendix B.

3.1 Monitoring Well (Fall 2012) Data Summaries

Tables 3.1-1 through 3.1-3 include complete analytical results for Monitoring Well (Fall 2012) sampling conducted in October-November 2012.

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-10-R2	MW-11-R2	MW-12-R2	MW-13D-R2	MW-13S-R2	MW-14DD-R2	MW-14D-R2	MW-14S-R2	MW-15DD-R2	MW-15D-R2	MW-15S-R2	MW16D-R2	MW16S-R2	MW-17S-R2	MW-18I-R2	MW-18S-R2	MW-19D-R2	MW-19S-R2	MW-201-220-R2
LAB ID	160-950-2	160-950-3	160-945-55	160-950-17	160-950-13	160-945-53	160-945-52	160-945-51	160-950-20	160-950-19	160-950-18	160-863-6	160-863-5	160-950-5	160-916-11	160-916-10	160-916-33	160-916-32	160-945-49
SAMPLE DATE	11/16/2012	11/16/2012	11/15/2012	11/17/2012	11/16/2012	11/15/2012	11/15/2012	11/15/2012	11/17/2012	11/17/2012	11/17/2012	11/03/2012	11/03/2012	11/16/2012	11/09/2012	11/09/2012	11/12/2012	11/12/2012	11/15/2012
URANIUM																			
URANIUM	0.1 U	0.1 U	6.17	0.1 U	0.1 U	0.0948	0.1 U	0.1 U	0.1 U	0.1 U	0.185	0.250	0.1 U	0.1 U	193	11400	0.1 U	0.1 U	0.1 U
NICKEL																			
NICKEL	13 J	17 J	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	23 J	40 U	40 U	14 J	40 U	15 J	40 U	40 U	40 U
VOCs																			
1,1,1-TRICHLOROETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	0.30 J	0.99 J	0.20 J	0.11 J	1.0 U	1.0 U	1	1 U	1.0 U	0.23 J	1.0 U	1.2	1.0 U	1.8
1,1,2,2-TETRACHLOROETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLOROETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHANE	1.0 U	2.5 U	0.44 J	1.0 U	1.0 U	0.32 J	1.3	1.0 U	0.32 J	1.0 U	1.0 U	2.3	1 U	1.0 U	0.36 J	1.0 U	1.6	1.0 U	0.072 J
1,1-DICHLOROETHENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	0.14 J	0.83 J	1.0 U	1.0 U	1.0 U	1.0 U	0.86 J	1 U	1.0 U	0.23 J	1.0 U	1.1	1.0 U	1.6
1,2,3-TRICHLOROBENZENE	2.0 U	5.0 U	5.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ
1,2,4-TRICHLOROBENZENE	5.0 U	13 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROBENZENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	0.66 J	1.0 U	1.0 U	1.0 U
1,2-DICHLOROPROPANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-DICHLOROBENZENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DICHLOROBENZENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-HEXANONE	5.0 U	13 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5.0 U	0.33 J	5.0 U	5.0 U	5.0 U	5.0 U
ACETONE	0.76 UJ	2.9 UJ	2.0 UJ	2.0 U	0.92 J	0.48 UJ	0.67 UJ	2.0 U	2.0 U	2.0 U	2.0 U	0.35 UJ	0.9 UJ	0.87 UJ	1.0 UJ	1.4 UJ	0.78 UJ	0.88 UJ	0.77 UJ
BENZENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOCHLOROMETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOFORM	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOMETHANE	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CARBON DISULFIDE	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CARBON TETRACHLORIDE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CHLOROBENZENE	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CHLOROETHANE	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CHLOROFORM	1.0 U	2.5 U	7.0	1.0 U	1.0 U	0.14 J	0.16 J	1.0 U	1.0 U	1.0 U	0.71 J	0.12 J	0.41 J	1.0 U	2.9	1.8	0.13 J	1.0 U	1.0 U
CHLOROMETHANE	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CIS-1,2-DICHLOROETHENE	1.0 U	2.5 U	0.37 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.12 J	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.87 J
CIS-1,3-DICHLOROPROPENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CYCLOHEXANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DIBROMOCHLOROMETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DICHLORODIFLUOROMETHANE	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ETHYLBENZENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
M,P-XYLENES	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5 U	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
METHYL ACETATE	5.0 U	13 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	5.0 U	13 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	13 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYLCYCLOHEXANE	4.0 U	10 U	10 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4 U	4 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
METHYLENE CHLORIDE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.76 UJ	0.41 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
STYRENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TERT-BUTYL METHYL ETHER	2.0 U	5.0 U	0.44 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	0.29 J	2.0 U	1.1 J	2.0 U	0.21 J
TETRACHLOROETHENE (PCE)	18	270	290	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.4 J	1 U	1.3	1.0 U	1.6	0.53 J	0.39 J	0.27 J
TOLUENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRANS-1,2-DICHLOROETHENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRANS-1,3-DICHLOROPROPENE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROETHENE (TCE)	0.32 J	2.5 U	3.6	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	3.7	1 U	1.0 U	1.0 U	1.0 U	0.90 J	1.0 U	12
TRICHLOROFLUOROMETHANE	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
VINYL CHLORIDE	2.0 U	5.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-202-220-R2	MW-202-380-R2	MW-202-495-R2	MW-203-160-R2	MW-203-360-R2	MW-203-440-R2	MW-204-320-R2	MW-204-470-R2	MW-205-285-R2	MW-205-470-R2	MW-206-320-R2	MW-206-470-R2	MW-207-170-R2	MW-207-250-R2
LAB ID	160-945-37	160-945-36	160-945-38	160-950-9	160-950-12	160-950-10	160-950-8	160-950-11	160-888-25	160-888-33	160-888-30	160-888-29	160-945-22	160-899-6
SAMPLE DATE	11/14/2012	11/14/2012	11/14/2012	11/16/2012	11/16/2012	11/16/2012	11/16/2012	11/16/2012	11/07/2012	11/07/2012	11/07/2012	11/07/2012	11/14/2012	11/08/2012
URANIUM														
URANIUM	0.1 U	0.1 U	0.267	0.1 U	0.1 U	0.1 U	0.143	0.1 U	0.200	0.1 U	0.137	0.292	0.1 U	0.1 U
NICKEL														
NICKEL	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs														
1,1,1-TRICHLOROETHANE	0.31 J	25	1.0 U	1.1	1.3	1.0 U	1.0 U	1.0 U	0.16 J	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,1,2,2-TETRACHLOROETHANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0 U	10 U	1.0 U	1.2	1.0 U	1.0 U	0.16 J	1.0 U	2.5	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,1,2-TRICHLOROETHANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,1-DICHLOROETHANE	0.82 J	1.6 J	0.20 J	0.82 J	0.55 J	1.0 U	0.22 J	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,1-DICHLOROETHENE	0.53 J	34	1.0 U	5.1	0.98 J	1.0 U	0.13 J	1.0 U	0.30 J	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,2,3-TRICHLOROBENZENE	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,2,4-TRICHLOROBENZENE	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	13 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,2-DICHLOROBENZENE	1.0 U	10 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,2-DICHLOROETHANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,2-DICHLOROPROPANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,3-DICHLOROBENZENE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,4-DICHLOROBENZENE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	47 J	5.0 U	2.2 J	5.0 U	5.0 U	1.3 JM	5.0 U	2.3 JM	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-HEXANONE	5.0 U	50 U	0.26 J	5.0 U	5.0 U	5.0 U	0.26 J	5.0 U	0.52 J	5.0 U	13 U	5.0 U	13 U	5.0 U
ACETONE	2.0 U	20 U	21	1.0 UJ	2.0 U	0.49 UJ	2.0 U	2.0 U	26	6.4 J	3.4 J	2.0 U	2.8 UJ	0.97 UJ
BENZENE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
BROMOCHLOROMETHANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
BROMODICHLOROMETHANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
BROMOFORM	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 UJ	1.0 U
BROMOMETHANE	2.0 U	20 U	2.0 U	2.0 U	0.33 J	2.0 U	0.89 J	0.74 J	2.0 U	0.33 J	5.0 U	2.0 U	5.0 U	2.0 U
CARBON DISULFIDE	2.0 U	20 U	0.48 J	0.063 J	0.089 J	0.054 J	0.66 J	0.45 J	0.29 J	0.79 J	5.0 U	2.0 U	5.0 U	2.0 U
CARBON TETRACHLORIDE	1.0 U	10 U	1.0 U	0.16 J	0.17 J	1.0 U	1.0 U	1.0 U	0.16 J	1.0 U	2.5 U	1.0 U	0.47 J	1.0 U
CHLOROBENZENE	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
CHLOROETHANE	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
CHLOROFORM	0.15 J	10 U	0.19 J	0.24 J	0.20 J	1.0 U	0.49 J	1.0 U	0.78 J	1.0 U	0.28 J	0.82 J	2.5 U	20
CHLOROMETHANE	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	0.37 J	0.29 J	0.33 J	0.31 J	5.0 U	2.0 U	5.0 U	2.0 U
CIS-1,2-DICHLOROETHENE	1.0 U	12	1.0	3.0	9.8	1.0 U	2.1	0.34 J	1.5	1.0 U	1.9 J	1.0 U	1.8 J	1.0 U
CIS-1,3-DICHLOROPROPENE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
CYCLOHEXANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
DIBROMOCHLOROMETHANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 UJ	1.0 U
DICHLORODIFLUOROMETHANE	2.0 U	20 U	2.0 U	0.18 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
ETHYLBENZENE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
M,P-XYLENES	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
METHYL ACETATE	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	13 U	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	5.0 U	50 U	1.2 J	5.0 U	5.0 U	5.0 U	1.2 J	5.0 U	1.5 J	5.0 U	13 U	5.0 U	13 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	13 U	5.0 U
METHYLCYCLOHEXANE	4.0 U	40 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	10 U	4.0 U	10 U	4.0 U
METHYLENE CHLORIDE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39 J	0.32 J	0.71 J	1.0 U	2.5 U	1.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	10 U	1.0 U	0.16 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
STYRENE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
TERT-BUTYL METHYL ETHER	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
TETRACHLOROETHENE (PCE)	0.62 J	5.9 J	1.0 U	61	5.4	0.27 J	24	0.25 J	69	1.0 U	300	1.1	390	25
TOLUENE	1.0 U	10 U	0.49 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 UJ	2.5 U	1.0 U	2.5 U	1.0 U
TRANS-1,2-DICHLOROETHENE	1.0 U	10 U	1.0 U	1.0 U	0.11 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
TRANS-1,3-DICHLOROPROPENE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 UJ	1.0 U
TRICHLOROETHENE (TCE)	1.0 U	1300	7.8	40	160	0.35 J	44	2.1	130	1.0 U	4.8	1.0 U	4.6	1.0 U
TRICHLOROFLUOROMETHANE	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
VINYL CHLORIDE	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-207-320-R2	MW208-350-R2	MW208-540-R2	MW-209-380-R2	MW-209-530-R2	MW-20D-R2	MW-20I-R2	MW-20S-R2	MW-210-280-R2	MW-210-380-R2	MW-210-470-R2	MW211-190-R2	MW211-250-R2	MW211-455-R2	MW212-580-R2
LAB ID	160-899-3	160-863-13	160-863-15	160-863-8	160-863-7	160-888-28	160-916-6	160-888-27	160-945-46	160-945-45	160-945-48	160-863-1	160-863-2	160-863-4	160-863-3
SAMPLE DATE	11/08/2012	11/04/2012	11/04/2012	11/03/2012	11/03/2012	11/07/2012	11/09/2012	11/07/2012	11/15/2012	11/15/2012	11/15/2012	11/02/2012	11/02/2012	11/03/2012	11/02/2012
URANIUM															
URANIUM	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.913	6.76	2920	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
NICKEL															
NICKEL	40 U	40 U	40 U	15 J	40 U	40 U	40 U	42	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs															
1,1,1-TRICHLOROETHANE	1.0 U	0.1 J	1 U	5 U	1 U	0.11 J	0.36 J	1.0 U	1.0 U	2.5 U	1.0 U	0.23 J	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0 U	3.1	1 U	9.3	1 U	1.0 U	1.0 U	1.0 U	0.15 J	1.3 J	1.0 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1.0 U	1 U	1 U	2.2 J	1 U	0.11 J	0.44 J	1.0 U	0.14 J	0.42 J	0.17 J	1.4	0.27 J	0.35 J	1 U
1,1-DICHLOROETHENE	1.0 U	0.29 J	1 U	10	1 U	1.0 U	0.32 J	1.0 U	0.25 J	0.58 J	0.22 J	0.33 J	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	2.0 U	2 U	2 U	10 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 UJ	2 U	2 U	2 U	2 U
1,2,4-TRICHLOROBENZENE	5.0 U	5 U	5 U	25 U	5 U	5.0 U	5.0 U	5.0 U	0.32 UJ	13 U	5.0 U	5 U	5 U	5 U	5 U
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1.0 U	0.96 J	0.11 J	5 U	1 U	1.0 U	1.0 U	1.0 U	2.2	2.5 U	2.9	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1.0 U	0.14 J	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	0.22 J	2.5 U	1.0 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	5 U	5 U	5.5	5 U	5.0 U	3.9 J	5.0 U	5.0 U	5.0 U	5.0 U	5 U	2.2 J	5 U	5 U
2-HEXANONE	5.0 U	5 U	5 U	25 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5 U	5 U	0.25 J	5 U
ACETONE	2.0 U	1.1 UJ	2.7	12	7.8	2.0 U	0.73 UJ	2.0 U	2.0 U	5.0 U	2.0 U	2 U	0.54 UJ	2.7	0.66 UJ
BENZENE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	0.15 J	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
BROMOFORM	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
BROMOMETHANE	2.0 U	2 U	2 U	10 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	0.92 J	2 U	2 U	2 U	2 U
CARBON DISULFIDE	0.27 J	2 U	0.098 J	10 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	0.80 J	2 U	2 U	2 U	2 U
CARBON TETRACHLORIDE	1.0 U	0.26 J	1 U	12	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	2.0 U	2 U	2 U	10 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2 U	2 U	2 U	2 U
CHLOROETHANE	2.0 U	2 U	2 U	10 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2 U	2 U	2 U	2 U
CHLOROFORM	1.0 U	1.9	1 U	3.3 J	1 U	0.82 J	4.5	4.2	0.33 J	1.6 J	1.0 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	2.0 U	2 U	2 U	10 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	0.53 J	2 U	2 U	2 U	2 U
CIS-1,2-DICHLOROETHENE	1.0 U	1.4	1 U	270	0.13 J	1.0 U	1.0 U	1.0 U	14	13	12	0.46 J	0.22 J	1 U	0.21 J
CIS-1,3-DICHLOROPROPENE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	2.0 U	2 U	2 U	10 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
M,P-XYLENES	2.0 U	5 U	2 U	25 U	5 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	5 U	5 U	5 U	5 U
METHYL ACETATE	5.0 U	5 U	5 U	25 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5 U	5 U	5 U	5 U
METHYL ETHYL KETONE (2-BUTANONE)	5.0 U	1.3 J	5 UJ	25 U	1.4 J	5.0 U	5.0 U	5.0 U	5.0 U	13 U	0.80 J	5 U	5 U	0.97 J	5 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	5 U	5 U	25 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5 U	5 U	5 U	5 U
METHYLCYCLOHEXANE	4.0 U	4 U	4 U	20 U	4 U	4.0 UJ	4.0 U	4.0 U	4.0 U	10 U	4.0 U	4 U	4 U	4 U	4 U
METHYLENE CHLORIDE	1.0 U	0.55 UJ	0.89 J	4.6 UJ	0.45 UJ	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	0.7 UJ	0.6 UJ	0.47 UJ	0.72 UJ
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	0.079 J	1 U	1 U	1 U	1 U
STYRENE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	0.19 J	2 U	2 U	10 U	2 U	2.0 U	1.5 J	2.0 U	2.0 U	5.0 U	2.0 U	2 U	0.21 J	2 U	2 U
TETRACHLOROETHENE (PCE)	1.0 U	110	4.6	170	9.6	1.0 U	0.25 J	5.2	170	230	20	0.76 J	0.54 J	1 U	6.5
TOLUENE	1.0 U	1 U	0.14 J	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	0.079 J	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1.0 U	1 U	1 U	0.61 J	1 U	1.0 U	1.0 U	1.0 U	0.12 J	2.5 U	0.79 J	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE (TCE)	1.0 U	110	0.91 J	800	1.1	1.0 U	1.0 U	1.0 U	22	77	10	5.1	0.26 J	1 U	1.8
TRICHLOROFLUOROMETHANE	1.0 U	1 U	1 U	5 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2.0 U	2 U	2 U	10 U	2 U	2.0 U	2.0 U	2.0 U	0.54 J	5.0 U	1.1 J	2 U	2 U	2 U	2 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW213-570-R2	MW214-570-R2	MW-21D-R2	MW-21I-R2	MW-21S-R2	MW-22D-R2	MW-22I-R2	MW-22S-R2	MW-23D-R2	MW-23I-R2	MW-23S-R2	MW-24DD-R2	MW-24S-R2	MW-25D-R2	MW-25I-R2	MW-25S-R2	MW-26D-R2	MW-26S-R2	MW-27DD-R2
LAB ID	160-863-17	160-863-18	160-916-31	160-916-29	160-916-28	160-888-17	160-888-20	160-888-19	160-899-7	160-916-12	160-899-13	160-888-7	160-888-6	160-899-9	160-899-10	160-899-8	160-899-12	160-899-11	160-945-27
SAMPLE DATE	11/04/2012	11/04/2012	11/12/2012	11/12/2012	11/12/2012	11/06/2012	11/06/2012	11/06/2012	11/08/2012	11/09/2012	11/08/2012	11/05/2012	11/05/2012	11/08/2012	11/08/2012	11/08/2012	11/08/2012	11/08/2012	11/14/2012
URANIUM																			
URANIUM	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.138	0.1 U	2.24	0.268	5.25	12.6	0.1 U	14.2	0.1 U	0.1 U	10.1	0.684	6.33	0.1 U
NICKEL																			
NICKEL	40 U	40 U	40 U	40 U	40 U	40 U	40 U	16 J	40 U	40 U	1700	40 U	83	40 U	40 U	19 J	40 U	360	40 U
VOCs																			
1,1,1-TRICHLOROETHANE	1 U	1 U	1.0 UJ	0.19 J	1.0 U	0.13 J	0.31 J	25 U	0.65 J	1.0 U	1.0 UJ	1.4	1.0 U	0.079 J	0.21 J	0.27 J	0.86 J	0.40 J	0.80 J
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	0.16 J	0.42 J	25 U	0.90 J	1.0 U	1.0 UJ	1.9	1.0 U	1.0 U	1.0 U	1.0 U	1.2	0.73 J	1.0
1,1-DICHLOROETHENE	1 U	1 U	1.0 UJ	0.13 J	1.0 U	0.11 J	0.31 J	25 U	0.42 J	1.0 U	1.0 UJ	1.2	1.0 U	1.0 U	0.15 J	0.22 J	0.86 J	0.49 J	0.58 J
1,2,3-TRICHLOROBENZENE	0.11 UJ	2 U	2.0 UJ	2.0 U	2.0 U	0.15 J	2.0 U	50 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-TRICHLOROBENZENE	5 U	5 U	5.0 UJ	5.0 U	5.0 U	0.17 J	5.0 U	130 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROBENZENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROPROPANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-DICHLOROBENZENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DICHLOROBENZENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DIOXANE (P-DIOXANE)	5 U	5 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.2 J	5.0 U	5.0 UJ	1.6 JM	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-HEXANONE	5 U	5 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
ACETONE	0.77 UJ	0.78 UJ	1.0 UJ	0.82 UJ	0.93 UJ	2.0 U	2.0 U	50 U	2.0 U	4.1 UJ	0.63 UJ	2.0 U	2.0 U	1.3 UJ	0.64 UJ	0.83 UJ	0.99 UJ	0.97 UJ	2.0 U
BENZENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	0.38 J	0.087 J	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOCHLOROMETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOFORM	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOMETHANE	2 U	2 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CARBON DISULFIDE	2 U	0.13 J	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	50 U	0.055 J	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CARBON TETRACHLORIDE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.16 J	1.0 U	1.0 U
CHLOROBENZENE	2 U	2 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CHLOROETHANE	2 U	2 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CHLOROFORM	1 U	1 U	1.0 UJ	1.0 U	1.0 U	4.2	2.4	25 U	0.22 J	1.0 U	1.0 UJ	0.15 J	1.0 U	1.0 U	0.11 J	0.13 J	1.0 U	1.0 U	0.14 J
CHLOROMETHANE	2 U	2 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CIS-1,2-DICHLOROETHENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.12 J	1.0 U	1.0 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CYCLOHEXANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DIBROMOCHLOROMETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DICHLORODIFLUOROMETHANE	2 U	2 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ETHYLBENZENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
M,P-XYLENES	5 U	2 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
METHYL ACETATE	5 UJ	5 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	5 U	5 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5 U	5 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYLCYCLOHEXANE	4 U	4 U	4.0 UJ	4.0 U	4.0 U	4.0 U	4.0 U	100 U	4.0 U	4.0 U	4.0 UJ	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
METHYLENE CHLORIDE	0.6 UJ	0.85 J	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.33 J	0.29 J	1.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
STYRENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TERT-BUTYL METHYL ETHER	2 U	2 U	2.0 UJ	0.16 J	2.0 U	2.0 U	0.39 J	50 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	0.12 J	0.20 J	2.0 U	2.0 U	0.12 J
TETRACHLOROETHENE (PCE)	1 U	1 U	1.0 UJ	1.0 U	1.0 U	2.4	0.23 J	2600	2.5	1.0 U	1.0 UJ	0.95 J	47	0.18 J	1.0 U	1.0 U	0.54 J	0.22 J	0.73 J
TOLUENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROETHENE (TCE)	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	6.5 J	1.8	1.0 U	1.0 UJ	5.5	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U	3.7
TRICHLOROFLUOROMETHANE	1 U	1 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
VINYL CHLORIDE	2 U	2 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-27D-R2	MW-27S-R2	MW-28D-R2	MW-28I-R2	MW-28S-R2	MW-29S-R2	MW-30D-R2	MW-30I-R2	MW-30S-R2	MW-31D-R2	MW-31I-R2	MW-32D-R2	MW-33D-R2	MW-33S-R2	MW-34D-R2	MW-34S-R2	MW-39S-R2	MW-3-R2	MW-41S-R2	MW-42I-R2
LAB ID	160-945-28	160-945-23	160-945-8	160-945-25	160-945-2	160-945-29	160-950-21	160-950-22	160-945-50	160-950-23	160-950-24	160-950-25	160-950-4	160-950-15	160-945-42	160-945-41	160-950-14	160-945-1	160-888-16	160-945-7
SAMPLE DATE	11/14/2012	11/14/2012	11/13/2012	11/14/2012	11/13/2012	11/14/2012	11/17/2012	11/17/2012	11/15/2012	11/17/2012	11/17/2012	11/17/2012	11/16/2012	11/16/2012	11/15/2012	11/15/2012	11/16/2012	11/13/2012	11/06/2012	11/13/2012
URANIUM																				
URANIUM	4.32	1.91	0.286	1.82	1.43	0.1 U	0.1 U	0.1 U	0.1 U	0.627	0.1 U	0.1 U	0.0903	109	0.104	0.1 U	0.1 U	0.1 U	271	174
NICKEL																				
NICKEL	85	55	40 U	40 U	40 U	23 J	13 J	40 U	40 U	67	40 U	40 U	13 J	14 J	40 U	40 U	40 U	39 J	40 U	40 U
VOCs																				
1,1,1-TRICHLOROETHANE	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U	1.0 U	1.0 U	12	1.0 U	0.12 J	0.57 J	1.0 U	1.0 U	10 U	0.45 J	1.0 U	0.33 J	1.0 U	1.0 U	1.0 U
1,1,2,2-TETRACHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.31 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHANE	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	1.0 U	0.55 J	1.0 U	0.12 J	0.83 J	1.0 U	1.0 U	10 U	0.93 J	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHENE	1.0 U	1.0 U	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	10	1.0 U	0.10 J	0.57 J	1.0 U	1.0 U	10 U	0.37 J	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,2,3-TRICHLOROBENZENE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U
1,2,4-TRICHLOROBENZENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROBENZENE	1.0 U	0.15 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROPROPANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,3-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,4-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-HEXANONE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U
ACETONE	0.73 J	2.0 U	0.97 UJ	2.4	1.4 UJ	2.0 U	2.0 U	2.0 U	0.71 UJ	0.56 J	2.0 U	2.0 U	0.81 UJ	20 U	2.0 U	2.0 U	5.0 U	1.2 UJ	2.0 U	0.75 UJ
BENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
BROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
BROMOFORM	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
BROMOMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U
CARBON DISULFIDE	0.11 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U
CARBON TETRACHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
CHLOROBENZENE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U
CHLOROETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 UJ	2.0 U
CHLOROFORM	5.6	1.0 U	5.1	6.0	2.1	1.0 U	1.0 U	1.0 U	1.0 U	3.0	1.0 U	1.0	1.0 U	10 U	0.14 J	1.0 U	2.5 U	1.0 U	1.0 U	9.5
CHLOROMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U
CIS-1,2-DICHLOROETHENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.17 J	1.0 U	0.95 J	1.0 U	1.0 U	1.0 U	1.0 U	0.36 J	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
CIS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
CYCLOHEXANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
DIBROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
DICHLORODIFLUOROMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U
ETHYLBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
M,P-XYLENES	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U
METHYL ACETATE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	1.3 J	5.0 U	5.0 U	5.0 U	5.0 U	0.94 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	21 J	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U
METHYLCYCLOHEXANE	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	40 U	4.0 U	4.0 U	10 U	4.0 U	4.0 U	4.0 U
METHYLENE CHLORIDE	1.0 U	1.0 U	0.29 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35 J	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
STYRENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
TERT-BUTYL METHYL ETHER	2.0 U	2.0 U	0.15 J	1.3 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	0.12 J
TETRACHLOROETHENE (PCE)	11	0.92 J	5.7	0.33 J	31	110	1.0 U	0.32 J	0.68 J	26	0.76 J	12	48 J	920	2.9	1.0 U	390	20	6.1	1.0 U
TOLUENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
TRANS-1,2-DICHLOROETHENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
TRANS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
TRICHLOROETHENE (TCE)	0.46 J	1.0 U	1.0 U	1.0 U	0.40 J	0.84 J	1.0 U	2.7	1.0 U	2.7	1.1	0.69 J	0.34 J	10 U	0.62 J	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
TRICHLOROFLUOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 UJ	1.0 U
VINYL CHLORIDE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-43S-R2	MW-44S-R2	MW-49S-R2	MW-4-R2	MW-500-GWR2	MW501-GWR2	MW502-GW-R2	MW-503-GW-R2	MW-504-GW-R2	MW-505-GW-R2	MW-506-GW-R2	MW-507-GW-R2	MW-508-GW-R2	MW-509-GW-R2	MW-50I-R2	MW-510-GW-R2
LAB ID	160-888-26	160-888-22	160-945-26	160-945-21	160-863-12	160-863-14	160-863-16	160-888-21	160-888-35	160-888-34	160-899-4	160-899-5	160-916-3	160-916-30	160-899-2	160-945-14
SAMPLE DATE	11/07/2012	11/06/2012	11/14/2012	11/14/2012	11/03/2012	11/04/2012	11/04/2012	11/06/2012	11/07/2012	11/07/2012	11/08/2012	11/08/2012	11/09/2012	11/12/2012	11/08/2012	11/13/2012
URANIUM																
URANIUM	70.5	33.6	0.654	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.271	0.1 U	9.57	0.1 U	11100	0.1 U	12.2	186
NICKEL																
NICKEL	40 U	1500	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	19 J	40 U	14 J	40 U	280	40 U
VOCs																
1,1,1-TRICHLOROETHANE	1.0 U	1.0 U	1.0 U	2.5 U	0.13 J	0.1 J	1 U	0.33 J	1.0 U	1.0 U	0.31 J	1.0 UJ	1.0 U	1.0 U	0.21 J	1.0 U
1,1,2,2-TETRACHLOROETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	3	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1,2-TRICHLOROETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1-DICHLOROETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	0.46 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.31 J	1.0 U
1,1-DICHLOROETHENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	0.24 J	1 U	0.33 J	0.17 J	1.0 U	0.21 J	1.0 UJ	1.0 U	1.0 U	0.23 J	1.0 U
1,2,3-TRICHLOROBENZENE	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U
1,2,4-TRICHLOROBENZENE	5.0 U	5.0 U	5.0 U	13 U	5 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	0.77 J	1 U	0.93 J	0.11 J	1.0 U	0.083 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.3	1.0 UJ	1.0 U
1,2-DICHLOROETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2-DICHLOROPROPANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,3-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,4-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	0.14 J	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.12 J	1.0 UJ	1.0 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U
2-HEXANONE	5.0 U	5.0 U	5.0 U	13 U	5 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U
ACETONE	2.0 U	2.0 U	2.0 U	5.0 U	0.47 J	0.37 UJ	2.2	2.0 U	0.56 UJ	1.4 UJ	0.99 UJ	1.7 UJ	0.97 UJ	1.3 UJ	1.3 UJ	1.1 UJ
BENZENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
BROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
BROMODICHLOROMETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
BROMOFORM	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
BROMOMETHANE	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U
CARBON DISULFIDE	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.18 J	2.0 U	2.0 U	2.0 UJ	2.0 U
CARBON TETRACHLORIDE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	0.29 J	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
CHLOROBENZENE	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U
CHLOROETHANE	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U
CHLOROFORM	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1.8	1 U	2.5	1.0 U	0.83 J	0.11 J	0.11 J	1.9	1.0 U	1.0 UJ	8.9
CHLOROMETHANE	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	2.0 U	2.0 U	0.077 J	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U
CIS-1,2-DICHLOROETHENE	1.0 U	1.0 U	1.0 U	1.7 J	1 U	1.2	1 U	1.0 U	0.31 J	1.0 U	1.0 U	1.0 UJ	1.0 U	0.46 J	1.0 UJ	1.0 U
CIS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
CYCLOHEXANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
DIBROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
DICHLORODIFLUOROMETHANE	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U
ETHYLBENZENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
M,P-XYLENES	2.0 U	2.0 U	2.0 U	5.0 U	5 U	5 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U
METHYL ACETATE	5.0 U	5.0 U	5.0 U	13 U	5 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	5.0 U	5.0 U	5.0 U	13 U	0.8 J	5 U	5 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	5.0 U	5.0 U	13 U	5 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U
METHYLCYCLOHEXANE	4.0 U	4.0 U	4.0 U	10 U	4 U	4 U	4 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 UJ	4.0 U	4.0 U	4.0 UJ	4.0 U
METHYLENE CHLORIDE	0.37 J	1.0 U	1.0 U	2.5 U	0.45 UJ	0.68 UJ	0.94 J	1.0 U	0.34 J	0.37 J	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
STYRENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
TERT-BUTYL METHYL ETHER	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	0.40 J	2.0 U	2.0 U	0.18 J	0.18 J	2.0 U	0.16 J	2.0 UJ	0.13 J
TETRACHLOROETHENE (PCE)	140	35	1.0 U	300	1 U	110	4.3	0.21 J	2.7	1.2	1.0 U	1.0 UJ	1.5	1.1	0.31 J	1.0 U
TOLUENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	0.13 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
TRANS-1,2-DICHLOROETHENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
TRANS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
TRICHLOROETHENE (TCE)	0.51 J	1.0 U	1.0 U	2.3 J	1 U	110	0.84 J	1.0 U	4.2	1.0 U	1.0 U	1.0 UJ	1.0 U	2.7	0.34 J	1.0 U
TRICHLOROFLUOROMETHANE	1.0 U	1.0 U	1.0 U	2.5 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
VINYL CHLORIDE	2.0 U	2.0 U	2.0 U	5.0 U	2 U	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	2.0 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-511-GW-R2	MW-512-GW-R2	MW-513-GW-R2	MW-514-GW-R2	MW-515-GW-R2	MW-516-GW-R2	MW-517-GW-R2	MW-51I-R2	MW-52D-R2	MW-53S-R2	MW-55S-R2	MW-8-R2	MW-9-R2	MW-P110-355-R2	MW-P110-440-R2	MW-P114-170-R2
LAB ID	160-945-24	160-945-40	160-945-54	160-945-47	160-950-6	160-950-7	160-950-27	160-950-26	160-945-44	160-945-43	160-950-16	160-945-18	160-950-1	160-945-59	160-945-57	160-945-56
SAMPLE DATE	11/14/2012	11/14/2012	11/15/2012	11/15/2012	11/16/2012	11/16/2012	11/17/2012	11/17/2012	11/15/2012	11/15/2012	11/16/2012	11/13/2012	11/16/2012	11/15/2012	11/15/2012	11/15/2012
URANIUM																
URANIUM	2.08	0.1 U	0.1 U	0.1 U	111	0.1 U	0.1 U	0.1 U	0.0834	25.9	0.1 U	0.1 U	0.1 U	0.0945	0.1 U	0.242
NICKEL																
NICKEL	51	40 U	40 U	40 U	13 J	40 U	40 U	27 J	40 U	13 J	40 U	640	40 U	40 U	40 U	40 U
VOCs																
1,1,1-TRICHLOROETHANE	1.0 U	25	0.28 J	1.0 U	10 U	1.2	12	0.29 J	1.0 U	25 U	1.0 U	1.0 U	2.5 U	3.7	5.0 U	2.5 U
1,1,2,2-TETRACHLOROETHANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0 U	10 U	1.0 U	0.14 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	4.7	5.0 U	2.5 U
1,1,2-TRICHLOROETHANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	0.30 J	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
1,1-DICHLOROETHANE	1.0 U	1.5 J	0.36 J	0.13 J	10 U	0.53 J	0.53 J	0.32 J	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.6	5.0 U	3.1
1,1-DICHLOROETHENE	1.0 U	34	0.14 J	0.21 J	10 U	0.80 J	8.8	0.20 J	1.0 U	25 U	1.0 U	1.0 U	2.5 U	6.3	5.0 U	2.0 J
1,2,3-TRICHLOROBENZENE	2.0 U	20 U	2.0 UJ	2.0 UJ	20 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 UJ	10 UJ	5.0 UJ
1,2,4-TRICHLOROBENZENE	5.0 U	50 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	13 U	13 U	25 U	13 U
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
1,2-DICHLOROBENZENE	1.0 U	10 U	1.0 U	2.3	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	0.29 J
1,2-DICHLOROETHANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
1,2-DICHLOROPROPANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
1,3-DICHLOROBENZENE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
1,4-DICHLOROBENZENE	1.0 U	10 U	1.0 U	0.23 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	61 J	5.0 U	5.0 U	5.0 U	5.0 U	2.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	15 J	1.5 UJ	4.5 J
2-HEXANONE	5.0 U	50 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	13 U	13 U	25 U	13 U
ACETONE	2.0 U	20 U	2.0 U	0.91 UJ	6.6 J	2.0 U	2.0 U	2.0 U	2.0 U	50 U	0.53 UJ	2.0 U	0.91 UJ	2.3 UJ	6.3 UJ	2.0 UJ
BENZENE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	1.8 J	5.0 U	0.28 J
BROMOCHLOROMETHANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
BROMODICHLOROMETHANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
BROMOFORM	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
BROMOMETHANE	2.0 U	20 U	2.0 U	2.0 U	20 U	0.25 J	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 U	10 U	5.0 U
CARBON DISULFIDE	2.0 U	20 U	2.0 U	2.0 U	20 U	0.078 J	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 U	10 U	5.0 U
CARBON TETRACHLORIDE	1.0 U	10 U	1.0 U	1.0 U	10 U	0.20 J	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	4.6	1.4 J	2.5 U
CHLOROBENZENE	2.0 U	20 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 U	10 U	5.0 U
CHLOROETHANE	2.0 U	20 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 U	10 U	5.0 U
CHLOROFORM	1.0 U	10 U	0.15 J	0.36 J	10 U	0.20 J	1.0 U	0.18 J	1.0 U	25 U	13	1.0 U	2.5 U	1.8 J	5.0 U	0.70 J
CHLOROMETHANE	2.0 U	20 U	2.0 U	2.0 U	20 U	0.13 J	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 U	10 U	5.0 U
CIS-1,2-DICHLOROETHENE	1.0 U	12	1.0 U	13	10 U	10	0.95 J	1.0 U	0.47 J	25 U	1.0 U	1.0 U	2.5 U	22	4.1 J	33
CIS-1,3-DICHLOROPROPENE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
CYCLOHEXANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
DIBROMOCHLOROMETHANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
DICHLORODIFLUOROMETHANE	2.0 U	20 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 U	10 U	5.0 U
ETHYLBENZENE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
M,P-XYLENES	2.0 U	20 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 U	10 U	5.0 U
METHYL ACETATE	5.0 U	50 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	13 U	13 U	25 U	13 U
METHYL ETHYL KETONE (2-BUTANONE)	5.0 U	6.9 J	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	13 U	13 U	8.0 J	13 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	50 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	130 U	5.0 U	5.0 U	13 U	13 U	25 U	13 U
METHYLCYCLOHEXANE	4.0 U	40 U	4.0 U	4.0 U	40 U	4.0 U	4.0 U	4.0 U	4.0 U	100 U	4.0 U	4.0 U	10 U	10 U	20 U	10 U
METHYLENE CHLORIDE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
STYRENE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
TERT-BUTYL METHYL ETHER	2.0 U	20 U	2.0 U	2.0 U	20 U	2.0 U	0.11 J	2.0 U	2.0 U	50 U	0.18 J	2.0 U	5.0 U	5.0 U	10 U	1.1 J
TETRACHLOROETHENE (PCE)	0.92 J	10 U	1.0 U	190	950	5.4	0.25 J	0.90 J	90	3000	1.0 U	0.33 J	330	220	820	6.9
TOLUENE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
TRANS-1,2-DICHLOROETHENE	1.0 U	10 U	1.0 U	0.10 J	10 U	0.094 J	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	0.30 J	5.0 U	0.26 J
TRANS-1,3-DICHLOROPROPENE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
TRICHLOROETHENE (TCE)	1.0 U	1200	1.0 U	20	10 U	160	2.6	0.67 J	0.51 J	15 J	1.0 U	1.0 U	2.5 U	350	10	250
TRICHLOROFLUOROMETHANE	1.0 U	10 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U	2.5 U	2.5 U	5.0 U	2.5 U
VINYL CHLORIDE	2.0 U	20 U	2.0 U	0.42 J	20 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	2.0 U	2.0 U	5.0 U	5.0 U	10 U	0.75 J

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-P114-290-R2	PW-2-1-R2	PW-2-2-R2	PW-2-3-R2	PW-2-4-R2	PW-2-5-R2	PW-2-6-R2	PW-2-7-R2	PW-2-7-R2-F	PW-3-1-R2	PW-3-2-R2	PW-3-3-R2	PW-3-4-R2	PW-3-5-R2	PW-3-6-R2	PW-3-7-R2	PW-4-1-R2	PW-4-2-R2	PW-4-3-R2	PW-4-4-R2
LAB ID	160-945-58	160-945-12	160-945-10	160-945-17	160-945-16	160-945-9	160-916-22	160-916-23	160-916-23F	160-945-11	160-945-13	160-945-32	160-945-35	160-945-33	160-945-34	160-916-21	160-863-21	160-863-20	160-863-9	160-863-22
SAMPLE DATE	11/15/2012	11/13/2012	11/13/2012	11/13/2012	11/13/2012	11/13/2012	11/12/2012	11/12/2012	11/12/2012	11/13/2012	11/13/2012	11/14/2012	11/14/2012	11/14/2012	11/14/2012	11/12/2012	11/04/2012	11/04/2012	11/03/2012	11/04/2012
URANIUM																				
URANIUM	0.160	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.101	0.447	0.1 U	0.1 U	0.1 U	0.1 U	0.574	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
NICKEL																				
NICKEL	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs																				
1,1,1-TRICHLOROETHANE	7.6	0.18 J	0.093 J	0.59 J	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.29 J	0.88 J	2.3	1 U
1,1,2,2-TETRACHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	10	0.069 J	1.0 U	0.26 J	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	0.86 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.19 J	0.51 J	1.6	1 U
1,1-DICHLOROETHENE	14	1.0 U	1.0 U	0.10 J	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	0.23 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	0.16 J	1 U
1,2,3-TRICHLOROBENZENE	2.0 UJ	2.0 U	2.0 U	2.0 U	0.12 UJ	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U
1,2,4-TRICHLOROBENZENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
1,4-DIOXANE (P-DIOXANE)	9.9 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.8 J	6.7	2.5 J	5 U
2-HEXANONE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.31 J	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U
ACETONE	0.96 UJ	0.96 UJ	1.0 UJ	2.0 U	2.0 U	1.0 UJ	1.4 UJ	1.2 UJ	NA	1.1 UJ	1.1 UJ	2.0 U	2.0 U	2.0 U	2.0 U	1.2 UJ	0.41 UJ	0.89 UJ	0.51 UJ	1 UJ
BENZENE	0.073 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.096 J	0.65 J	1 U	1 U
BROMOFORM	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	2.3	1 U	1 U
BROMOMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U
CARBON DISULFIDE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U
CARBON TETRACHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.15 J	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U
CHLOROETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U
CHLOROFORM	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	0.23 J	NA	1.0 U	1.0 U	0.16 J	1.0 U	1.0 U	1.0 U	1.0 U	0.12 J	0.35 J	0.18 J	1 U
CHLOROMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U
CIS-1,2-DICHLOROETHENE	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.50 J	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.15 J	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1.5	1 U	1 U
DICHLORODIFLUOROMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U
ETHYLBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
M,P-XYLENES	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	5 U	2 U
METHYL ACETATE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U
METHYL ETHYL KETONE (2-BUTANONE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 UJ	5 UJ	5 U	5 UJ
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U
METHYLCYCLOHEXANE	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 UJ	4.0 U	NA	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4 U	4 U	4 U	4 U
METHYLENE CHLORIDE	1.0 U	1.0 U	0.29 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8 J	0.87 J	0.93 UJ	0.81 J
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
STYRENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
TERT-BUTYL METHYL ETHER	0.21 J	2.0 U	2.0 U	2.0 U	0.21 J	0.30 J	0.93 J	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.12 J	2 U	2 U	2 U	2 U
TETRACHLOROETHENE (PCE)	9.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39 J	110	NA	1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	4.7	1 U	1 U	1 U	1 U
TOLUENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.078 J	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	0.15 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE (TCE)	43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.5	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.26 J	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	0.092 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	PW-4-5-R2	PW-4-6-R2	PW-4-7-R2	PW-6-1-R2	PW-6-2-R2	PW-6-3-R2	PW-6-4-R2	PW-6-5-R2	PW-6-6-R2	PW-6-7-R2	PW-7-1-R2	PW-7-2-R2	PW-7-3-R2	PW-7-4-R2	PW-7-5-R2	PW-7-6-R2	PW-7-7-R2	PW-7-7-R2-f	S-1-325-R2
LAB ID	160-863-19	160-863-11	160-863-10	160-916-13	160-916-14	160-916-15	160-916-16	160-916-17	160-916-18	160-916-19	160-888-13	160-888-14	160-888-12	160-916-9	160-916-7	160-888-31	160-888-32	160-888-32F	160-916-25
SAMPLE DATE	11/04/2012	11/03/2012	11/03/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/06/2012	11/06/2012	11/06/2012	11/09/2012	11/09/2012	11/07/2012	11/07/2012	11/07/2012	11/12/2012
URANIUM																			
URANIUM	0.1 U	0.1 U	0.1 U	0.658	0.373	0.321	0.168	0.0823	0.226	0.158	0.1 U	0.1 U	0.1 U	0.129	0.201	0.140	0.0818	NA	0.1 U
NICKEL																			
NICKEL	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
VOCs																			
1,1,1-TRICHLOROETHANE	1 U	1 U	0.11 J	1.0 U	0.41 J	0.90 J	1.0 U	1.0 U	1.0 U	1.0 U	0.55 J	1.0 U	1.0 U	1.0 U	0.13 J	1.0 U	1.0 U	NA	1.1
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1.0 U	0.20 J	0.71 J	1.0 U	1.0 U	1.0 U	1.0 U	0.50 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.40 J
1,1-DICHLOROETHENE	1 U	1 U	1 U	1.0 U	0.096 J	0.63 J	1.0 U	1.0 U	1.0 U	1.0 U	0.91 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.3
1,2,3-TRICHLOROBENZENE	2 U	2 U	2 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	NA	2.0 U
1,2,4-TRICHLOROBENZENE	5 U	5 U	5 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
1,4-DIOXANE (P-DIOXANE)	5 U	5 U	5 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
2-HEXANONE	5 U	5 U	5 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.28 J	0.42 J	NA	5.0 U
ACETONE	0.62 UJ	1.3 UJ	0.75 UJ	12 UJ	1.6 UJ	1.9 UJ	1.6 UJ	2.0 UJ	1.2 UJ	1.1 UJ	2.0 U	2.0 U	2.0 U	14 UJ	1.2 UJ	1.8 UJ	1.3 UJ	NA	1.0 UJ
BENZENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
BROMOFORM	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
BROMOMETHANE	2 U	2 U	2 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U
CARBON DISULFIDE	2 U	2 U	2 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	2.2
CHLOROBENZENE	2 U	2 U	2 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U
CHLOROETHANE	2 U	2 U	2 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U
CHLOROFORM	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	0.42 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.34 J
CHLOROMETHANE	2 U	2 U	2 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	0.54 J	1.0 U	1.0 U	1.0 U	1.0 U	0.095 J	1.0 U	1.0 U	NA	0.47 J
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
CYCLOHEXANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
DICHLORODIFLUOROMETHANE	2 U	2 U	2 U	0.15 J	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U
ETHYLBENZENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
ISOPROPYLBENZENE (CUMENE)	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
M,P-XYLENES	2 U	5 U	5 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U
METHYL ACETATE	5 U	5 U	5 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	5 UJ	5 U	5 U	1.1 J	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5 U	5 U	5 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
METHYLCYCLOHEXANE	4 U	4 U	4 U	4.0 U	4.0 UJ	4.0 UJ	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	NA	4.0 U
METHYLENE CHLORIDE	0.95 J	0.62 UJ	0.66 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.38 J	0.35 J	NA	1.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
STYRENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
TERT-BUTYL METHYL ETHER	2 U	2 U	2 U	4.0	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	1.7 J	2.0 U	2.0 U	2.0 U	3.7	2.0 U	0.12 J	NA	2.0 U
TETRACHLOROETHENE (PCE)	1 U	1 U	1 U	1.0 U	1.0 UJ	0.28 J	1.2	0.71 J	1.3	120	0.41 J	1.0 U	1.0 U	1.0 U	0.84 J	1.0 U	1.0 U	NA	15
TOLUENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.072 J	1.0 U	1.0 U	1.0 U	NA	1.0 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
TRICHLOROETHENE (TCE)	1 U	1 U	1 U	1.0 U	1.0 UJ	0.52 J	1.0 U	0.27 J	0.39 J	1.4	0.74 J	1.0 U	1.0 U	1.0 U	3.0	1.0 U	1.0 U	NA	19
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	0.19 J	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
VINYL CHLORIDE	2 U	2 U	2 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	S-1-450-R2	W-01-120-R2	W-01-75-R2	W-02-70-R2	W-03-112-R2	W-03-72-R2	W-05-78-R2	W-08-71-R2	W-10-120-R2	W-10-71-R2	W-11-70-R2	W-12-120-R2	W-12-70-R2	W-14-150-R2	W-16-148-R2	W-17-130-R2	W-18-150-R2	W-19-110-R2
LAB ID	160-916-24	160-817-4	160-817-7	160-817-6	160-817-1	160-817-2	160-888-3	160-817-8	160-945-31	160-888-2	160-817-9	160-888-5	160-888-4	160-817-3	160-888-18	160-888-15	160-945-30	160-888-23
SAMPLE DATE	11/12/2012	10/25/2012	10/26/2012	10/26/2012	10/25/2012	10/25/2012	11/05/2012	10/26/2012	11/14/2012	11/05/2012	10/26/2012	11/05/2012	11/05/2012	10/25/2012	11/06/2012	11/06/2012	11/14/2012	11/06/2012
URANIUM																		
URANIUM	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.221	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.0796	0.163	0.1 U
NICKEL																		
NICKEL	65	40 U	40 U	130	40 U	40 U	40 U	40 U	40 U	40 U	21 J	25 J	40 U	13 J	14 J	16 J	120	40 U
VOCs																		
1,1,1-TRICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,1,2,2-TETRACHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,1,2-TRICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,1-DICHLOROETHANE	0.11 J	1.0 U	1.0 U	0.63 J	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,1-DICHLOROETHENE	0.82 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9 J	10 U
1,2,3-TRICHLOROBENZENE	2.0 U	0.20 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	20 U
1,2,4-TRICHLOROBENZENE	5.0 U	0.17 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	50 U
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,2-DICHLOROBENZENE	1.0 U	0.54 J	52	1.0 U	1.0 U	1.0 U	1.0 U	0.17 J	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,2-DICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,2-DICHLOROPROPANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,3-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,4-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-HEXANONE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	50 U
ACETONE	1.2 UJ	6.6 UJ	1.2 UJ	0.76 UJ	1.5 UJ	0.55 UJ	2.0 U	1.0 UJ	5.0 U	2.0 U	0.60 UJ	2.0 U	2.0 U	0.80 UJ	2.0 U	2.0 U	5.0 U	20 U
BENZENE	0.069 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
BROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
BROMODICHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
BROMOFORM	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
BROMOMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	20 U
CARBON DISULFIDE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	20 U
CARBON TETRACHLORIDE	3.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
CHLOROBENZENE	2.0 U	2.0 U	5.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	20 U
CHLOROETHANE	2.0 U	2.0 U	2.0 U	2.0 U	0.10 J	2.0 U	2.0 UJ	2.0 U	5.0 U	2.0 UJ	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 UJ	5.0 U	20 U
CHLOROFORM	0.54 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	2.5 U	10 U
CHLOROMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	20 U
CIS-1,2-DICHLOROETHENE	15	1.9	46	0.88 J	1.0 U	4.5	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	230	12
CIS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
CYCLOHEXANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
DIBROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
DICHLORODIFLUOROMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	20 U
ETHYLBENZENE	1.0 U	1.0 U	3.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
M,P-XYLENES	2.0 U	0.14 J	8.1	5.0 U	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U	2.0 U	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	5.0 U	20 U
METHYL ACETATE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	50 U
METHYL ETHYL KETONE (2-BUTANONE)	5.0 U	5.0 U	1.1 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	13 J
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	50 U
METHYLCYCLOHEXANE	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	10 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	10 U	40 U
METHYLENE CHLORIDE	1.0 U	0.62 UJ	0.99 UJ	1.0 U	0.65 UJ	1.0 U	1.0 U	0.42 UJ	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.66 UJ	1.0 U	1.0 U	2.5 U	94
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	1.0 U	9.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
STYRENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
TERT-BUTYL METHYL ETHER	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 UJ	5.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 UJ	0.32 J	2.0 U	0.29 J	1.8 J
TETRACHLOROETHENE (PCE)	300	3.8	170	8.4	21	73	2.9	32	400	2.0	0.18 J	84	1.0 U	2.2	190	37	280	2000
TOLUENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
TRANS-1,2-DICHLOROETHENE	0.11 J	1.0 U	0.26 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 J	10 U
TRANS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	10 U
TRICHLOROETHENE (TCE)	140	4.0	190	11	1.6	5.2	8.5	1.0 U	2.5 U	3.1	1.0 U	0.28 J	1.0 U	1.0 U	2.9	1.0 U	96	18
TRICHLOROFLUOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	2.5 U	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 UJ	2.5 U	10 U
VINYL CHLORIDE	2.0 U	2.0 U	1.0 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	13	20 U

Table 3.1-1 Complete Results for Monitoring Well Sampling (Fall 2012) not including Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	W-19-150-R2	W-20-120-R2	W-20-160-R2	W-22-95-R2	W-23-110-R2	W-24-260-R2	W-25-150-R2	W-25-188-R2	W-26-270-R2	W-27-240-R2	W-27-285-R2	W-30-285-R2	W-31-95-R2	W-32-110-R2	W-36-390-R2	W-36-448-R2	W-37-325-R2	W-37-385-R2	W-6-79-R2
LAB ID	160-888-10	160-888-24	160-888-11	160-888-1	160-888-37	160-916-26	160-916-27	160-945-20	160-916-8	160-945-6	160-945-19	160-945-5	160-888-9	160-817-10	160-945-3	160-945-4	160-916-4	160-916-5	160-888-8
SAMPLE DATE	11/06/2012	11/06/2012	11/06/2012	11/05/2012	11/07/2012	11/12/2012	11/12/2012	11/14/2012	11/09/2012	11/13/2012	11/13/2012	11/13/2012	11/06/2012	10/26/2012	11/13/2012	11/13/2012	11/09/2012	11/09/2012	11/06/2012
URANIUM																			
URANIUM	0.1 U	0.365	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.266	0.192	0.1 U	0.1 U	0.107	0.1 U	0.1 U	0.459	0.0819	3.41	2.08	0.1 U
NICKEL																			
NICKEL	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	19 J	40 U	40 U	57	40 U	14 J	39 J	87	40 U	18 J	40 U
VOCs																			
1,1,1-TRICHLOROETHANE	5.0 U	1.0 U	1.0 U	0.14 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	0.55 J	53	1.0 U
1,1,2,2-TETRACHLOROETHANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.78 J	1.0 U	1.0 U	1.0 U	0.19 J	2.5 U	1.0 U	1.0 U	1.0 U	9.4	1.8	2.2	35	1.0 U
1,1,2-TRICHLOROETHANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	0.25 J	1.4	1.0 U
1,1-DICHLOROETHANE	5.0 U	0.22 J	0.79 J	1.0 U	1.0 U	0.32 J	1.0 U	0.11 J	1.0 U	1.2	0.56 J	1.0 U	1.0 U	1.0 U	2.5 J	0.53 J	3.7	3.6	1.0 U
1,1-DICHLOROETHENE	0.71 J	1.0 U	1.6	1.0 U	0.17 J	1.1	1.0 U	0.67 J	1.0 U	4.1	2.4 J	1.0 U	1.0 U	1.0 U	14	1.2	7.5	110	1.0 U
1,2,3-TRICHLOROBENZENE	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-TRICHLOROBENZENE	25 U	5.0 U	5.0 U	5.0 U	5.0 U	0.63 J	5.0 U	0.36 J	5.0 U	5.0 U	0.77 J	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROBENZENE	5.0 U	1.0 U	57	1.0 U	1.0 U	0.68 J	1.2	53 J	1.0 U	8.5	37	1.0 U	1.0 U	1.0 U	5.0 U	0.061 J	0.066 J	0.066 J	1.0 U
1,2-DICHLOROETHANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROPROPANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	0.23 J	1.0 U
1,3-DICHLOROBENZENE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	0.71 J	0.16 J	1.0 U	1.0 U	1.0 U
1,4-DICHLOROBENZENE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 J	2.8	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	1.4 JM	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 J	5.0 U	5.0 U	5.0 U	5.0 U	16 J	4.4 J	17 M	37	5.0 U
2-HEXANONE	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.44 J	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U
ACETONE	10 U	2.0 U	2.0 U	2.0 U	1.1 UJ	1.3 UJ	2.0 U	2.0 U	1.2 UJ	1.3 UJ	5.0 U	2.0 U	2.0 U	0.73 UJ	5.2 UJ	0.60 UJ	1.4 UJ	0.97 UJ	2.0 U
BENZENE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	0.68 J	0.14 J	0.12 J	0.072 J	1.0 U
BROMOCHLOROMETHANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOFORM	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	0.31 J	1.0 U	1.0 U
BROMOMETHANE	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U
CARBON DISULFIDE	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U
CARBON TETRACHLORIDE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J	2.5 U	1.0 U	1.0 U	1.0 U	45	6.1	18	11	1.0 U
CHLOROBENZENE	10 U	2.0 U	0.55 J	2.0 U	2.0 U	2.0 U	2.0 U	2.6	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U
CHLOROETHANE	10 UJ	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.30 J	5.0 U	2.0 U	2.0 UJ	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 UJ
CHLOROFORM	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35 J	2.5 U	1.0 U	1.0 U	1.0 U	4.9 J	0.88 J	390	100	1.0 U
CHLOROMETHANE	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U
CIS-1,2-DICHLOROETHENE	190	2.3	12	1.5	0.33 J	4.4	0.48 J	18	0.28 J	80	310	0.87 J	1.0 U	1.0 U	740	120	4.2	3.1	1.0 U
CIS-1,3-DICHLOROPROPENE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CYCLOHEXANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DIBROMOCHLOROMETHANE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DICHLORODIFLUOROMETHANE	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U
ETHYLBENZENE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE (CUMENE)	5.0 U	1.0 U	0.18 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
M,P-XYLENES	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	5.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U
METHYL ACETATE	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYLCYCLOHEXANE	20 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	10 U	4.0 U	4.0 U	4.0 U	20 U	4.0 U	4.0 U	4.0 U	4.0 U
METHYLENE CHLORIDE	5.0 U	1.0 U	1.0 U	1.0 U	0.33 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.29 UJ	2.5 U	0.42 UJ	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.15 J	1.0 U	0.091 J	0.47 J	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
STYRENE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TERT-BUTYL METHYL ETHER	10 U	2.0 U	0.35 J	2.0 U	2.0 U	0.24 J	0.21 J	0.34 J	0.21 J	0.26 J	0.34 J	2.0 U	2.0 U	2.0 UJ	10 U	2.0 U	2.0 U	2.0 U	2.0 U
TETRACHLOROETHENE (PCE)	990	22	100	65	2.5	21	1.3	3.9	4.8	34	390	2.7	2.5	3.8	120	34	190	75	0.38 J
TOLUENE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	0.079 UJ	1.0 U	1.0 U	5.0 U	0.076 UJ	1.0 U	1.0 U	1.0 U
TRANS-1,2-DICHLOROETHENE	0.91 J	0.10 J	0.28 J	1.0 U	1.0 U	1.0 U	1.0 U	0.17 J	1.0 U	0.50 J	2.9	1.0 U	1.0 U	1.0 U	2.7 J	4.0	1.0 U	0.088 J	1.0 U
TRANS-1,3-DICHLOROPROPENE	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROETHENE (TCE)	230 J	30	30	3.5	4.2	9.8	2.9	10	0.40 J	110	130	0.67 UJ	1.0 U	1.0 U	1600	260	740	210	1.0 U
TRICHLOROFLUOROMETHANE	5.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 UJ	1.0 U	5.0 U	1.0 U	0.23 J	7.4	1.0 UJ
VINYL CHLORIDE	2.1 J	0.10 J	4.5	2.0 U	2.0 U	2.0 U	2.0 U	9.3	2.0 U	10	31	2.0 U	2.0 U	2.0 U	0.64 J	0.087 J	2.0 U	2.0 U	2.0 U

Table 3.1-2 Complete Results for Monitoring Well Sampling (Fall 2012) For Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-206-320-R2	MW-22S-R2	W-27-285-R2	MW-12-R2	MW-14S-R2	MW-207-170-R2	MW-210-380-R2	MW-53S-R2	MW-P110-440-R2	W-10-120-R2	W-18-150-R2
LAB ID	160-888-30	160-888-19	160-945-19	160-945-55	160-945-51	160-945-22	160-945-45	160-945-43	160-945-57	160-945-31	160-945-30
SAMPLE DATE	11/07/2012	11/06/2012	11/13/2012	11/15/2012	11/15/2012	11/14/2012	11/15/2012	11/15/2012	11/15/2012	11/14/2012	11/14/2012
ANALYTE											
ACETIC ACID	1.0 U	1.0 U	1.0 U	1.0 UM	1.0 U	1.0 U	1.0 U	1.0 UM	1.0 UM	1.0 UM	1.0 U
ALKALINITY, TOTAL (AS CACO3)	2.0 JH	98	21	62	10	6.0	6.0	8.0	6.0	8.0	38
ALUMINUM	300 U	300 U	220 J	97 J	300 U	300 U	300 U	140 J	300 U	310	2400
BUTANOIC ACID	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CALCIUM	19000	37000	15000	32000	25000	8700	28000	6900	29000	14000	23000
Carbon Dioxide, Free	30 HF	74 HF	46 HF	31 HF	47 HF	17 HF	20 HF	29 HF	8.6 HF	45 HF	14 HF
CHLORIDE (AS CL)	120 D	16 D	90 D	88 D	250 D	37 D	220 D	5.9 D	60 D	80 D	44 D
ETHANE	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHENE	0.47 U	0.47 U	6.2	0.47 U	0.47 U	0.28 J	0.27 J	0.47 U	0.47 U	0.47 U	0.58
FERROUS IRON	NA	0.10 UHF	0.10 UHF	0.1 UHF	0.1 UHF	0.057 HF	0.1 UHF	0.1 UHF	1.0 UHF	0.072 JHF	1.8 HF
FORMIC ACID	1.0 U	1.0 U	1.0 UM	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UM	1.0 U	1.0 U	1.0 U
IRON	100 U	100 U	140	250	100 U	140	100 U	100 U	100 U	160	7200
LACTIC ACID	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MAGNESIUM	6300	6600	4000	3400	11000	3100	8800	1000	8800	1600	3000
MANGANESE	15 U	15 U	53	48	13 J	31	37	110	27	17	1600
NITROGEN, AMMONIA (AS N)	51	29 J	2200	33 J	52	45 J	30 J	50 U	35 J	46 J	710
NITROGEN, NITRATE-NITRITE	7900 DJ	4800 D	420	8200 D	2000	5900 DJ	7100 D	2400	25000 D	1700	28 J
POTASSIUM	5000 U	6400	2500 J	6100	1900 J	5000 U	2300 J	1900 J	1800 J	2400 J	2200 J
PROPANE	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
PROPIONIC ACID	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PYRUVIC ACID	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SODIUM	66000	51000	58000	69000	130000	21000	120000	6500	31000	43000	20000
SULFATE (AS SO4)	8.0	89 D	42 D	57 D	49 D	3.1	37 D	14	1.5	14	19
SULFIDE	1.0 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DISSOLVED ORGANIC CARBON	0.62 J	3.6	1.1	1.5	0.60 J	0.69 J	1.0 U	0.55 J	1.0 U	0.94 J	3.4

Table 3.1-3 Complete Trip Blank and Rinsate Blank Results for Monitoring Well Sampling (Fall 2012), Sylvania Corning FUSRAP Site

SAMPLE DATE	RB-01-R2	RB-02-R2	RB-03-R2	RB-04-R2	RB-05-R2	TB01
LAB ID	160-888-36	160-916-20	160-945-15	160-945-39	160-945-60	160-817-5
SAMPLE DATE	11/07/2012	11/12/2012	11/14/2012	11/14/2012	11/16/2012	10/25/2012
URANIUM						
URANIUM	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	NA
NICKEL						
NICKEL	40 U	40 U	40 U	40 U	40 U	NA
VOCs						
1,1,1-TRICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-TETRACHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-TRICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-TRICHLOROBENZENE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	0.13 UJ
1,2,4-TRICHLOROBENZENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.13 UJ
1,2-DIBROMO-3-CHLOROPROPANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-DICHLOROPROPANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DICHLOROBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-DIOXANE (P-DIOXANE)	5.0 U	5.0 U	5.0 U	150 U	2.3 J	5.0 U
2-HEXANONE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
ACETONE	7.7	11 UJ	12	11	9.9	1.6 UJ
BENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOFORM	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMOMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CARBON DISULFIDE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CARBON TETRACHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CHLOROBENZENE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CHLOROETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CHLOROFORM	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CHLOROMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CIS-1,2-DICHLOROETHENE	1.0 U	1.0 U	0.11 J	1.0 U	1.0 U	1.0 U
CIS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CYCLOHEXANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DIBROMOCHLOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DICHLORODIFLUOROMETHANE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ETHYLBENZENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE (CUMENE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
M,P-XYLENES	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U
METHYL ACETATE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	5.0 U	2.1 J	12	5.8	1.2 J	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
METHYLCYCLOHEXANE	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
METHYLENE CHLORIDE	2.3	0.41 J	0.46 J	1.0 U	1.1	0.93 J
O-XYLENE (1,2-DIMETHYLBENZENE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
STYRENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TERT-BUTYL METHYL ETHER	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ
TETRACHLOROETHENE (PCE)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOLUENE	1.0 U	1.4	1.7	1.7	1.7	1.0 U
TRANS-1,2-DICHLOROETHENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRANS-1,3-DICHLOROPROPENE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TRICHLOROETHENE (TCE)	1.0 U	1.0 U	0.48 J	1.0 U	1.0 U	1.0 U
TRICHLOROFLUOROMETHANE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
VINYL CHLORIDE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3.1-3 Complete Trip Blank and Rinsate Blank Results for Monitoring Well Sampling (Fall 2012), Sylvania Corning FUSRAP Site

SAMPLE DATE	TB-110412	TB-110812	TB-110912	TB-111312	TB-111612	TB-111712
LAB ID	160-863-23	160-888-38	160-899-14	160-916-34	160-945-61	160-950-28
SAMPLE DATE	11/04/2012	11/08/2012	11/09/2012	11/13/2012	11/16/2012	11/17/2012
URANIUM						
URANIUM	NA	NA	NA	NA	NA	NA
NICKEL						
NICKEL	NA	NA	NA	NA	NA	NA
VOCs						
1,1,1-TRICHLOROETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,1,2,2-TETRACHLOROETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,1,2-TRICHLOROETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,1-DICHLOROETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,1-DICHLOROETHENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,2,3-TRICHLOROBENZENE	0.16 J	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U
1,2,4-TRICHLOROBENZENE	0.13 J	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,2-DICHLOROBENZENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,2-DICHLOROETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,2-DICHLOROPROPANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,3-DICHLOROBENZENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,4-DICHLOROBENZENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1,4-DIOXANE (P-DIOXANE)	5 U	150 U	5.0 U	5.0 UJ	5.0 U	5.0 U
2-HEXANONE	5 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
ACETONE	0.66 J	1.3 UJ	1.6 UJ	1.2 UJ	0.80 UJ	2.0 U
BENZENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
BROMOCHLOROMETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
BROMODICHLOROMETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
BROMOFORM	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
BROMOMETHANE	2 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
CARBON DISULFIDE	2 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
CARBON TETRACHLORIDE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
CHLOROBENZENE	2 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
CHLOROETHANE	2 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
CHLOROFORM	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
CHLOROMETHANE	2 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
CIS-1,2-DICHLOROETHENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
CIS-1,3-DICHLOROPROPENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
CYCLOHEXANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
DIBROMOCHLOROMETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
DICHLORODIFLUOROMETHANE	2 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
ETHYLBENZENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
ISOPROPYLBENZENE (CUMENE)	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
M,P-XYLENES	5 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
METHYL ACETATE	5 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
METHYL ETHYL KETONE (2-BUTANONE)	5 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
METHYLCYCLOHEXANE	4 U	4.0 U	4.0 U	4.0 UJ	4.0 U	4.0 U
METHYLENE CHLORIDE	0.71 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
O-XYLENE (1,2-DIMETHYLBENZENE)	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
STYRENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
TERT-BUTYL METHYL ETHER	2 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
TETRACHLOROETHENE (PCE)	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
TOLUENE	1 U	0.074 J	1.0 U	0.088 J	0.084 J	1.0 U
TRANS-1,2-DICHLOROETHENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
TRANS-1,3-DICHLOROPROPENE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
TRICHLOROETHENE (TCE)	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
TRICHLOROFLUOROMETHANE	1 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
VINYL CHLORIDE	2 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U

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4 System Audits

No audits were completed for the Fall 2012 sampling for this project.

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5 Data Completeness and QA/QC Problems

This section summarizes the degree to which the analytical systems met or failed the data quality objectives (DQOs) listed in the QAPP. A discussion is provided for each phase of fieldwork.

5.1 Fall 2012 Groundwater Data Completeness

5.1.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.1-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.1. Data points that were qualified as estimated are considered usable for the purposes of this project. A total of 100% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.1-1 Summary of Data for Monitoring Well Sampling (Fall 2012), Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	R	Total	Rejected
Water	SW6010C	16	27	156	0	0	199	0%
	SW8260C	345	556	9010	593	0	10504	0%
	ASTM D5174	74	0	125	0	0	199	0%
Totals		**435**	**583**	**9291**	**593**	**0**	**10902**	**0%**

5.1.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Field duplicate sample precision for a minority of the analytes was not within QC criteria. Field duplicate sampling procedures does not appear to be a concern.
- The laboratory did not spike the full list of compounds into all MS/MSD pairs, however all Compounds of Concern were spiked and did not indicate any problems with the analysis.

- Calibration %D was exceeded for a minority of the analytes, this did not indicate a gross analytical issue with the laboratory analysis

- Acetone, and toluene were consistently detected in the method blank samples were consistently detected in the laboratory method blanks at concentrations above the MDL but below the reporting limit. Toluene is not considered a common laboratory contaminant. Concentrations detected in the field samples were consistent with the method blank levels. None of the affected levels were above the PQL, and therefore should not impact data usability significantly.

- Low levels of Acetone, and Toluene were detected in the trip blank samples. However this can be attributed to the above mentioned method blank contamination, and does not impact data usability.

- Several compounds were detected in the rinsate blank samples. These detections did cause some compounds to be qualified as non-detect but they were not compounds of concern, and as such should not impact data usability.

- Some matrix effects were noted for varying analytes in the MS/MSD. There are no recommended changes for problems based on sample matrix.

- Some analytes in the LCS/LCSD were out of QC criteria, and exceeded RPD limits, however they were not compounds of concern, and therefore should not impact data usability significantly.

5.2 Groundwater Data Completeness for Natural Attenuation Parameters

5.2.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.2-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.2. Data points that were qualified as estimated are considered usable for the purposes of this project. No sample results were rejected and 100% of the data are useable. The completeness goals for the project were met based on this percentage.

Table 5.1-2 Summary of Data for Monitoring Well Sampling (Fall 2012) Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

Sample	Lab Method ID	Not Qualified	J	U	UJ	Total	Rejected
Water	3810M	2	2	29	0	33	0.0%
	6010B/DOD	50	11	16	0	77	0.0%
	300.0	22	0	0	0	22	0.0%
	310.1	3	1	0	7	11	0.0%
	350.1	5	6	0	0	11	0.0%
	353.1 Preserved	8	3	0	0	11	0.0%
	376.1	0	0	11	0	11	0.0%
	9060	4	5	2	0	11	0.0%
	SM 3500 FE D	1	2	8	0	11	0.0%

Table 5.1-2 Summary of Data for Monitoring Well Sampling (Fall 2012) Natural Attenuation Parameters, Sylvania Corning FUSRAP Site

Sample	Lab Method ID	Not Qualified	J	U	UJ	Total	Rejected
	SM 4500 CO2 D	11	0	0	0	11	0.0%
	VFA-IC	0	3	60	3	66	0.0%
	Local Method	0	0	11	0	11	0.0%
	AM20GAX	11	0	0	0	11	0.0%
Totals		**117**	**33**	**137**	**10**	**297**	**0.0%**

5.2.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Ferrous iron and carbon dioxide have method defined holding times of 15 minutes and these analyses are typically performed in the field; however, project samples were delivered to the laboratory for ferrous iron and carbon dioxide analysis. Therefore, results of ferrous iron and carbon dioxide were analyzed outside of holding time and have been given the "HF" qualifier to denote that analysis was performed outside of the method defined holding time.

- Lactic acid, propionic acid, and pyruvic acid were outside of the QC limits for the MS/MSD prepared with project sample MW-12-R2. Results for MW-12-R2 have been qualified as estimated.

- Alkalinity was detected in the method blank associated with samples MW-207-170-R2, W-10-120-R2, MW-14S-R2, MW-210-380-R2, MW-P110-440-R2, and MW-53S-R2. Results of alkalinity have been negated qualifier as the amount present in the samples was less than 5x the amount present in the associated method blank.

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6 References

The Louis Berger Group, Inc. (LBG), 2011, Work Plan, Health and Safety Plan, and Quality Assurance Project Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

The Louis Berger Group, Inc. (LBG), 2011, Quality Control Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

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A Data Usability Summary Reports

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Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-817-1**
Date Completed: 1/7/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/BK

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-817-1**
Date Completed: 1/7/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Multiple compounds present in associated Method Blank. Acetone and methylene chloride were detected in the trip blank. Acetone and methylene chloride were detected in associated rinsate blank RB-01-R2.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – RPD for 4-methyl-2-pentanone is outside of QC limits. Associated parent sample is qualified "J" as estimated for this compound.
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No - RPD for acetone and methyl tert-butyl ether is outside of QC limits. Associated results for project samples have been qualified as estimated.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-817-1**
Date Completed: 1/7/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Two samples were analyzed at a dilution due to high concentration of target analytes.
Do field duplicate results show good precision for all compounds? See Table 4	There are no field duplicates associated with this SDG.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blanks included with this SDG.)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-817-1**
Date Completed: 1/7/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 4	Yes – There were three field duplicate and parent sample pairs, all samples were non-detect, no qualification of the data is necessary.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples were reanalyzed with a post spike to confirm that quenching was not occurring. The original results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - Dichlorodifluoromethane and chloromethane are outside of the upper QC limit. The samples associated with this CC are non-detections. No qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-817-1**
Date Completed: 1/7/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
The %RSD for LCS/LCSD and MS/MSD qualified analytes as estimated “J”. No impact on data usability was observed.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	LAB SDG ID: 160-817-1
Date Completed: 1/7/2013	Data Validation Chemist: B. Kroon
Date Performed: 1/30/2013	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-817-1

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
W-03-112-R2	160-817-1/315121001	Groundwater	10/25/2012	MS/MSD
W-03-72-R2	160-817-2/315121002	Groundwater	10/25/2012	
W-14-150-R2	160-817-3/315121003	Groundwater	10/25/2012	
W-01-120-R2	160-817-4/315121004	Groundwater	10/25/2012	MS/MSD
TB01	160-817-5	Trip Blank	10/25/2012	
W-02-70-R2	160-817-6/315121005	Groundwater	10/26/2012	
W-01-75-R2	160-817-7/315121006	Groundwater	10/26/2012	
W-08-71-R2	160-817-8/315121007	Groundwater	10/26/2012	
W-11-70-R2	160-817-9/315121008	Groundwater	10/26/2012	
W-32-110-R2	160-817-10/315121009	Groundwater	10/26/2012	
MW-500-GWR2	315121021	Groundwater	11/3/2012	FD
MW16D-R2	315121015	Groundwater	11/3/2012	
MW16S-R2	315121014	Groundwater	11/3/2012	
MW208-350-R2	315121023	Groundwater	11/4/2012	
MW208-540-R2	315121024	Groundwater	11/4/2012	
MW209-380-R2	315121017	Groundwater	11/3/2012	
MW209-550-R2	315121016	Groundwater	11/3/2012	
MW211-190-R2	315121010	Groundwater	11/2/2012	
MW211-250-R2	315121011	Groundwater	11/2/2012	
MW211-455-R2	315121013	Groundwater	11/3/2012	
MW212-580-R2	315121012	Groundwater	11/2/2012	
MW213-570	315121026	Groundwater	11/4/2012	MS/MSD
MW214-570-R2	315121027	Groundwater	11/4/2012	
MW501-GWR2	315121022	Groundwater	11/4/2012	FD
MW502-GWR2	315121025	Groundwater	11/4/2012	FD
PW-4-1-R2	315121030	Groundwater	11/4/2012	
PW-4-2-R2	315121028	Groundwater	11/4/2012	
PW-4-3-R2	315121018	Groundwater	11/3/2012	
PW-4-4-R2	315121031	Groundwater	11/4/2012	
PW-4-5-R2	315121029	Groundwater	11/4/2012	
PW-4-6-R2	315121020	Groundwater	11/3/2012	
PW-4-7-R2	315121019	Groundwater	11/3/2012	
W-12-120-R2	315121032	Groundwater	11/5/2012	
W-12-70-R2	315121033	Groundwater	11/5/2012	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-817-1

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	10
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	10
Groundwater	SW846 6010B	Nickel	9
Groundwater	ASTM D5174	KPA, Total U, Liquid	33

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-817-1

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
W-03-112-R2	160-817-1	Acetone	<0.34	1.5	J	1.5	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3
		Methylene chloride	<0.27	0.65	J	0.65	UJ	Qualify	4
W-03-72-R2	160-817-2	Acetone	<0.34	0.55	J	0.55	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3
W-14-150-R2	160-817-3	Acetone	<0.34	0.80	J	0.80	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3
		Methylene chloride	<0.27	0.66	J	0.66	UJ	Qualify	4
W-01-120-R2	160-817-4	1,2,3-Trichlorobenzene	0.171	0.20	J	0.20	UJ	Qualify	1
		1,2,4-Trichlorobenzene	0.141	0.17	J	0.17	UJ	Qualify	1
		4-Methyl-2-pentanone	<0.12	0.12	UJ	0.12	UJ	Qualify	2
		Acetone	<0.34	6.60		2.0	UJ	Qualify	3, 5
		Methyl tert-butyl ether	<0.11	0.1	U	0.1	UJ	Qualify	3
		Methylene chloride	<0.27	0.62	J	0.62	UJ	Qualify	4
TB01	160-817-5	1,2,3-Trichlorobenzene	0.171	0.13	J	0.13	UJ	Qualify	1
		1,2,4-Trichlorobenzene	0.141	0.13	J	0.13	UJ	Qualify	1
		Acetone	<0.34	1.60	J	1.60	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3
W-02-70-R2	160-817-6	Acetone	<0.34	0.76	J	0.76	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3
W-01-75-R2	160-817-7	Acetone	<0.34	1.2	J	1.2	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3
		Methylene chloride	<0.27	0.99	J	0.99	UJ	Qualify	4
W-08-71-R2	160-817-8	Acetone	<0.34	1.0	J	1.0	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3
		Methylene chloride	<0.27	0.42	J	0.42	UJ	Qualify	4
W-11-70-R2	160-817-9	Acetone	<0.34	0.60	J	0.60	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3
W-32-110-R2	160-817-10	Acetone	<0.34	0.73	J	0.73	UJ	Qualify	3, 4
		Methyl tert-butyl ether	<0.11	0.11	U	0.11	UJ	Qualify	3

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The relative percent difference (RPD) between the matrix spike and the matrix spike duplicate is outside of QC limits.
3 - The reported result has been qualified as estimated. The RPD between the laboratory control sample and the laboratory control sample duplicate is outside of QC limits.
4 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip blank.
5 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-817-1

Primary Sample ID: PW-4-7-R2 Lab ID: 315121019
Duplicate Sample ID: MW-500-GW-R2 Lab ID: 315121021

Method	Analyte	PW-4-7-R2	MW-500-GW-R2	RPD	Rating	Qualifier
ASTM D5174	Total U	ND	ND	--	--	None

Primary Sample ID: MW-208-350-R2 Lab ID: 315121023
Duplicate Sample ID: MW-501-GWR2 Lab ID: 315121022

Method	Analyte	MW-208-350-R2	MW-501-GWR2	RPD	Rating	Qualifier
ASTM D5174	Total U	ND	ND	--	--	None

Primary Sample ID: MW208-540-R2 Lab ID: 315121024
Duplicate Sample ID: MW-502-GWR2 Lab ID: 315121025

Method	Analyte	MW208-540-R2	MW-502-GWR2	RPD	Rating	Qualifier
ASTM D5174	Total U	ND	ND	--	--	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-863**
Date Completed: 1/21/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above BK

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-863**
Date Completed: 1/21/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Several compounds were found in the method blanks for the batches for SW8260. There were also several detections in the trip blank for this batch.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several compounds were flagged as non-detect due to detection in the method blanks. No analytes were flagged due to trip blank contamination. Acetone and Methylene Chloride were detected in associated rinsate blank RB-01-R2
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes – MS/MSD RPD for one compound was greater than QC limits causing qualification of the data.
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes – LCS/LCSD RPD for one compound was greater than QC limits causing qualification of the data.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-863**
Date Completed: 1/21/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Several samples were analyzed at dilution due to high concentration of target analytes, only one result is reportable for each sample.
Do field duplicate results show good precision for all compounds? See Table 4	Yes – VOC compounds showed good agreement with each other in the field duplicate and parent samples, no Ni was detected in any of the duplicate/parent samples, no qualification of the data is necessary.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	NA
Any compounds present in method and field blanks? See Table 3	NA
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	NA
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	NA
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	NA

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-863**
Date Completed: 1/21/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 4	NA
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	NA

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-863**
Date Completed: 1/21/2013	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
Analytes were qualified due to method blank contamination, MS/MSD RPD, and LCS/LCS RPD.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-863-1

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW16D-R2	160-863-6	Groundwater	11/3/2012	
MW16S-R2	160-863-5	Groundwater	11/3/2012	
MW208-350-R2	160-863-13	Groundwater	11/4/2012	
MW208-540-R2	160-863-15	Groundwater	11/4/2012	
MW-209-380-R2	160-863-8	Groundwater	11/3/2012	
MW-209-530-R2	160-863-7	Groundwater	11/3/2012	
MW211-190-R2	160-863-1	Groundwater	11/2/2012	
MW211-250-R2	160-863-2	Groundwater	11/2/2012	
MW211-455-R2	160-863-4	Groundwater	11/3/2012	
MW212-580-R2	160-863-3	Groundwater	11/2/2012	
MW213-570-R2	160-863-17	Groundwater	11/4/2012	MS/MSD
MW214-570-R2	160-863-18	Groundwater	11/4/2012	
MW-500-GWR2	160-863-12	Groundwater	11/3/2012	
MW501-GWR2	160-863-14	Groundwater	11/4/2012	
MW502-GW-R2	160-863-16	Groundwater	11/4/2012	
PW-4-1-R2	160-863-21	Groundwater	11/4/2012	
PW-4-2-R2	160-863-20	Groundwater	11/4/2012	
PW-4-3-R2	160-863-9	Groundwater	11/3/2012	
PW-4-4-R2	160-863-22	Groundwater	11/4/2012	
PW-4-5-R2	160-863-19	Groundwater	11/4/2012	
PW-4-6-R2	160-863-11	Groundwater	11/3/2012	
PW-4-7-R2	160-863-10	Groundwater	11/3/2012	
TB-110412	160-863-23	Trip Blank	11/4/2012	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-863-1

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	23
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	23
Groundwater	SW846 6010B	Nickel	23

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-863-1

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW211-190-R2	160-863-1	METHYLENE CHLORIDE	0.919 J	0.70	J B	1.0	UJ	Qualify	1
MW211-250-R2	160-863-2	METHYLENE CHLORIDE	0.919 J	0.60	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.54	J	2.0	UJ	Qualify	1
MW212-580-R2	160-863-3	METHYLENE CHLORIDE	0.919 J	0.72	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.66	J	2.0	UJ	Qualify	1
MW211-455-R2	160-863-4	ACETONE	0.438 J	2.7		2.0	UJ	Qualify	4
		METHYLENE CHLORIDE	0.919 J	0.47	JB	1.0	UJ	Qualify	1
MW16S-R2	160-863-5	METHYLENE CHLORIDE	0.919 J	0.41	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.90	J	2.0	UJ	Qualify	1
MW16D-R2	160-863-6	METHYLENE CHLORIDE	0.919 J	0.76	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.35	J	2.0	UJ	Qualify	1
MW-209-530-R2	160-863-7	ACETONE	0.438 J	7.8		2.0	UJ	Qualify	4
		METHYLENE CHLORIDE	0.919 J	0.5	J B	1.0	UJ	Qualify	1
MW-209-380-R2	160-863-8	ACETONE	0.438 J	12		10	UJ	Qualify	4
		METHYLENE CHLORIDE	0.919 J	4.60	J B	5.0	UJ	Qualify	1
PW-4-3-R2	160-863-9	METHYLENE CHLORIDE	0.919 J	0.93	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.51	J	2.0	UJ	Qualify	1
PW-4-7-R2	160-863-10	METHYLENE CHLORIDE	0.919 J	0.66	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.75	J	2.0	UJ	Qualify	1
PW-4-6-R2	160-863-11	METHYLENE CHLORIDE	0.919 J	0.62	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	1.30	J	2.0	UJ	Qualify	1
MW-500-GWR2	160-863-12	METHYLENE CHLORIDE	0.919 J	0.45	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.47	J	2.0	UJ	Qualify	1
MW-208-350-R2	160-863-13	METHYLENE CHLORIDE	0.919 J	0.55	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	1.10	J	2.0	UJ	Qualify	1
MW501-GWR2	160-863-14	METHYLENE CHLORIDE	0.919 J	0.68	J B	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.37	J	2.0	UJ	Qualify	1
MW213-570-R2	160-863-17	METHYLENE CHLORIDE	0.919 J	0.89	J	1.0	UJ	Qualify	1
		ACETONE	0.438 J	0.77	J	2.0	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.168 J	0.11	J	2.0	UJ	Qualify	1
		METHYL ACETATE	0.37 U	9.96		7.99	J	Qualify	2
TB-110412	160-863-23	METHYLENE CHLORIDE	0.919 J	0.71	J B	1.0	UJ	Qualify	1
MW208-540-R2	160-863-15	ACETONE	0.388 J	2.7		2.0	UJ	Qualify	4
		METHYLENE CHLORIDE	0.919 J	0.89	J	1.0	UJ	Qualify	4
		2-BUTANONE	0.52 U	8.60		10.7		Qualify	3
MW502-GW-R2	160-863-16	2-BUTANONE	0.52 U	8.60		10.7		Qualify	3
MW214-570-R2	160-863-18	ACETONE	0.388 J	0.78	J	2.0	UJ	Qualify	1
		METHYLENE CHLORIDE	0.919 J	0.85	J	1.0	UJ	Qualify	4
		2-BUTANONE	0.52 U	8.60		10.7		Qualify	3
PW-4-5-R2	160-863-19	ACETONE	0.388 J	0.62	J	2.0	UJ	Qualify	1
		2-BUTANONE	0.52 U	8.60		10.7		Qualify	3
PW-4-2-R2	160-863-20	ACETONE	0.388 J	0.89	J	2.0	UJ	Qualify	1
		2-BUTANONE	0.52 U	8.60		10.7		Qualify	3
PW-4-1-R2	160-863-21	ACETONE	0.388 J	0.41	J	2.0	UJ	Qualify	1
		2-BUTANONE	0.52 U	8.60		10.7		Qualify	3
PW-4-4-R2	160-863-22	ACETONE	0.388 J	1.00	J	2.0	UJ	Qualify	1
		2-BUTANONE	0.388 J	1.00	J	2.0	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The relative percent difference (RPD) between the matrix spike and the matrix spike duplicate is outside of QC limits.
3 - The reported result has been qualified as estimated. The RPD between the laboratory control sample and the laboratory control sample duplicate is outside of QC limits.
4 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated rinse blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-863-1

Primary Sample ID: PW-4-7-R2 Lab ID: 160-863-10
Duplicate Sample ID: MW-500-GW-R2 Lab ID: 160-863-12

Method	Analyte	PW-4-7-R2	MW-500-GW-R2	RPD	Rating	Qualifier
SW8260	1,1,1-TRICHLOROETHANE	0.11	0.13	16.7	Good	None

Primary Sample ID: MW-208-350-R2 Lab ID: 160-863-13
Duplicate Sample ID: MW-501-GWR2 Lab ID: 160-863-14

Method	Analyte	MW-208-350-R2	MW-501-GWR2	RPD	Rating	Qualifier
SW8260	TETRACHLOROETHENE	110.0	110	0.0	Good	None
SW8260	TRICHLOROETHENE	110.0	110.0	0.0	Good	None
SW8260	1,1,1-TRICHLOROETHANE	0.1	0.1	0.0	Good	None
SW8260	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3.1	3.0	3.3	Good	None
SW8260	1,1-DICHLOROETHENE	0.3	0.2	18.9	Good	None
SW8260	1,2-DICHLOROBENZENE	1.0	0.9	3.2	Good	None
SW8260	1,4-DICHLOROBENZENE	0.1	0.1	0.0	Good	None
SW8260	CARBON TETRACHLORIDE	0.26	0.29	10.9	Good	None
SW8260	CHLOROFORM	1.9	2	5.4	Good	None
SW8260	CIS-1,2-DICHLOROETHENE	1.4	1.2	15.4	Good	None

Primary Sample ID: MW208-540-R2 Lab ID: 160-863-15
Duplicate Sample ID: MW-502-GWr2 Lab ID: 160-863-16

Method	Analyte	MW208-540-R2	MW-502-GWr2	RPD	Rating	Qualifier
SW8260	1,2-DICHLOROBENZENE	0.11	0.11	0.0	Good	None
SW8260	ACETONE	2.7	2.2	20.4	Good	None
SW8260	METHYLENE CHLORIDE	0.89	0.94	5.5	Good	None
SW8260	TETRACHLOROETHENE	4.6	4.3	6.7	Good	None
SW8260	TOLUENE	0.14	0.13	7.4	Good	None
SW8260	TRICHLOROETHENE	0.91	0.84	8.0	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-888**
Date Completed: 01/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above BK

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-888**
Date Completed: 01/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of Acetone were detected in MB 160-16767/2. Low levels of 1,2,3 and 1,2,4-Trichlorobenzene were detected in MB 160-16768/2 Low levels of 2-Hexanone and Acetone were detected in MB 160-16963/2 Acetone and Methylene Chloride were detected in RB-01. Acetone (U qualified due to MB contamination) and low level of Toluene were detected in TB-110812.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified non-detect for Acetone in Batch 16767. Sample MW-205-470-R2 result for Toluene qualified due to Trip Blank Contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No – Several surrogates for PW-7-6-R2 and PW-7-7-R2 as well as MSD for batch16767 were recovered high. Samples were not reanalyzed, detections in the field samples are qualified “J” as estimated due to this non-conformance.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then “R” flag associated non-detect values.*	No – MS/MSD for bat 16767 RPD was non-compliant for 1,2-Dibromo-3-Chloropropane, no positive results in this batch no qualification of the data necessary.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-888**
Date Completed: 01/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – several samples were diluted due to high concentrations of target analytes, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	Yes – VOC analysis showed good precision across all detected analytes. Nickel was not detected in any of the field duplicate/parent sample pairs and was not qualified.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blanks included with this SDG.)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-888**
Date Completed: 01/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 4	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Several samples were reanalyzed due to failure of R2 or lifetime and assessed for quenching. No quenching was observed and the initial results are reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-888**
Date Completed: 01/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No – Chloroethane was greater than 20% for ICV 16238/9 associated samples are flagged "J" or "UJ" as estimated. Trichlorofluoromethane was greater than 20% for ICV 16770/3 associated samples are flagged "J" or "UJ" as estimated.
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
Results qualified due to Method, Trip, and Rinsate Blank contamination, high surrogate recovery, and GC/MS CCV recovery.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	LAB SDG ID: 160-888
Date Completed: 01/22/2012	Data Validation Chemist: B. Kroon
Date Performed: 1/30/2013	Data Validation Review: J. Nelson

GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-888-1

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
W-22-95-R2	160-888-1	Groundwater	11/5/2012	MS/MSD
W-10-71-R2	160-888-2	Groundwater	11/5/2012	
W-05-78-R2	160-888-3	Groundwater	11/5/2012	
W-12-70-R2	160-888-4	Groundwater	11/5/2012	
W-12-120-R2	160-888-5	Groundwater	11/5/2012	
MW-24S-R2	160-888-6	Groundwater	11/5/2012	
MW-24DD-R2	160-888-7	Groundwater	11/5/2012	
W-6-79-R2	160-888-8	Groundwater	11/6/2012	
W-31-95-R2	160-888-9	Groundwater	11/6/2012	
W-19-150-R2	160-888-10	Groundwater	11/6/2012	
W-20-160-R2	160-888-11	Groundwater	11/6/2012	
PW-7-3-R2	160-888-12	Groundwater	11/6/2012	
PW-7-1-R2	160-888-13	Groundwater	11/6/2012	
PW-7-2-R2	160-888-14	Groundwater	11/6/2012	
W-17-130-R2	160-888-15	Groundwater	11/6/2012	MS/MSD
MW-41S-R2	160-888-16	Groundwater	11/6/2012	
MW-22D-R2	160-888-17	Groundwater	11/6/2012	
W-16-148-R2	160-888-18	Groundwater	11/6/2012	
MW-22I-R2	160-888-19	Groundwater	11/6/2012	
MW-22S-R2	160-888-20	Groundwater	11/6/2012	
MW-503-GW-R2	160-888-21	Groundwater	11/6/2012	MS/MSD
MW-44S-R2	160-888-22	Groundwater	11/6/2012	
W-19-110-R2	160-888-23	Groundwater	11/6/2012	
W-20-120-R2	160-888-24	Groundwater	11/6/2012	MS/MSD
MW-205-285-R2	160-888-25	Groundwater	11/7/2012	
MW-43S-R2	160-888-26	Groundwater	11/7/2012	
MW-20S-R2	160-888-27	Groundwater	11/7/2012	
MW-20D-R2	160-888-28	Groundwater	11/7/2012	MS/MSD
MW-206-470-R2	160-888-29	Groundwater	11/7/2012	
MW-206-320-R2	160-888-30	Groundwater	11/7/2012	
PW-7-6-R2	160-888-31	Groundwater	11/7/2012	
PW-7-7-R2	160-888-32	Groundwater	11/7/2012	
MW-205-470-R2	160-888-33	Groundwater	11/7/2012	
MW-505-GW-R2	160-888-34	Groundwater	11/7/2012	
MW-504-GW-R2	160-888-35	Groundwater	11/7/2012	
RB-01-R2	160-888-36	Rinsate Blank	11/7/2012	
W-23-110-R2	160-888-37	Groundwater	11/7/2012	
TB-110812	160-888-38	Trip Blank	11/8/2012	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-888-1

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	38
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	38
Groundwater	SW846 6010B	Nickel	38
Groundwater	ASTM D5174	KPA, Total U, Liquid	35

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-888-1

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
PW-7-6-R2	160-888-31	ACETONE	0.534 J	1.8	J	2.0	UJ	Qualify	1
PW-7-7-R2	160-888-32	ACETONE	0.534 J	1.30	J	2.00	UJ	Qualify	1
MW-505-GW-R2	160-888-34	ACETONE	0.534 J	1.40	J	2.00	UJ	Qualify	1
MW-504-GW-R2	160-888-35	ACETONE	0.534 J	0.56	J	2.00	UJ	Qualify	1
W-23-110-R2	160-888-37	ACETONE	0.534 J	1.10	J	2.00	UJ	Qualify	1
		METHYLENE CHLORIDE	2.300	0.33	J	1.00	UJ	Qualify	2
TB-110812	160-888-38	ACETONE	0.534 J	1.30	J	2.00	UJ	Qualify	1
MW-205-470-R2	160-888-33	TOLUENE	0.074 J	0.1	J	1.0	UJ	Qualify	2

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-888-1

Primary Sample ID: MW-22I-R2 Lab ID: 160-888-20
Duplicate Sample ID: MW-503-GWR2 Lab ID: 160-888-21

Method	Analyte	MW-22I-R2	MW-503-GWR2	RPD	Rating	Qualifier
SW8260	1,1,1-TRICHLOROETHANE	0.31	0.33	6.3	Good	None
SW8260	1,1-DICHLOROETHANE	0.42	0.46	9.1	Good	None
SW8260	1,1-DICHLOROETHENE	0.31	0.33	6.3	Good	None
SW8260	CHLOROFORM	2.40	2.50	4.1	Good	None
SW8260	TERT-BUTYL METHYL ETHER	0.39	0.40	2.5	Good	None
SW8260	TETRACHLOROETHENE (PCE)	0.23	0.21	9.1	Good	None

Primary Sample ID: W-23-110-R2 Lab ID: 160-888-37
Duplicate Sample ID: MW-504-GWR2 Lab ID: 160-888-35

Method	Analyte	W-23-110-R2	MW-504-GWR2	RPD	Rating	Qualifier
ASTM D5174	U, TOTAL	0.292	0.271	7.5	Good	None
SW8260	1,1-DICHLOROETHENE	0.17	0.17	0.0	Good	None
SW8260	CIS-1,2-DICHLOROETHENE	0.33	0.31	6.3	Good	None
SW8260	TETRACHLOROETHENE (PCE)	2.50	2.7	7.7	Good	None
SW8260	TRICHLOROETHENE (TCE)	4.20	4.2	0.0	Good	None

Primary Sample ID: MW-206-470-R2 Lab ID: 160-888-29
Duplicate Sample ID: MW-505-GWR2 Lab ID: 160-888-34

Method	Analyte	MW-206-470-R2	MW-505-GWR2	RPD	Rating	Qualifier
SW8260	CHLOROFORM	0.82	0.83	1.2	Good	None
SW8260	TETRACHLOROETHENE (PCE)	1.1	1.2	8.7	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characteriztion – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-899**
Date Completed: 1/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above BK

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characteriztion – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-899**
Date Completed: 1/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes - Alkalinity for sample 160-899-1 was analyzed outside of holding time but within 2x the holding time. Ferrous iron and carbon dioxide have method defined holding times of 15 minutes and these analyses are typically performed in the field; however, project samples were delivered to the laboratory for ferrous iron and carbon dioxide analysis. Therefore, results of ferrous iron and carbon dioxide were analyzed outside of holding time and have been given the "HF" qualifier to denote that analysis was performed outside of the method defined holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Acetone was detected in MB 160-16767/2. 2-Hexanone and Acetone were detected in MB 160-16963/2.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Samples associated with MB 160-16767/2 are flagged “U” as non-detect for Acetone if less than 10 times the amount in the blank. Samples associated with MB 160-16963/2 are flagged “U” as non-detect for Acetone if less than 10 times the amount in the blank, and less than 5 times the amount of 2-Hexanone.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No – Multiple surrogates were out of QC limits for samples MW-50I-R2, MW-507-GW-R2, and MW-23S-R2. All detections and non-detects are flagged as estimated “J” or “UJ” in these samples.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characteriztion – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-899**
Date Completed: 1/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – RPD for MS/MSD of MW-50I-R2 for 1,2-Dibromo-3-Chloropropane is qualified "UJ" as estimated. The MS/MSD prepared with 160-899-1 was outside of QC limits for nitrate/nitrite due to high concentrations in the native sample relative to the spike amount. No qualification has been performed.
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No
Do field duplicate results show good precision for all compounds? See Table 4	

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blanks included with this SDG.)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characteriztion – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-899**
Date Completed: 1/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 4	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Several samples were reanalyzed due to failure of R2 or lifetime to test for quenching. No evidence of quenching found results are reported. Several other samples were diluted due to high concentrations of target analytes, only one result is reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characteriztion – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-899**
Date Completed: 1/22/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
Results qualified due to Method blank contamination, surrogate recovery, and MS/MSD RPD.

Key:

AP = Acid Phenol
BN = Base Neutral

CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-899-1

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-18I-R2	315501021	Ground Water	11/9/2012	
MW-18S-R2	315501020	Ground Water	11/9/2012	
MW-19D-R2	315501044	Ground Water	11/12/2012	
MW-19S-R2	315501043	Ground Water	11/12/2012	
MW-206-320-R2	160-899-1	Ground Water	11/7/2012	MS/MSD
MW-207-250-R2	160-899-6/315501005	Ground Water	11/8/2012	
MW-207-320-R2	160-899-3/315501002	Ground Water	11/8/2012	
MW-20I-R2	315501016	Ground Water	11/9/2012	
MW-21D-R2	315501042	Ground Water	11/12/2012	
MW-21I-R2	315501040	Ground Water	11/12/2012	
MW-21S-R2	315501039	Ground Water	11/12/2012	
MW-23D-R2	160-899-7/315501006	Ground Water	11/8/2012	
MW-23I-R2	315501022	Ground Water	11/9/2012	
MW-23S-R2	160-899-13/315501012	Ground Water	11/8/2012	
MW-25D-R2	160-899-9/315501008	Ground Water	11/8/2012	
MW-25I-R2	160-899-10/315501009	Ground Water	11/8/2012	
MW-25S-R2	160-899-8/315501007	Ground Water	11/8/2012	
MW-26D-R2	160-899-12/315501011	Ground Water	11/8/2012	
MW-26S-R2	160-899-11/315501010	Ground Water	11/8/2012	
MW-506-GW-R2	160-899-4/315501003	Ground Water	11/8/2012	
MW-507-GW-R2	160-899-5/315501004	Ground Water	11/8/2012	
MW-508-GW-R2	315501013	Ground Water	11/9/2012	
MW-509-GW-R2	315501041	Ground Water	11/12/2012	
MW-50I-R2	160-899-2/315501001	Ground Water	11/8/2012	MS/MSD
PW-2-6-R2	315501034	Ground Water	11/12/2012	
PW-2-7-R2	315501032	Ground Water	11/12/2012	
PW-2-7-R2-F	315501033	Ground Water	11/12/2012	
PW-3-7-R2	315501031	Ground Water	11/12/2012	
PW-6-1-R2	315501023	Ground Water	11/10/2012	
PW-6-2-R2	315501024	Ground Water	11/10/2012	
PW-6-3-R2	315501025	Ground Water	11/10/2012	
PW-6-4-R2	315501026	Ground Water	11/10/2012	
PW-6-5-R2	315501027	Ground Water	11/10/2012	
PW-6-6-R2	315501028	Ground Water	11/10/2012	
PW-6-7-R2	315501029	Ground Water	11/10/2012	
PW-7-4-R2	315501019	Ground Water	11/9/2012	MS/MSD
PW-7-5-R2	315501017	Ground Water	11/9/2012	
RB-02-R2	315501030	Rinsate Blank	11/12/2012	
S-1-325-R2	315501036	Ground Water	11/12/2012	MS/MSD
S-1-450-R2	315501035	Ground Water	11/12/2012	
W-24-260-R2	315501037	Ground Water	11/12/2012	
W-25-150-R2	315501038	Ground Water	11/12/2012	
W-26-270-R2	315501018	Ground Water	11/9/2012	
W-37-325-R2	315501014	Ground Water	11/9/2012	
W-37-385-R2	315501015	Ground Water	11/9/2012	
TB-1109-12	160-899-14	Trip Blank	11/9/2012	

Table 2
Summary of Analytical Methods

Sylvania Corning FUSRAP
SDG: 160-899-1

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	13
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	13
Groundwater	SW846 6010B	Nickel, Metals	13
Groundwater	ASTM D5174	KPA, Total U, Liquid	43
Groundwater	SW846 3810M	Methane, Ethene, Ethane	1
Groundwater	Method 300.0	Anions	1
Groundwater	Method 310.1	Alkalinity	1
Groundwater	Method 350.1	Nitrogen, Ammonia	1
Groundwater	Method 353.1	Nitrogen, Nitrate-Nitrite	1
Groundwater	Method 376.1	Sulfide	1
Groundwater	Method 9060	Dissolved Organic Carbon	1
Groundwater	Method SM 3500 FE D	Iron, Ferrous and Ferric	1
Groundwater	Method SM 4500 CO2 D	Carbon Dioxide	1
Groundwater	Method VFA-IC	Volatile Fatty Acids	1
Groundwater	Local Method	Dehalococcoides	1
Groundwater	AM20GAX	Hydrogen	1
Rinsate Blank	SW846 8260B	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 6010B	Nickel	1
Rinsate Blank	ASTM D5174	KPA, Total U, Liquid	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-899-1

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-50I-R2	160-899-2	ACETONE	0.534 J	1.3	J	2.0	UJ	Qualify	1
		1,2-DIBROMO-3-CHLOROPROPANE	0.534 J	1.00	U	1.00	UJ	Qualify	2
MW-207-320-R2	160-899-3	ACETONE	0.534 J	2.10		2.00	UJ	Qualify	1
MW-506-GW-R2	160-899-4	ACETONE	0.534 J	0.99	J	2.00	UJ	Qualify	1
MW-507-GW-R2	160-899-5	ACETONE	0.534 J	1.70	J	2.00	UJ	Qualify	1
MW-23D-R2	160-899-7	ACETONE	0.534 J	2.50		2.00	UJ	Qualify	1
MW-25S-R2	160-899-8	ACETONE	0.534 J	0.83	J	2.00	UJ	Qualify	1
MW-25D-R2	160-899-9	ACETONE	0.534 J	1.3	J	2.0	UJ	Qualify	1
MW-26S-R2	160-899-11	ACETONE	0.534 J	0.97	J	2.0	UJ	Qualify	1
MW-26D-R2	160-899-12	ACETONE	0.534 J	0.99	J	2.00	UJ	Qualify	1
MW-23S-R2	160-899-13	ACETONE	0.534 J	0.63	J	2.00	UJ	Qualify	1
TB-110912	160-899-14	ACETONE	0.534 J	1.60	J	2.00	UJ	Qualify	1
MW-207-250-R2	160-899-6	ACETONE	0.465 J	0.97	J	2.00	UJ	Qualify	1
MW-25I-R2	160-899-10	ACETONE	0.465 J	0.64	J	2.00	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The relative percent difference (RPD) between the matrix spike and the matrix spike duplicate is outside of QC limits.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-899-1

Primary Sample ID: MW-25S-R2 Lab ID: 160-899-8
Duplicate Sample ID: MW-506-GWR2 Lab ID: 160-899-4

Method	Analyte	MW-25S-R2	MW-506-GWR2	RPD	Rating	Qualifier
ASTM D5174	U, Total	10.1	9.57	5.4	Good	None
SW6010B	NICKEL	19	19	0.0	Good	None
SW8260B	1,1,1-TRICHLOROETHANE	0.27	0.31	13.8	Good	None
SW8260B	1,1-DICHLOROETHENE	0.22	0.21	4.7	Good	None
SW8260B	CHLOROFORM	0.13	0.11	16.7	Good	None
SW8260B	TERT-BUTYL METHYL ETHER	0.20	0.18	10.5	Good	None

Primary Sample ID: MW-207-320-R2 Lab ID: 160-899-3
Duplicate Sample ID: MW-507-GW-R2 Lab ID: 160-899-5

Method	Analyte	MW-207-320-R2	MW-507-GW-R2	RPD	Rating	Qualifier
SW8260	CARBON DISULFIDE	0.27	0.18	40.0	Good	None
SW8260	TERT-BUTYL METHYL ETHER	0.19	0.2	5.4	Good	None

Primary Sample ID: MW-18S-R2 Lab ID: 315501020
Duplicate Sample ID: MW-508-GWR2 Lab ID: 315501013

Method	Analyte	MW-18S-R2	MW-508-GWR2	RPD	Rating	Qualifier
ASTM D5174	U, Total	11400	11100	2.7	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-916**
Date Completed: 1/23/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above BK

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-916**
Date Completed: 1/23/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes – Ferrous iron and carbon dioxide have method defined holding times of 15 minutes and these analyses are typically performed in the field; however, project samples were delivered to the laboratory for ferrous iron and carbon dioxide analysis. Therefore, results of ferrous iron and carbon dioxide were analyzed outside of holding time and have been given the "HF" qualifier to denote that analysis was performed outside of the method defined holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Acetone and 2-Hexanone were detected at low levels in MB 160-17161/2. Acetone was detected in low levels in MB 17602/2. Iron was detected in MB 160-17827/1-A.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Acetone in both 17161 and 17602 in multiple samples was qualified as non-detect “UJ”. Iron in sample 160-916-1 and -2 was qualified as non-detect "UJ".
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No – Multiple surrogates for PW-7-4-R2MS, PW-6-2-R2, PW-6-3-R2, PW-2-6-R2, PW-2-6-R2MSD, MW-21D-R2, and TB-111312, samples were not reanalyzed. Detections and non-detects are qualified as estimated “J” and “UJ”.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then “R” flag associated non-detect values.*	No – Recovery for sample PW-2-6-R2 for 1,2-Dibromoethane was greater than QC limits, sample result in parent sample is qualified as estimated “J”.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-916**
Date Completed: 1/23/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – several samples required dilution prior to analysis. Only one result was reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – 1,4-Dichlorobenzene was out of QC criteria and is qualified "J" as estimated. Nickel wasn't detected in either the field duplicate or parent sample no data qualified.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	NA
Any compounds present in method and field blanks? See Table 3	NA
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	NA
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	NA

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-916**
Date Completed: 1/23/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	NA
Do field duplicate results show good precision? See Table 4	NA
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	NA

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-916**
Date Completed: 1/23/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
Results qualified due to Method Blank contamination, surrogate recovery, MSD recovery, and field duplicate RPD.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard

ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-916-1

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-22S-R2	160-916-1	Groundwater	11/13/2012	
W-27-285-R2	160-916-2	Groundwater	11/13/2012	
MW-18I-R2	160-916-11	Groundwater	11/9/2012	
MW-18S-R2	160-916-10	Groundwater	11/9/2012	
MW-19D-R2	160-916-33	Groundwater	11/12/2012	
MW-19S-R2	160-916-32	Groundwater	11/12/2012	
MW-20I-R2	160-916-6	Groundwater	11/9/2012	
MW-21D-R2	160-916-31	Groundwater	11/12/2012	
MW-21I-R2	160-916-29	Groundwater	11/12/2012	
MW-21S-R2	160-916-28	Groundwater	11/12/2012	
MW-23I-R2	160-916-12	Groundwater	11/9/2012	
MW-508-GW-R2	160-916-3	Groundwater	11/9/2012	
MW-509-GW-R2	160-916-30	Groundwater	11/12/2012	
PW-2-6-R2	160-916-22	Groundwater	11/12/2012	MS/MSD
PW-2-7-R2	160-916-23	Groundwater	11/12/2012	
PW-2-7-R2-F	160-916-35	Groundwater	11/12/2012	
PW-3-7-R2	160-916-21	Groundwater	11/12/2012	
PW-6-1-R2	160-916-13	Groundwater	11/10/2012	
PW-6-2-R2	160-916-14	Groundwater	11/10/2012	
PW-6-3-R2	160-916-15	Groundwater	11/10/2012	
PW-6-4-R2	160-916-16	Groundwater	11/10/2012	
PW-6-5-R2	160-916-17	Groundwater	11/10/2012	
PW-6-6-R2	160-916-18	Groundwater	11/10/2012	
PW-6-7-R2	160-916-19	Groundwater	11/10/2012	
PW-7-4-R2	160-916-9	Groundwater	11/9/2012	MS/MSD
PW-7-5-R2	160-916-7	Groundwater	11/9/2012	
RB-02-R2	160-916-20	Rinsate Blank	11/12/2012	
S-1-325-R2	160-916-25	Groundwater	11/12/2012	
S-1-450-R2	160-916-24	Groundwater	11/12/2012	
TB-111312	160-916-34	Trip Blank	11/13/2012	
W-24-260-R2	160-916-26	Groundwater	11/12/2012	
W-25-150-R2	160-916-27	Groundwater	11/12/2012	
W-26-270-R2	160-916-8	Groundwater	11/9/2012	
W-37-325-R2	160-916-4	Groundwater	11/9/2012	
W-37-385-R2	160-916-5	Groundwater	11/9/2012	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-916-1

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	32
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	32
Groundwater	SW846 6010B	Nickel, Metals	32
Groundwater	SW846 3810M	Methane, Ethene, Ethane	2
Groundwater	Method 300.0	Anions	2
Groundwater	Method 310.1	Alkalinity	2
Groundwater	Method 350.1	Nitrogen, Ammonia	2
Groundwater	Method 353.1	Nitrogen, Nitrate-Nitrite	2
Groundwater	Method 376.1	Sulfide	2
Groundwater	Method 9060	Dissolved Organic Carbon	2
Groundwater	Method SM 3500 FE D	Iron, Ferrous and Ferric	2
Groundwater	Method SM 4500 CO2 D	Carbon Dioxide	2
Groundwater	Method VFA-IC	Volatile Fatty Acids	2
Groundwater	Local Method	Dehalococcoides	2
Groundwater	AM20GAX	Hydrogen	2
Rinsate Blank	SW846 8260B	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 6010B	Nickel	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-916-1

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.	QA Reported Conc.	QA Decision	Footnote
MW-22S-R2	160-916-1	IRON	35.5 J	28 U	28 UJ	Qualify	1
W-27-285-R2	160-916-2	IRON	35.5 J	140	140 UJ	Qualify	1
MW-508-GW-R2	160-916-3	ACETONE	1.2 J	0.97 JB	2.0 UJ	Qualify	1
W-37-325-R2	160-916-4	ACETONE	1.2 J	1.40 JB	2.0 UJ	Qualify	1
W-37-385-R2	160-916-5	ACETONE	1.2 J	0.97 JB	2.0 UJ	Qualify	1
MW-20I-R2	160-916-6	ACETONE	1.2 J	0.73 JB	2.0 UJ	Qualify	1
PW-7-5-R2	160-916-7	ACETONE	1.2 J	1.20 JB	2.0 UJ	Qualify	1
W-26-270-R2	160-916-8	ACETONE	1.2 J	1.20 JB	2.0 UJ	Qualify	1
MW-18S-R2	160-916-10	ACETONE	1.2 J	1.4 JB	2.0 UJ	Qualify	1
MW-23I-R2	160-916-12	ACETONE	1.2 J	4.1 B	2.0 UJ	Qualify	1
PW-6-3-R2	160-916-15	ACETONE	1.2 J	1.9 JB	2.0 UJ	Qualify	1
PW-6-4-R2	160-916-16	ACETONE	1.2 J	1.6 JB	2.0 UJ	Qualify	1
PW-6-5-R2	160-916-17	ACETONE	1.2 J	2.0 B	2.0 UJ	Qualify	1
PW-6-6-R2	160-916-18	ACETONE	1.2 J	1.2 JB	2.0 UJ	Qualify	1
RB-02-R2	160-916-20	ACETONE	1.2 J	11.0 B	2.0 UJ	Qualify	1
PW-3-7-R2	160-916-21	ACETONE	1.2 J	1.2 JB	2.0 UJ	Qualify	1
MW-18I-R2	160-916-11	ACETONE	0.580 J	1.0 J	2.0 UJ	Qualify	1
PW-6-2-R2	160-916-14	ACETONE	0.580 J	1.6 J	2.0 UJ	Qualify	1
PW-6-7-R2	160-916-19	ACETONE	0.580 J	1.1 J	2.0 UJ	Qualify	1
PW-2-6-R2	160-916-22	ACETONE	0.580 J	1.4 J	2.0 UJ	Qualify	1
		1,2-DIBROMOETHANE	0.13 U	1.00 U	1.0 UJ	Qualify	2
PW-2-7-R2	160-916-23	ACETONE	0.580 J	1.2 J	2.0 UJ	Qualify	1
S-1-450-R2	160-916-24	ACETONE	0.580 J	1.2 J	2.0 UJ	Qualify	1
S-1-325-R2	160-916-25	ACETONE	0.580 J	1.0 J	2.0 UJ	Qualify	1
W-24-260-R2	160-916-26	ACETONE	0.580 J	1.3 J	2.0 UJ	Qualify	1
W-25-150-R2	160-916-27	ACETONE	0.580 J	2.2	2.0 UJ	Qualify	1
MW-21S-R2	160-916-28	ACETONE	0.580 J	0.93 J	2.0 UJ	Qualify	1
MW-21I-R2	160-916-29	ACETONE	0.580 J	0.82 J	2.0 UJ	Qualify	1
MW-509-GW-R2	160-916-30	ACETONE	0.580 J	1.30 J	2.0 UJ	Qualify	1
MW-21D-R2	160-916-31	ACETONE	0.580 J	1.00 J	2.0 UJ	Qualify	1
MW-19S-R2	160-916-32	ACETONE	0.580 J	0.88 J	2.0 UJ	Qualify	1
MW-19D-R2	160-916-33	ACETONE	0.580 J	0.78 J	2.0 UJ	Qualify	1
TB-111312	160-916-34	ACETONE	0.580 J	1.20 J	2.0 UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The recovery of the LCS, LCSD, MS, or MSD is outside of QC limits.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-916-1

Primary Sample ID: MW-18S-R2 Lab ID: 160-916-10
Duplicate Sample ID: MW-508-GW-R2 Lab ID: 160-916-3

Method	Analyte	MW-18S-R2	MW-508-GW-R2	RPD	Rating	Qualifier
SW6010	NICKEL	15.0	14	6.9	Good	None
SW8260	CHLOROFORM	1.8	1.9	5.4	Good	None
SW8260	TETRACHLOROETHENE (PCE)	1.6	1.5	6.5	Good	None

Primary Sample ID: W-25-150-R2 Lab ID: 160-916-27
Duplicate Sample ID: MW-509-GW-R2 Lab ID: 160-916-30

Method	Analyte	W-25-150-R2	MW-509-GW-R2	RPD	Rating	Qualifier
SW8260	1,2-DICHLOROBENZENE	1.2	1.3	8.0	Good	None
SW8260	1,4-DICHLOROBENZENE	1.1	0.12	160.7	Poor	J
SW8260	CIS-1,2-DICHLOROETHENE	0.48	0.46	4.3	Good	None
SW8260	TERT-BUTYL METHYL ETHER	0.21	0.16	27.0	Good	None
SW8260	TETRACHLOROETHENE (PCE)	1.3	1.1	16.7	Good	None
SW8260	TRICHLOROETHENE (TCE)	2.9	2.7	7.1	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-933**
Date Completed: 01/28/2012	**Data Validation Chemist: J. Nelson**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	N/A
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-933**
Date Completed: 01/28/2012	**Data Validation Chemist: J. Nelson**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes – Ferrous iron and carbon dioxide have method defined holding times of 15 minutes and these analyses are typically performed in the field; however, project samples were delivered to the laboratory for ferrous iron and carbon dioxide analysis. Therefore, results of ferrous iron and carbon dioxide were analyzed outside of holding time. Results of ferrous iron and carbon dioxide have been given the "HF" qualifier to denote that analysis was performed outside of the method defined holding time. Hydrogen for samples MW-206-302-R2, MW-22S-R2, W-27-285-R2, MW-207-170-R2, W-18-150-R2, and W-10-120-R2 were analyzed outside of the 14-day, but within 2x, the method recommended holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Alkalinity was detected in method blank 160-18623/1.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified non-detect for alkalinity.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	N/A
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	N/A

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-933**
Date Completed: 01/28/2012	**Data Validation Chemist: J. Nelson**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – The MS/MSD prepared with 160-933-1 was outside of QC limits for nitrate/nitrite due to high concentrations in the native sample relative to the spike amount. No qualification has been performed. The MS/MSD prepared with 160-933-7 was outside of QC limits for propionic, pyruvic, and lactic acid. Results for 160-933-7 were qualified as estimated.
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – several samples were diluted due to high concentrations of target analytes, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	N/A

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	N/A
Any compounds present in method and field blanks? See Table 3	N/A

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-933**
Date Completed: 01/28/2012	**Data Validation Chemist: J. Nelson**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	N/A
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	N/A
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	N/A
Do field duplicate results show good precision? See Table 4	N/A
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	N/A

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-933**
Date Completed: 01/28/2012	**Data Validation Chemist: J. Nelson**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-933**
Date Completed: 01/28/2012	**Data Validation Chemist: J. Nelson**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
Results qualified due to Method Blank contamination.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	LAB SDG ID: 160-933
Date Completed: 01/28/2012	Data Validation Chemist: J. Nelson
Date Performed: 1/30/2013	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-933-1

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-207-170-R2	160-933-1	Groundwater	11/14/2012	
W-18-150-R2	160-933-2	Groundwater	11/14/2012	
W-10-120-R2	160-933-3	Groundwater	11/14/2012	
MW-14S-R2	160-933-4	Groundwater	11/15/2012	
MW-210-380-R2	160-933-5	Groundwater	11/15/2012	
MW-P110-440-R2	160-933-6	Groundwater	11/15/2012	
MW-12-R2	160-933-7	Groundwater	11/15/2012	
MW-53S-R2	160-933-8	Groundwater	11/15/2012	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-933-1

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 6010B	Metals	8
Groundwater	SW846 3810M	Methane, Ethene, Ethane	8
Groundwater	Method 300.0	Anions	8
Groundwater	Method 310.1	Alkalinity	8
Groundwater	Method 350.1	Nitrogen, Ammonia	8
Groundwater	Method 353.1	Nitrogen, Nitrate-Nitrite	8
Groundwater	Method 376.1	Sulfide	8
Groundwater	Method 9060	Dissolved Organic Carbon	8
Groundwater	Method SM 3500 FE D	Iron, Ferrous and Ferric	8
Groundwater	Method SM 4500 CO2 D	Carbon Dioxide	8
Groundwater	Method VFA-IC	Volatile Fatty Acids	8
Groundwater	Local Method	Dehalococcoides	8
Groundwater	AM20GAX	Hydrogen	8

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-933-1

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-207-170-R2	160-933-1	Alkalinity	2.0	6.0		6.0	UJ	Qualify	1
W-10-120-R2	160-933-3	Alkalinity	2.0	8.0	J	8.0	UJ	Qualify	1
MW-14S-R2	160-933-4	Alkalinity	2.0	10		10	UJ	Qualify	1
MW-210-380-R2	160-933-5	Alkalinity	2.0	6.0		6.0	UJ	Qualify	1
MW-P110-440-R2	160-933-6	Alkalinity	2.0	6.0		6.0	UJ	Qualify	1
MW-12-R2	160-933-7	Lactic acid	<0.14	0.14	U	0.14	UJ	Qualify	2
		Propionic acid	<0.17	0.17	U	0.17	UJ	Qualify	2
		Pyruvic acid	<0.080	0.080	U	0.080	UJ	Qualify	2
MW-53S-R2	160-933-8	Alkalinity	2.0	8.0		8.0	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The relative percent recovery for the matrix spike is outside of QC limits.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-945**
Date Completed: 1/25/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above BK

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-945**
Date Completed: 1/25/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of compounds present in Method, Trip, and Rinsate Blanks.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples across multiple batches were qualified for method blank contamination. Rinsate blanks qualified multiple analytes in multiple samples.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – MS/MSD recovery of trans-1,3-Dichloropropene in MW-207-170-R2 pair was high, compound is non-detect and no qualification of the data is necessary.
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No – LCS/LCSD RPD recovery of 1,2,3-Trichlorobenzene was high for batch 17878, this analyte qualified "UJ" since no positive detections of this analyte were found in the batch.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-945**
Date Completed: 1/25/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	Yes – All VOC compounds showed good agreement between field duplicate and parent sample RPDs. Nickel was not detected in four of the field duplicate or parent samples and showed good agreement in the pair that it was detected in.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blanks included with this SDG.)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-945**
Date Completed: 1/25/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 4	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-945**
Date Completed: 1/25/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/30/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
VOC results qualified based on method and rinsate blank contamination, and LCS/LCSD RPD.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate

QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-945-1

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-12-R2	160-945-55	Groundwater	11/15/2012	
MW-14DD-R2	160-945-53	Groundwater	11/15/2012	
MW-14D-R2	160-945-52	Groundwater	11/15/2012	
MW-14S-R2	160-945-51	Groundwater	11/15/2012	
MW-201-220-R2	160-945-49	Groundwater	11/15/2012	
MW-202-220-R2	160-945-37	Groundwater	11/14/2012	
MW-202-380-R2	160-945-36	Groundwater	11/14/2012	
MW-202-495-R2	160-945-38	Groundwater	11/14/2012	
MW-207-170-R2	160-945-22	Groundwater	11/14/2012	MS/MSD
MW-210-280-R2	160-945-46	Groundwater	11/15/2012	
MW-210-380-R2	160-945-45	Groundwater	11/15/2012	
MW-210-470-R2	160-945-48	Groundwater	11/15/2012	
MW-27DD-R2	160-945-27	Groundwater	11/14/2012	
MW-27D-R2	160-945-28	Groundwater	11/14/2012	
MW-27S-R2	160-945-23	Groundwater	11/14/2012	
MW-28D-R2	160-945-8	Groundwater	11/13/2012	
MW-28I-R2	160-945-25	Groundwater	11/14/2012	
MW-28S-R2	160-945-2	Groundwater	11/13/2012	
MW-29S-R2	160-945-29	Groundwater	11/14/2012	
MW-30S-R2	160-945-50	Groundwater	11/15/2012	
MW-34D-R2	160-945-42	Groundwater	11/15/2012	
MW-34S-R2	160-945-41	Groundwater	11/15/2012	MS/MSD
MW-3-R2	160-945-1	Groundwater	11/13/2012	MS/MSD
MW-42I-R2	160-945-7	Groundwater	11/13/2012	
MW-49S-R2	160-945-26	Groundwater	11/14/2012	
MW-4-R2	160-945-21	Groundwater	11/14/2012	
MW-510-GW-R2	160-945-14	Groundwater	11/13/2012	
MW-511-GW-R2	160-945-24	Groundwater	11/14/2012	
MW-512-GW-R2	160-945-40	Groundwater	11/14/2012	MS/MSD
MW-513-GW-R2	160-945-54	Groundwater	11/15/2012	
MW-514-GW-R2	160-945-47	Groundwater	11/15/2012	
MW-52D-R2	160-945-44	Groundwater	11/15/2012	
MW-53S-R2	160-945-43	Groundwater	11/15/2012	
MW-8-R2	160-945-18	Groundwater	11/13/2012	
MW-P110-355-R2	160-945-59	Groundwater	11/15/2012	
MW-P110-440-R2	160-945-57	Groundwater	11/15/2012	
MW-P114-170-R2	160-945-56	Groundwater	11/15/2012	
MW-P114-290-R2	160-945-58	Groundwater	11/15/2012	
PW-2-1-R2	160-945-12	Groundwater	11/13/2012	
PW-2-2-R2	160-945-10	Groundwater	11/13/2012	
PW-2-3-R2	160-945-17	Groundwater	11/13/2012	
PW-2-4-R2	160-945-16	Groundwater	11/13/2012	
PW-2-5-R2	160-945-9	Groundwater	11/13/2012	MS/MSD
PW-3-1-R2	160-945-11	Groundwater	11/13/2012	
PW-3-2-R2	160-945-13	Groundwater	11/13/2012	
PW-3-3-R2	160-945-32	Groundwater	11/14/2012	
PW-3-4-R2	160-945-35	Groundwater	11/14/2012	
PW-3-5-R2	160-945-33	Groundwater	11/14/2012	
PW-3-6-R2	160-945-34	Groundwater	11/14/2012	
RB-03-R2	160-945-15	Rinsate Blank	11/14/2012	
RB-04-R2	160-945-39	Rinsate Blank	11/14/2012	
RB-05-R2	160-945-60	Rinsate Blank	11/16/2012	
TB-111612	160-945-61	Trip Blank	11/16/2012	
W-10-120-R2	160-945-31	Groundwater	11/14/2012	
W-18-150-R2	160-945-30	Groundwater	11/14/2012	
W-25-188-R2	160-945-20	Groundwater	11/14/2012	
W-27-240-R2	160-945-6	Groundwater	11/13/2012	
W-27-285-R2	160-945-19	Groundwater	11/13/2012	
W-30-285-R2	160-945-5	Groundwater	11/13/2012	
W-36-390-R2	160-945-3	Groundwater	11/13/2012	
W-36-448-R2	160-945-4	Groundwater	11/13/2012	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-945-1

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	57
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	57
Groundwater	SW846 6010B	Nickel	57
Groundwater	ASTM D5174	KPA, Total U, Liquid	57
Rinsate Blank	SW846 8260B	Volatile Organics by GC/MS	3
Rinsate Blank	SW846 8260B SIM	Volatile Organics by GC/MS	3
Rinsate Blank	SW846 6010B	Nickel	3
Rinsate Blank	ASTM D5174	KPA, Total U, Liquid	3
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-945-1

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-3-R2	160-945-1	ACETONE	0.751 J	1.2	J	2.0	UJ	Qualify	1
MW-28S-R2	160-945-2	ACETONE	0.751 J	1.40	J	2.00	UJ	Qualify	1
W-36-390-R2	160-945-3	ACETONE	0.751 J	5.20	J	10.00	UJ	Qualify	1
W-36-448-R2	160-945-4	ACETONE	0.751 J	0.60	J	2.00	UJ	Qualify	1
		TOLUENE	1.700	0.076	J	1.00	UJ	Qualify	3
W-30-285-R2	160-945-5	ACETONE	0.751 J	2.50		2.00	UJ	Qualify	1
		METHYLENE CHLORIDE	0.46 J	0.42	J	1.00	UJ	Qualify	3
		TRICHLOROETHENE	0.48 J	0.67	J	1.00	UJ	Qualify	3
		TOLUENE	1.7000	0.079	J	1.00	UJ	Qualify	3
W-27-240-R2	160-945-6	ACETONE	0.751 J	1.30	J	2.00	UJ	Qualify	1
		METHYLENE CHLORIDE	0.46 J	0.29	J	1.00	UJ	Qualify	3
MW-42I-R2	160-945-7	ACETONE	0.751 J	0.75	J	2.00	UJ	Qualify	1
MW-28D-R2	160-945-8	ACETONE	0.751 J	0.97	J	2.00	UJ	Qualify	1
PW-2-5-R2	160-945-9	ACETONE	0.751 J	1.00	J	2.00	UJ	Qualify	1
PW-2-2-R2	160-945-10	ACETONE	0.751 J	1.00	J	2.00	UJ	Qualify	1
PW-3-1-R2	160-945-11	ACETONE	0.751 J	1.10	J	2.00	UJ	Qualify	1
PW-2-1-R2	160-945-12	ACETONE	0.751 J	0.96	J	2.00	UJ	Qualify	1
PW-3-2-R2	160-945-13	ACETONE	0.751 J	1.10	J	2.00	UJ	Qualify	1
MW-510-GW-R2	160-945-14	ACETONE	0.751 J	1.10	J	2.00	UJ	Qualify	1
MW-207-170-R2	160-945-22	ACETONE	0.751 J	2.80	J	5.00	UJ	Qualify	1
PW-2-4-R2	160-945-16	1,2,3-TRICHLOROBENZENE	0.126 J	0.12	J	2.00	UJ	Qualify	1
MW-210-280-R2	160-945-46	1,2,4-TRICHLOROBENZENE	0.14 J	0.32	J	5.00	UJ	Qualify	1
MW-514-GW-R2	160-945-47	ACETONE	0.960 J	0.91	J	2.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-210-470-R2	160-945-48	ACETONE	0.960 J	5.70		2.00	U	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-201-220-R2	160-945-49	ACETONE	0.960 J	0.77	J	2.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-30S-R2	160-945-50	ACETONE	0.960 J	0.71	J	2.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-14S-R2	160-945-51	1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-14D-R2	160-945-52	ACETONE	0.960 J	0.67	J	2.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-14DD-R2	160-945-53	ACETONE	0.960 J	0.48	J	2.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-513-GW-R2	160-945-54	1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-12-R2	160-945-55	ACETONE	0.960 J	2.00	J	5.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	5.00	U	5.00	UJ	Qualify	2
MW-P114-170-R2	160-945-56	ACETONE	0.960 J	2.00	J	5.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	5.00	U	5.00	UJ	Qualify	2
MW-P110-440-R2	160-945-57	ACETONE	0.960 J	6.30	J	10.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	10.00	U	10.00	UJ	Qualify	2
		1,4-DIOXANE	2.3000	1.50	J	5.00	UJ	Qualify	3
MW-P114-290-R2	160-945-58	ACETONE	0.960 J	0.96	J	2.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
MW-P110-355-R2	160-945-59	ACETONE	0.960 J	2.30	J	5.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	5.00	U	5.00	UJ	Qualify	2
RB-05-R2	160-945-60	1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2
TB-111612	160-945-61	ACETONE	0.960 J	0.80	J	2.00	UJ	Qualify	1
		1,2,3-TRICHLOROBENZENE	0.087 U	2.00	U	2.00	UJ	Qualify	2

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The RPD between the laboratory control sample and the laboratory control sample duplicate is outside of QC limits.
3 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-945-1

Primary Sample ID: MW-42I-R2 Lab ID: 160945-7
Duplicate Sample ID: MW-510-GW-R2 Lab ID: 160-945-14

Method	Analyte	MW-42I-R2	MW-510-GW-R2	RPD	Rating	Qualifier
SW8260	CHLOROFORM	9.5	8.9	6.5	Good	None
SW8260	TERT-BUTYL METHYL ETHER	0.1	0.1	8.0	Good	None
ASTM D5174	U, TOTAL	174.0	186.0	6.7	Good	None

Primary Sample ID: MW-27S-R2 Lab ID: 160-945-23
Duplicate Sample ID: MW-511-GW-R2 Lab ID: 160-945-24

Method	Analyte	MW-27S-R2	MW-511-GW-R2	RPD	Rating	Qualifier
SW6010	NICKEL	55.0	51	7.5	Good	None
SW8260	TETRACHLOROETHENE (PCE)	0.9	0.9	0.0	Good	None
ASTM D5174	U, TOTAL	1.91	2.08	8.5	Good	None

Primary Sample ID: MW-202-380-R2 Lab ID: 160-945-45
Duplicate Sample ID: MW-512-GW-R2 Lab ID: 160-945-40

Method	Analyte	MW-202-380-R2	MW-512-GW-R2	RPD	Rating	Qualifier
SW8260	TRICHLOROETHENE (TCE)	1300.0	1200	8.0	Good	None
SW8260	1,1,1-TRICHLOROETHANE	25.0	25.0	0.0	Good	None
SW8260	1,1-DICHLOROETHANE	1.6	1.5	6.5	Good	None
SW8260	1,1-DICHLOROETHENE	34	34	0.0	Good	None
SW8260	1,4-DIOXANE (P-DIOXANE)	47	61	25.9	Good	None
SW8260	CIS-1,2-DICHLOROETHENE	12	12	0.0	Good	None

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-945-1

Primary Sample ID: MW-14DD-R2 Lab ID: 160-945-53
Duplicate Sample ID: MW-513-GW-R2 Lab ID: 160-945-54

Method	Analyte	MW-14DD-R2	MW-513-GW-R2	RPD	Rating	Qualifier
SW8260	1,1,1-TRICHLOROETHANE	0.3	0.28	6.9	Good	None
SW8260	1,1-DICHLOROETHANE	0.3	0.4	11.8	Good	None
SW8260	1,1-DICHLOROETHENE	0.1	0.1	0.0	Good	None
SW8260	CHLOROFORM	0.14	0	6.9	Good	None

Primary Sample ID: MW-210-280-R2 Lab ID: 160-945-46
Duplicate Sample ID: MW-514-GW-R2 Lab ID: 160-945-47

Method	Analyte	MW-210-280-R2	MW-514-GW-R2	RPD	Rating	Qualifier
SW8260	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.15	0.14	6.9	Good	None
SW8260	1,1-DICHLOROETHANE	0.14	0.13	7.4	Good	None
SW8260	1,1-DICHLOROETHENE	0.25	0.21	17.4	Good	None
SW8260	1,2-DICHLOROBENZENE	2.20	2.30	4.4	Good	None
SW8260	1,4-DICHLOROBENZENE	0.22	0.23	4.4	Good	None
SW8260	CHLOROFORM	0.33	0.36	8.7	Good	None
SW8260	CIS-1,2-DICHLOROETHENE	14	13	7.4	Good	None
SW8260	TETRACHLOROETHENE (PCE)	170	190	11.1	Good	None
SW8260	TRANS-1,2-DICHLOROETHENE	0.12	0.10	18.2	Good	None
SW8260	TRICHLOROETHENE (TCE)	22	20	9.5	Good	None
SW8260	VINYL CHLORIDE	0.54	0.42	25.0	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-950**
Date Completed: 1/31/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/31/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above BK

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-950**
Date Completed: 1/31/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/31/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low level detections were found in multiple method blanks. RB-04-R2 contains detections.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Samples from batch 18029 had several samples qualified as non-detect "U" and "UJ" for Acetone due to method blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No – MW-33D-R2 1,2-Dichloroethane-d4 was recovered high, positive detections in this sample are qualified "J" as estimated.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	Yes
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-950**
Date Completed: 1/31/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/31/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Several samples were reanalyzed, only one result is reportable.
Do field duplicate results show good precision for all compounds? See Table 4	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blanks included with this SDG.)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-950**
Date Completed: 1/31/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/31/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 4	Yes.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Several samples in analytical batches failed R2 and or lifetime so they were reanalyzed with a post-spike to test for quenching. No evidence of quenching was observed, initial results reported.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Fall 2012 Sampling
Laboratory: TestAmerica	**LAB SDG ID: 160-950**
Date Completed: 1/31/2012	**Data Validation Chemist: B. Kroon**
Date Performed: 1/31/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
Results are qualified due to method and rinsate blank contamination, and surrogate recovery.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-950-1

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-10-R2	160-950-2	Groundwater	11/16/2012	
MW-11-R2	160-950-3	Groundwater	11/16/2012	MS/MSD
MW-13D-R2	160-950-17	Groundwater	11/17/2012	
MW-13S-R2	160-950-13	Groundwater	11/16/2012	
MW-15DD-R2	160-950-20	Groundwater	11/17/2012	
MW-15D-R2	160-950-19	Groundwater	11/17/2012	
MW-15S-R2	160-950-18	Groundwater	11/17/2012	
MW-17S-R2	160-950-5	Groundwater	11/16/2012	
MW-203-160-R2	160-950-9	Groundwater	11/16/2012	
MW-203-360-R2	160-950-12	Groundwater	11/16/2012	
MW-203-440-R2	160-950-10	Groundwater	11/16/2012	
MW-204-320-R2	160-950-8	Groundwater	11/16/2012	
MW-204-470-R2	160-950-11	Groundwater	11/16/2012	
MW-30D-R2	160-950-21	Groundwater	11/17/2012	MS/MSD
MW-30I-R2	160-950-22	Groundwater	11/17/2012	
MW-31D-R2	160-950-23	Groundwater	11/17/2012	
MW-31I-R2	160-950-24	Groundwater	11/17/2012	
MW-32D-R2	160-950-25	Groundwater	11/17/2012	
MW-33D-R2	160-950-4	Groundwater	11/16/2012	
MW-33S-R2	160-950-15	Groundwater	11/16/2012	
MW-39S-R2	160-950-14	Groundwater	11/16/2012	
MW-515-GW-R2	160-950-6	Groundwater	11/16/2012	
MW-516-GW-R2	160-950-7	Groundwater	11/16/2012	
MW-517-GW-R2	160-950-27	Groundwater	11/17/2012	
MW-51I-R2	160-950-26	Groundwater	11/17/2012	
MW-55S-R2	160-950-16	Groundwater	11/16/2012	
MW-9-R2	160-950-1	Groundwater	11/16/2012	
TB-111712	160-950-28	Trip Blank	11/17/2012	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-950-1

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	28
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	28
Groundwater	SW846 6010B	Nickel	27
Groundwater	ASTM D5174	KPA, Total U, Liquid	27

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-950-1

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-10-R2	160-950-2	ACETONE	0.581 J	0.76	J	2.0	UJ	Qualify	1
MW-11-R2	160-950-3	ACETONE	0.581 J	2.90	J	5.0	UJ	Qualify	1
MW-17S-R2	160-950-5	ACETONE	0.581 J	0.87	J	2.0	UJ	Qualify	1
MW-203-160-R2	160-950-9	ACETONE	0.581 J	1.00	J	2.0	UJ	Qualify	1
MW-203-360-R2	160-950-12	ACETONE	0.581 J	2.30		2.0	U	Qualify	1
MW-203-440-R2	160-950-10	ACETONE	0.581 J	0.49	J	2.0	UJ	Qualify	1
MW-204-320-R2	160-950-8	ACETONE	0.581 J	5.5		2.0	U	Qualify	1
MW-204-470-R2	160-950-11	ACETONE	0.581 J	3.3		2.0	U	Qualify	1
MW-33D-R2	160-950-4	ACETONE	0.581 J	0.81	J	2.0	UJ	Qualify	1
MW-516-GW-R2	160-950-7	ACETONE	0.581 J	2.80		2.0	U	Qualify	1
MW-55S-R2	160-950-16	ACETONE	0.581 J	0.53	J	2.0	UJ	Qualify	1
MW-9-R2	160-950-1	ACETONE	0.581 J	0.91	J	5.0	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-950-1

Primary Sample ID: MW-33S-R2 Lab ID: 160-950-15
Duplicate Sample ID: MW-515-GW-R2 Lab ID: 160-950-6

Method	Analyte	MW-33S-R2	MW-515-GW-R2	RPD	Rating	Qualifier
SW6010	NICKEL	14.0	13	7.4	Good	None
SW8260	TETRACHLOROETHENE (PCE)	920.0	950.0	3.2	Good	None
ASTM D5174	U, TOTAL	109.0	111.0	1.8	Good	None

Primary Sample ID: MW-230-360-R2 Lab ID: 160-950-12
Duplicate Sample ID: MW-516-GW-R2 Lab ID: 160-950-7

Method	Analyte	MW-230-360-R2	MW-516-GW-R2	RPD	Rating	Qualifier
SW8260	1,1,1-TRICHLOROETHANE	1.3	1.2	8.0	Good	None
SW8260	1,1-DICHLOROETHANE	0.6	0.5	3.7	Good	None
SW8260	1,1-DICHLOROETHENE	1.0	0.8	20.2	Good	None
SW8260	BROMOMETHANE	0.33	0.25	27.6	Good	None
SW8260	CARBON DISULFIDE	0.089	0.078	13.2	Good	None
SW8260	CARBON TETRACHLORIDE	0.17	0.2	16.2	Good	None
SW8260	CHLOROFORM	0.20	0.20	0.0	Good	None
SW8260	CIS-1,2-DICHLOROETHENE	9.8	10	2.0	Good	None
SW8260	TETRACHLOROETHENE (PCE)	5.4	5.4	0.0	Good	None
SW8260	TRANS-1,2-DICHLOROETHENE	0.11	0.094	15.7	Good	None
SW8260	TRICHLOROETHENE (TCE)	160.0	160.0	0.0	Good	None

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-950-1

Primary Sample ID: MW-30I-R2 Lab ID: 160-950-22
Duplicate Sample ID: MW-517-GW-R2 Lab ID: 160-950-27

Method	Analyte	MW-30I-R2	MW-517-GW-R2	RPD	Rating	Qualifier
SW8260	1,1,1-TRICHLOROETHANE	12.0	12	0.0	Good	None
SW8260	1,1,2-TRICHLOROETHANE	0.31	0.30	3.3	Good	None
SW8260	1,1-DICHLOROETHANE	0.55	0.53	3.7	Good	None
SW8260	1,1-DICHLOROETHENE	10	8.8	12.8	Good	None
SW8260	CIS-1,2-DICHLOROETHENE	0.95	0.95	0.0	Good	None
SW8260	TETRACHLOROETHENE (PCE)	0.32	0.25	24.6	Good	None
SW8260	TRICHLOROETHENE (TCE)	2.7	2.60	3.8	Good	None

B Analytical Data

Provided on attached CD.

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C Sample Collection Documentation

Daily Activity Summary Reports provided on attached CD.

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FINAL
Quality Control Summary Report
Spring 2013 and Summer 2013
Sampling Events
for the Sylvania Corning FUSRAP Site
Hicksville, County of Nassau,
New York

February 2014

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
Kansas City District
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Kansas City, Missouri 64106

Prepared by:

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Certificate of Compliance

On behalf of The Louis Berger Group, Inc. (LBG), the undersigned certify that the document listed below was developed in conformance with LBG's Quality Control Plan, and further, that the work was performed in accordance with acceptable standards of engineering and scientific practice.

Quality Control Summary Report
Spring 2013 and Summer 2013 Sampling Events
for the Sylvania Corning FUSRAP Site
Hicksville, New York

Dated: February 2014

Contract Numbers: W912DQ-11-D-3009, Task Order No. 0012

Prepared for:

U.S. Army Corps of Engineers
Kansas City District
601 East 12th Street
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List of Abbreviations and Acronyms

ADR	Automated Data Review
COC	chain-of-custody
DQOs	data quality objectives
DUSR	Data Usability Summary Report
E & E	Ecology and Environment, Inc.
EDD	electronic data deliverable
EDMS	Environmental Data Management System
EPA	Environmental Protection Agency
ESN	ESN Rocky Mountain
FUSRAP	Formerly Utilized Sites Remedial Action Program
LBG	The Louis Berger Group, Inc.
g/cc	grams per cubic centimeter
IDL	instrument detection limit
IDW	investigation derived waste
LCS	laboratory control sample
MDC	Minimum Detectable Concentration
MDL	Method Detection Limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
µg/kg	micrograms per kilogram
µg/L	micrograms per liter

List of Abbreviations and Acronyms (cont.)

pCi/g	picocuries per gram
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
QC	quality control
QCP	Quality Control Plan
QCSR	Quality Control Summary Report
RER	reported error ratio
RI	Remedial Investigation
RPD	relative percent difference
SDG	sample delivery group
USACE	United States Army Corps of Engineers
WP	Work Plan

Introduction

The Louis Berger Group, Inc. (LBG) and their subcontractor, Ecology and Environment, Inc. (E & E), have been contracted by the United States Army Corps of Engineers (USACE), under Contract Numbers W912DQ-11-D-3009, Task Order No. 0012, to perform an Off-Site Groundwater Characterization and Feasibility Study (FS) at the Sylvania Corning Formerly Utilized Sites Remedial Action Program (FUSRAP) Site (Sylvania Site or the Site) located in Hicksville, Nassau County, New York.

The study objectives are to:

- Characterize the nature and extent of off-site groundwater contamination originating from the Sylvania Site.
- Determine if groundwater contaminants from the Sylvania Site are reaching the municipal water supply wells at the Hicksville Water District Plant 5 and Bowling Green facilities.
- Collect sufficient data to select remedial alternatives and prepare a FS for remediation of the Site.

This Quality Control Summary Report (QCSR) presents the results of the sampling and analytical program and provides an opportunity to review the completeness and quality of the data collected.

The purpose of this QCSR is to:

- Summarize sample collection, handling, and analytical procedures for the sampling investigation conducted (see Section 1);
- Identify any deviations from the proposed sampling and analysis procedures (see Sections 1 and 2);
- Present the analytical results for the field samples collected (see Section 3);
- Report on any inspections or audits performed and any findings that that may impact the project data (see Section 4); and

- Discuss the results of the data quality evaluation associated with the sampling events (see Sections 2 and 5).

Evaluation of any contaminants detected will be provided in a separate Data Summary Report and the RI Report. The report also will contain maps of sample locations and summary tables of positive results.

Supporting information is included in appendices to the QCSR. The appendices are located on the attached DVD and include:

- Appendix A –Data Usability Summary Report (DUSR) – The DUSR prepared for each sample delivery group (SDG) in PDF format.

- Appendix B – Analytical Data – All laboratory reports in PDF format which include case narratives and quality control (QC) sample results. The compact disc also includes a database of the final validated data in Electronic Data Management System (EDMS) format.

- Appendix C – Sample Collection Documentation – Daily activity summary reports (on CD), and field adjustment forms which document deviations from the planned activities. This appendix also will include any audits performed.

1 Data Collection

Environmental samples were collected as part of the field characterization in accordance with the final Work Plan, Health and Safety Plan, and Quality Assurance Project Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site (USACE May 2011). Methodologies used for field notebooks; sample labeling, packaging, and custody; equipment decontamination; and containerization of investigation-derived waste (IDW) were performed in accordance with the WP, QAPP, and documents referenced therein. All field QC activities were carried out in accordance with the final Quality Control Plan (QCP) (USACE May 2011). The contents of this QCSR summarized the Spring 2013 area wide sampling event that included collection of samples from 176 monitoring wells and the Summer 2013 area wide sampling event that included collection of samples from 150 monitoring wells.

Quality assurance/quality control (QA/QC) samples were collected on a site-wide basis according to the criteria established in the QAPP. The field QA/QC sample requirements are as follows:

- Field QC duplicates collected at a frequency of 10% of the number of field samples collected;
- Rinsates collected at a frequency of 10% of the number of field samples collected if non-dedicated equipment was used;
- Matrix spike/matrix spike duplicate (MS/MSDs) for laboratory QC collected at a frequency of 5% of the sample collected; and
- Trip blanks sent one per shipment for each cooler that included water samples for volatile analysis. Trip blanks were analyzed for all volatile methods designated for the samples.

Any minor variances in field methodologies that occurred during the characterization are noted on the daily activity summary reports or in the field logbook. Deviations from the WP were noted on field adjustment forms. Copies of these reports and forms are provided in Appendix C. The following sections summarize the deviations and fieldwork activities.

1.1 Off Site Groundwater Characterization Data Collection

This section of the QCSR summarizes the results of two area wide monitoring well sampling events for the Off Site Groundwater Characterization – the Spring 2013 and Summer 2013 events. This consisted of sampling of 91 USACE monitoring wells, 11 wells installed by GTEOSI, 39 wells installed as part of the General Instruments inactive hazardous waste site investigation, and 35 samples collected from 5 multiport wells installed as part of the Anchor Chemical inactive hazardous waste site investigation during the Spring 2013 event (176 total samples). The Summer 2013 event consisted of the same well set with the addition of one GI well not previously sample (W-34-285) and a reduction of Anchor Chemical wells sampled (9 samples from 3 multiport wells) for a total of 150 samples. The Spring 2013 event was conducted between 10 April and 25 April 2013 and the Summer 2013 event was conducted between 13 August and 29 August 2013. The groundwater sampling procedures were performed in accordance with the final Work Plan (USACE May 2011) and Work Plan Addendum (USACE 2013). Deviations to sampling procedures are presented in Appendix C. Summaries of the exceptions and notable changes from previous sampling events are described below:

Both Spring 2013 and Summer 2013:

- The multiport Anchor Chemical wells have seven small ports in a two inch well. When a pump is installed to purge the well there is not room to install a water level meter to monitor the water level conditions during purging as required if using low flow sampling techniques. Therefore, this well was sampled after a minimum of three well volumes were removed and groundwater quality parameters had stabilized to ensure that all stagnant water with the well column had been purged prior to sampling.

- Monitoring well W-10-120 has an obstruction in the well and no sampling equipment could be installed to reach the well screen to allow for low flow sampling. Therefore, this well was sampled after a minimum of three well volumes were removed and groundwater quality parameters had stabilized to ensure that all stagnant water with the well column had been purged prior to sampling.

- The EPA Region 2 low flow sampling techniques do not require any minimum purge volume. Given the depth of the monitoring wells and amount of sample tubing required to reach the monitoring well screen depth (up to 570 feet BGS), the volumes of "stagnant" water contained within sampling devices can be several gallons. Given the purge rates of low flow sampling (less than 500 mls/min) it is conceivable that sample parameters could show stabilization and the well could be sampled prior to evacuating all "stagnant" water contained within the pumping device. This could provide a sample that is not representative of aquifer conditions. After review of USACE KC low flow

techniques, the USACE team decided to require that a minimum of two volumes of water contained within the pumping device be removed prior to determining stabilization of parameters for sampling to ensure representative samples are collected.

- General instruments well W-15-168 could not be located and therefore was not sampled.

Spring 2013 Only:

- A significant amount of silt was found in monitoring well W-25-188 when sampling was first attempted. This well is located in a low spot where silts accumulate during rain events. The well cap had not been properly secured during a previous sampling event and the silts were allowed to accumulate in the well (not a USACE sampling event). This well was redeveloped prior to sampling.

Summer 2013 Only:

- The schedule for sampling of Anchor Chemical multiport wells was reduced to samples from three ports from three separate wells for nine total samples as documented in the November 2013 Work Plan Addendum.

- As a result of the limited extent of uranium contaminants in the aquifer, the schedule for analyzing samples for total uranium was limited to 104 rather than all samples as had previously been done. These samples were all collected from wells located adjacent to West John Street and northward to include the entirety of the Sylvania-Corning and GI sites.

- Isotopic uranium samples were collected from 10 wells that had exhibited uranium contamination previously. This was done to evaluate the nature of the uranium contamination and to compare with previously documented isotopic uranium analyses.

- Groundwater samples from 30 monitoring wells were analyzed for compounds specific isotope analysis (CSIA) for both PCE and TCE. This information will be used to help determine the source of contaminants in the mixed plume areas downgradient of the Sylvania site. CSIA results were not addressed as part of this QCSR.

- Groundwater samples from all monitoring wells were analyzed for ferrous iron in the field using a Hach kit. In addition, 15 duplicate ferrous iron samples were collected for analysis by Test America. This QCSR discusses the QA/QC issues related only to the 15 duplicate ferrous iron samples analyzed by Test America.

- GI monitoring well W-34-285 had not been sampled during previous USACE sampling events because of known obstruction within the well that does not allow for installation of a bladder pump. This well was sampled during this round with a Waterra inertial lift pump which only requires tubing to be installed which is not likely to get stuck on the obstruction in the well.

- FedEx misplaced a sample cooler during shipment to the laboratory. This resulted in the samples arriving at the lab above recommended temperatures. These samples were not analyzed and the entire shipment was re-sampled (11 total).

1.1.1 Sample Handling and Sample Custody

Field samples were collected, preserved, and transported to the appropriate laboratory according to the procedures described in the WP (USACE May 2011). There were no deviations from the WP regarding sample handling or custody except for the following:

- The WP states that all samples were to be stored on ice at temperatures between 2 and 4 degrees Celsius. The total uranium analysis SOP does not require icing of samples and therefore were not placed or stored on ice.

- In table 3.2-2 of the WP, the analytical method EPA Method 200.8 is referred to as the selected method for total uranium analysis. It was decided by the USACE team to use ASTM D5174 (KPA) after the submission of the Final WP.

1.1.2 Equipment Calibration and Maintenance

Calibration procedures for the field and laboratory instruments are presented in LBG's QAPP. There were no deviations from the QAPP with regard to equipment calibration and maintenance.

1.1.3 Equipment Calibration and Maintenance

Samples were shipped to approved laboratories for analysis. Analytical methods in support of the Off Site Groundwater Characterization activities are referenced in the QAPP. GEL Laboratories of Charleston, SC provided total uranium for all monitoring well samples. Test America of Earth City, MO provided analysis for volatile, nickel, isotopic uranium, and ferrous iron. The CSIA analysis was performed by Microseeps in Pittsburgh, PA. Table 1-1 lists all of the analyses performed and the number of samples collected for methods for the investigation. Any deviations were evaluated as part of the data review process and are described in Section 2.

Table 1-1 Summary of Analytical Methods and Samples Collected for Off Site Groundwater Characterization, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Groundwater – Monitoring Wells - Spring 2013	6010B	Method 6010B – Total Metals, Ni only	176 samples, 18 dups, and 5 rinse blanks
	6010B	Method 6010B - Dissolved Metals, Ni only	3 samples
	8260B	Method 8260B – Volatile Organic Compounds by GC/MS in Water	176 samples, 18 dups, 5 rinse blanks, and 8 trip blanks
	ASTM D 5174	Total Uranium	176 samples, 18 dups, and 5 rinse blanks
	ASTM D 5174	Dissolved Uranium	3 samples
Groundwater - Monitoring Wells - Summer 2013	6010B	Method 6010B - Total Metals, Ni only	150 samples, 15 dups, and 3 rinse blanks
	6010B	Method 6010B - Dissolved Metals, Ni only	1 sample
	8260B	Method 8260B - Volatile Organic Compounds by GC/MS in Water	15 samples, 15 dups, 3 rinse, blanks, and16 trip blanks
	ASTM D 5174	Total Uranium	104 samples, 11 dups, and 1 rinse blank
	A-01-R	Isotopic Uranium	10 samples and 1 dup
	SM 3500 FE D	Iron, Ferrous and Ferric	17 samples
		Compound Specific Isotope Analysis (PCE/TCE)	30 samples and 3 dups

2 Data Analysis and Validation

Data quality evaluations focus on deviations from expected QC activities, problems encountered, and the acceptability of the methodologies used. Sample integrity is based on information provided on the cooler receipt form, COC documents, statements in the laboratory case narratives, and field notebooks. Laboratory activities were conducted in accordance with the QAPP. The target compounds, practical quantitation limits (PQLs), and QC limits for the project were reviewed in accordance with the QAPP. Field duplicate and blank data were used to evaluate the accuracy and precision of the analytical results and field sample collection methods. The final validated data was stored in an Environmental Quality Information Systems (EQuIS) format database.

LBG/E & E performed data review and validation of samples in accordance with the QAPP. The data review tasks completed for this project include:

- **Completeness.** LBG/E & E performed a completeness check on all EDDs and compared the data to the hard copy deliverable to verify the data were reported consistently.

- **Compliance.** LBG/E & E reviewed the laboratory reports and EDDs, checked the hard copy reports and case narratives, and verified the EDD data submitted matched the hard copy data packages. LBG/E & E reviewed calibration information and compound identification results in the raw data package and entered the qualifiers.

- **Reporting.** LBG/E & E assigned data qualifiers and flagged all reportable data with review from LBG. Results of the data review are summarized in the DUSR in Appendix A. The DUSR contain a summary of the data that was qualified, and tables of the QC samples that did not meet applicable limits.

- **Data Management.** LBG/E & E developed a project-specific database with all validated data stored in EQuIS format. LBG/E & E developed reporting tables through the use of the EQuIS database. LBG/E & E generated summary tables of final qualified data in Excel spreadsheets as shown in Section 3. Databases are provided in Appendix B.

QC samples were collected to assess the quality of the field sampling activities as described in Section 1. The evaluation of these samples was based on complete-

ness of data, positive results of equipment and trip blank analysis, and relative percent differences (RPDs) of field duplicate results. ADR was used to evaluate field duplicates. Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DUSR. The field duplicate QC criteria are 40% for aqueous samples, and 70% for soil samples. The RPD ratings are listed as "Good" if the RPD is less than field duplicate QC criteria and as "Poor" if the RPD exceeded the field duplicate QC criteria. Data were qualified "J" as estimated based on the data reviewers overall evaluation of field precision and accuracy. The qualification of data because of field duplicates is discussed at the end of each DUSR.

Rinse blanks were evaluated for each phase of sampling as described below. Rinse blanks were evaluated manually based on the associated samples and matrices and shipments.

The appropriate qualifiers were added to the data to indicate potential concerns with data usability. These qualifiers were transferred to the data presented on tables in Section 3. The following qualifiers were added:

J – This qualifier indicates an estimated value because the associated QC data indicated a potential laboratory or matrix problem or interference. In addition, J flags assigned by the laboratory to chemical data indicate the results are below the PQL but above the instrument detection limit (IDL) or method detection limit (MDL).

R – The positive results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified. Negative radiochemical results with absolute values greater than their 2-sigma uncertainty were rejected in accordance with the USACE Kansas City guidance document.

U – The result is considered non-detect. The laboratory assigned this flag to analytes not present at detectable concentrations (above the IDL or MDL). The data validator assigned this flag when an analyte was considered non-detect as a result of blank contamination. If the result is above the PQL, the PQL is considered elevated.

UJ – The non-detect value is considered estimated.

UR– The non-detect results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified.

The following sections summarize the data evaluation for each phase of fieldwork.

2.1 Monitoring Well Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DUSR was generated for each SDG reported and a copy of the DUSR is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. Tables 1 and 2 of the DUSR summarize the samples and methods included for each SDG.

Sample Delivery Groups for Monitoring Well Sampling - Spring 2013	Laboratory for Spring 2013
160-2089	TestAmerica St. Louis
160-2122	TestAmerica St. Louis
160-2133	TestAmerica St. Louis
160-2163	TestAmerica St. Louis
160-2187	TestAmerica St. Louis
160-2198	TestAmerica St. Louis
160-2215	TestAmerica St. Louis

Sample Delivery Groups for Monitoring Well Sampling - Summer 2013	Laboratory for Summer 2013
160-3377	TestAmerica St. Louis
160-3398	TestAmerica St. Louis
160-3414	TestAmerica St. Louis
160-3429	TestAmerica St. Louis
160-3441	TestAmerica St. Louis
160-3464	TestAmerica St. Louis
160-3532	TestAmerica St. Louis
160-3543	TestAmerica St. Louis
160-3563	TestAmerica St. Louis
160-3575	TestAmerica St. Louis

2.1.1 Field Data Quality Evaluation

Table 2.1-1 provides a summary of the field QC samples and the associated field samples. Table 2.1-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.1-1 Field QC Associations for Monitoring Well Sampling - Spring 2013 and Summer 2013 Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
Spring 2013			
MW-800-SP13	W-03-112-SP13	FD	160-2089
MW-801-SP13	W-6-79-SP13	FD	160-2089
MW-802-SP13	PW-07-04-SP13	FD	160-2112
MW-803-SP13	MW-23S-SP13	FD	160-2112
MW-804-SP13	PW-03-01-SP13	FD	160-2133
MW-805-SP13	W-37-385-SP13	FD	160-2187
MW-806-SP13	MW-18I-SP13	FD	160-2133
MW-807-SP13	PW-07-01-SP13	FD	160-2187
MW-808-SP13	MW-28I-SP13	FD	160-2163
MW-809-SP13	MW-208-350-SP13	FD	160-2163
MW-810-SP13	W-37-325-SP13	FD	160-2187
MW-811-SP13	MW-204-470-SP13	FD	160-2187
MW-812-SP13	MW-33S-SP13	FD	160-2198
MW-813-SP13	MW-13D-SP13	FD	160-2198
MW-814-SP13	MW-209-530-SP13	FD	160-2198
MW-815-SP13	MW-53S-SP13	FD	160-2198
MW-816-SP13	MW-31I-SP13	FD	160-2215
MW-817-SP13	MW-30I-SP13	FD	160-2215
TB01-SP13	TB01-SP13	TB	160-2089
TB02-SP13	TB02-SP13	TB	160-2112
TB-03-SP13	TB-03-SP13	TB	160-2133
TB-04-SP13	TB-04-SP13	TB	160-2163
TB-05-SP13	TB-05-SP13	TB	160-2187
TB-06-SP13	TB-06-SP13	TB	160-2198
TB-07-SP13	TB-07-SP13	TB	160-2215
TB-08-SP13	TB-08-SP13	TB	160-2215
RB-01-SP13	RB-01-SP13	EB	160-2089
RB-02-SP13	RB-02-SP13	EB	160-2112
RB-03-SP13	RB-03-SP13	EB	160-2112
RB-04-SP13	RB-04-SP13	EB	160-2187
RB-05-SP13	RB-05-SP13	EB	160-2198
Summer 2013			
MW-600-SU13	W-01-75-SU13	FD	160-3398
MW-601-SU13	MW-22S-SU13	FD	160-3398
MW-602-SU13	W-18-150-SU13	FD	160-3464
MW-603-SU13	W-12-70-SU13	FD	160-3377
MW-604-SU13	W-05-78-SU13	FD	160-3398
MW-605-SU13	MW-26S-SU13	FD	160-3398
MW-606-SU13	MW-44S-SU13	FD	160-3414
MW-607-SU13	MW-15DD-SU13	FD	160-3429
MW-608-SU13	MW-17S-SU13	FD	160-3441
MW-609-SU13	MW-28I-SU13	FD	160-3464

Table 2.1-1 Field QC Associations for Monitoring Well Sampling - Spring 2013 and Summer 2013 Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-610-SU13	MW-8-SU13	FD	160-3575
MW-611-SU13	PW-07-05-SU13	FD	160-3414
MW-612-SU13	W-26-270-SU13	FD	160-3429
MW-613-SU13	MW-207-320-SU13	FD	160-3532
MW-614-SU13	MW-208-540-SU13	FD	160-3543
TB01-SU13	TB01-SU13	TB	160-3377
TB02-SU13	TB02-SU13	TB	160-3398
TB03-SU13	TB03-SU13	TB	160-3398
TB04-SU13	TB04-SU13	TB	160-3414
TB05-SU13	TB05-SU13	TB	160-3414
TB-06	TB-06	TB	160-3429
TB-07	TB-07	TB	160-3429
TB08	TB08	TB	160-3441
TB09	TB09	TB	160-3441
TB10-SU13	TB10-SU13	TB	160-3464
TB11-SU13	TB11-SU13	TB	160-3464
TB12-SU13	TB12-SU13	TB	160-3532
TB13-SU13	TB13-SU13	TB	160-3532
TB14-SU13	TB14-SU13	TB	160-3543
TB15-SU13	TB15-SU13	TB	160-3563
TB15-SU13	TB15-SU13	TB	160-3575
RB-01-SU13	RB-01-SU13	EB	160-3414
RB-02-SU13	RB-02-SU13	EB	160-3464
RB-03-SU13	RB-03-SU13	EB	160-3575

Key:
EB = Equipment Blank.
TB = Trip Blank.
FD = Field Duplicate.

Table 2.1-2 Field QC Samples by Method for Monitoring Well Sampling - Spring 2013 and Summer 2013, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
Spring 2013						
6010B	Groundwater	175	18	10%	NA	5
8260B SIM	Groundwater	175	18	10%	8	5
ASTM D 5174	Groundwater	175	18	10%	NA	5
Summer 2013						
6010B	Groundwater	150	15	10%	NA	3
8260B SIM	Groundwater	150	15	10%	16	3
ASTM D 5174	Groundwater	104	11	10%	NA	1

Table 2.1-2 Field QC Samples by Method for Monitoring Well Sampling - Spring 2013 and Summer 2013, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
A-01-R	Groundwater	10	1	10%	NA	NA
SM 3500 FE D	Groundwater	15	1	6.7%	NA	NA

Key:
NA = Not applicable.

2.2.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DUSR. Field duplicate results are summarized on Table 4 of the DUSR. Overall, field duplicate precision was good for both the Spring 2013 and Summer 2013 Monitoring Well Sampling events.

During the Spring 2013 sampling event RPD values for total uranium were outside of QC limits for MW-28I-SP13 and MW-208-350-SP13 and tetrachloroethene was outside of QC limits for MW-33S-SP13. Sample results have been qualified as necessary.

In addition, duplicate sample MW-807-SP13 was collected twice; once on April 19, 2013 (160-2163-28) and again on April 22, 2013 (160-2187-13). The location of the parent sample for duplicate 160-2163-28, collected on April 19, was not recorded in either the well purge records or field log book during the time of sampling and therefore, the identity of the parent sample could not be accurately determined. When the error was discovered, sample MW-807-SP13 was recollected on April 22, 2013 (160-2187-13); however, sample 160-2163-28 had already been delivered to the laboratory for analysis. As a result, both samples 160-2163-28 and 160-2187-13 have been reported although only sample 160-2187-13 and its parent sample PW-07-01-SP13 (160-2187-12) are being used for site characterization and QC purposes.

2.2.1.2 Rinsate Blanks

Rinsate samples were collected at a rate of one every 35 groundwater samples during the Spring 2013 monitoring well sampling event and at a rate of one every 50 groundwater samples during the Summer 2013 monitoring well sampling event. The bulk of the groundwater sampling equipment during both sampling events was dedicated pumps and the samples collected from the dedicated pumps are not associated with the rinsate blanks collected during either the Spring 2013 or Summer 2013 monitoring well sampling events.

Spring 2013 Only:

Low levels of acetone were detected in all five rinsate blanks and chloroform, toluene, and 1,2,4-trichlorobenzene were found in several rinsate blanks. In addition

2-hexanone, cyclohexane, and methylene chloride were detected in RB-02-SP13; 1,4-dioxane was detected in RB-04-SP13; and tetrachloroethene was detected in RB-05-SP13. Acetone was also detected in many of the trip blank samples.

Acetone and 1,2,4-trichlorobenzene were consistently detected in the method blank samples. Acetone is a common laboratory reagent and the presence of acetone in the rinsate blanks may be attributed to laboratory contamination and not field decontamination procedures. The deionized water used for decontamination or possibly the containers used to ship the water are additional likely sources of acetone in the rinsates not the field decontamination procedures. Acetone was not used in the field as a decontamination agent.

Summer 2013 Only:

Low levels of acetone were detected in all three rinsate blanks and toluene was detected in both RB-01-SU13 and RB-02-SU13. In addition, 2-butanone, chloromethane, cis-1,2-dichloroethene, and tetrachloroethene were detected in RB-01-SU13. Acetone was also detected in many of the trip blank samples.

Acetone was consistently detected in the method blank samples and the presence of acetone in the rinsate samples may be attributed to laboratory contamination and/or the containers used to ship the deionized water used during field decontamination. Acetone was not used in the field as a decontamination agent.

2.2.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DUSR in Appendix A and summarized in a separate section for each analytical method below.

Table 3 in the DUSR provides a list of sample results qualified and the reason for data qualification.

2.2.2.1 Spring 2013 Groundwater Samples – Chemical Analysis

Method 8260B SIM

Acetone, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were detected in method blanks at concentrations below the reporting limits. Associated samples were qualified ("J" or "UJ" qualifier) based on the level of blank contamination versus the amount present in the project sample.

The laboratory control sample recovery is outside of QC limits for methylcyclohexane in SDG 160-2198. Associated sample results were qualified as estimated ("J" or "UJ" qualifier).

Nine samples were analyzed as MS/MSDs. High recovery of 1,1,1-trichloroethane was reported in the MS/MSD prepared with sample PW-03-02-SP13 (160-2112-20). Associated parent sample results were qualified as estimated ("J" qualifier). Low recovery of methyl acetate was reported for the MS/MSD pair prepared with project sample MWP-114-290-SP13 (160-2187-30). Results of methyl acetate for the associated project sample have been qualified as estimated ("J" qualifier).

The percent difference between the initial calibration and continuing calibration for 2-hexanone is outside of QC limits for the continuing calibration in SDG 160-2163. Additionally, acetone, methyl acetate, methyl tert-butyl ether, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, and 1,1,2,2-tetrachloroethane are outside of QC limits for SDG 160-2198. Non-detect results were qualified “UJ” if the calibration criteria indicated a low bias. Associated positive results were qualified “J”.

The laboratory made a reporting error regarding the dilution of field duplicate sample MW-812-SP13 (160-2198-20) for tetrachloroethene. At present, there is no way for the laboratory to tell if this was a data entry error in the volume recorded, or if it was re-analyzed at the wrong dilution. Screening data for both samples – not reportable because QC is not run during a screen – indicated that duplicate sample MW-812-SP13 (160-2198-20) and its parent sample MW-33S-SP13 (160-2198-22) had approximately 1400 ppb of tetrachloroethene. The run logs indicate a 1:25 dilution was performed on sample MW-812-SP13 (160-2198-20). The re-run should have been done at 1:100 dilution. The sample vials are no longer available to check the actual volumes removed from the vial to see if the volumes recorded were in error. As there is no definitive means to check the actual volume used, the data has to be reported with the 1:25 dilution and therefore, results of tetrachloroethene for sample MW-812-SP13 (160-2198-20) have been rejected ("R" qualifier). Sample MW-812-SP13 (160-2198-20) was not recollected in the field and with the exception of tetrachloroethene all results for sample MW-812-SP13 (160-2198-20) are considered usable.

Method 6010B

The analytical report for Method 6010B was reviewed, and no change to the laboratory reported qualifiers was required.

Method ASTM D 5174

The analytical report for Method ASTM D 5174 was reviewed, and no change to the laboratory reported qualifiers was required.

2.2.2.2 Summer 2013 Groundwater Samples – Chemical Analysis

Method 8260B SIM

Acetone was detected in method blanks at concentrations below the reporting limits. Associated samples were qualified ("J" or "UJ" qualifier) based on the level of blank contamination versus the amount present in the project sample.

Eight samples were analyzed as MS/MSDs. Low recovery of 1,2,3-trichlorobenzene was reported in the MS/MSD prepared with sample MW-15S-SU13 (160-3429-8). Associated parent sample results were qualified as estimated ("J" qualifier).

Method 6010B

The analytical report for Method 6010B was reviewed, and no change to the laboratory reported qualifiers was required.

Method ASTM D 5174

The analytical report for Method ASTM D 5174 was reviewed, and no change to the laboratory reported qualifiers was required.

Method A-01-R

Tracer recovery is outside of QC limits for sample MW-18S-SU13 (160-3414-13). Results have been qualified as estimated ("J" qualifier).

Method SM 3500 FE D

The analytical report for Method SM 3500 FE D was reviewed, and no change to the laboratory reported qualifiers was required.

3 Data Summaries

Tables summarizing the complete results for the site samples are provided in this section. Tables summarizing the positive results only will be provided in the associated data summary report that will be submitted under separate cover in Appendix A. Field duplicate results are presented along with the field samples. The DUSRs for each SDG, presented in Appendix A, report the RPDs for the field duplicates and provide a summary of positive results for the QC samples outside QC criteria including positive results for method blanks and the associated data qualifiers.

Complete analytical results are provided on the CD in Appendix B.

3.1 Spring 2013 and Summer 2013 Monitoring Well Data Summaries

Tables 3.1-1 through 3.1-4 include complete analytical results for the Spring 2013 Monitoring Well sampling conducted in April 2013 and the Summer 2013 Monitoring Well sampling conducting in August 2013.

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-10-SP13	MW-11-SP13	MW-12-SP13	MW-13D-SP13	MW-13S-SP13	MW-14DD-SP13	MW-14D-SP13	MW-14S-SP13	MW-15DD-SP13	MW-15D-SP13	MW-15S-SP13	MW-16D-SP13	MW-16S-SP13	MW-17S-SP13	MW-18I-SP13	MW-18S-SP13	MW-19D-SP13	MW-19S-SP13	MW-201-220-SP13	MW-202-220-SP13	MW-202-380-SP13
LAB ID	160-2215-8	160-2215-9	160-2215-10	160-2198-3	160-2187-19	160-2198-17	160-2198-21	160-2198-4	160-2215-2	160-2198-1	160-2215-1	160-2215-12	160-2215-11	160-2215-24	160-2133-6	160-2133-2	160-2187-20	160-2187-15	160-2215-25	160-2215-30	160-2215-31
SAMPLE DATE	4/24/2013	4/24/2013	4/24/2013	4/23/2013	4/22/2013	4/23/2013	4/23/2013	4/23/2013	4/24/2013	4/23/2013	4/24/2013	4/24/2013	4/24/2013	4/25/2013	4/17/2013	4/17/2013	4/22/2013	4/22/2013	4/25/2013	4/25/2013	4/25/2013
URANIUM																					
Uranium	0.0618 U	0.0618 U	9.37	0.0618 U	0.0618 U	0.0618 U	0.0879	0.0618 U	0.0618 U	0.0637	0.0618 U	0.153	0.0618 U	0.11	269	12200	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U
NICKEL																					
Nickel	13 JQ	17 JQ	14 JQ	13 U	13 U	13 U	13 U	13 U	13 UQ	13 U	13 UQ	13 UQ	13 UQ	13 U	13 U	20 J	13 U	13 U	13 U	13 U	13 U
VOCs																					
1,1,1-Trichloroethane	0.069 U	0.069 U	0.17 U	0.069 U	0.069 U	0.26 J	0.72 J	0.069 U	0.069 U	0.069 U	0.069 U	0.44 J	0.069 U	0.069 U	0.069 U	0.069 U	1.6	0.069 U	1.2	0.29 J	18
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.25 U	0.098 U	0.098 U	0.098 U	0.098 UJ	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.25 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.38 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	1.1 J
1,1-Dichloroethane	0.068 U	0.068 U	0.31 J	0.068 U	0.068 U	0.37 J	1.2	0.068 U	0.39 J	0.068 U	0.068 U	0.95 J	0.068 U	0.068 U	0.068 U	0.068 U	2.1	0.068 U	0.068 U	0.64 J	1.1 J
1,1-Dichloroethene	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.18 J	0.81 J	0.083 U	0.083 U	0.083 U	0.083 U	0.32 J	0.083 U	0.083 U	0.083 U	0.083 U	1.3	0.083 U	1.1	0.41 J	22
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.22 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.18 UJ	0.13 UJ	0.22 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.2 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.13 UJ	0.078 U	0.2 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.15 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.15 U
1,2-Dichloroethane	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
1,2-Dichloropropane	0.097 U	0.097 U	0.24 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.24 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.2 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.2 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.29 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.29 U
1,4-Dioxane	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.5 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	51 M
2-Butanone (MEK)	0.52 U	0.52 U	1.3 U	0.52 U	0.52 U	0.52 U	0.52 UJ	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	1.3 U
2-Hexanone	0.22 U	0.28 J	0.56 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.84 J
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.3 U	0.12 U	0.12 U	0.12 U	0.12 UJ	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.3 U
Acetone	1.9 UJ	2.7 UJ	2.4 UJ	0.48 UJ	0.68 UJ	0.34 U	0.34 UJ	0.52 UJ	0.95 J	0.34 U	1.5 J	1.4 UJ	1.4 UJ	1.3 J	0.85 UJ	0.95 UJ	0.81 UJ	0.34 U	1.5 J	1.9 UJ	3.1 UJ
Benzene	0.064 U	0.064 U	0.16 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.16 U
Bromochloromethane	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.33 U
Bromodichloromethane	0.088 U	0.088 U	0.22 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.22 U
Bromoform	0.17 U	0.17 U	0.42 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.42 U
Bromomethane	0.25 U	0.25 U	0.63 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.63 U
Carbon disulfide	0.051 U	0.051 U	0.13 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.13 U
Carbon tetrachloride	0.13 U	0.13 U	0.31 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.8 J
Chlorobenzene	0.15 U	0.15 U	0.37 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.37 U
Chloroethane	0.099 U	0.099 U	0.25 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.25 U
Chloroform	0.1 U	0.1 U	4.2	0.1 U	0.1 U	0.13 J	0.13 J	0.1 U	0.1 U	0.1 U	0.58 J	0.1 U	1.5	0.1 U	3.2	0.45 J	0.14 J	0.1 U	0.52 J	0.16 J	0.33 J
Chloromethane	0.077 U	0.077 U	0.19 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.19 U
cis-1,2-Dichloroethene	0.83 J	0.087 U	0.39 J	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.61 J	0.087 U	7.4
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.18 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.18 U
Cyclohexane	0.067 U	0.067 U	0.17 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UQ	0.067 U	0.067 U	0.17 U
Dibromochloromethane	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U
Ethylbenzene	0.086 U	0.086 U	0.22 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.22 U
Isopropylbenzene	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U
Methyl acetate	0.37 U	0.37 U	0.92 U	0.37 U	0.37 U	0.37 U	0.37 UJ	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.92 U
Methyl tert-butyl ether	0.11 U	0.11 U	0.55 J	0.11 U	0.11 U	0.11 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.18 J	0.11 U	0.11 U	0.11 U	1.2 J	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.29 U
Methylcyclohexane	0.1 U	0.1 U	0.26 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.26 U
Methylene Chloride	0.27 U	0.27 U	0.68 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.68 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.36 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.36 U
o-Xylene	0.063 U	0.063 U	0.16 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.074 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.16 U
Styrene	0.074 U	0.074 U	0.19 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.18 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.19 U
Tetrachloroethene	330	290	590	0.18 UJ	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.33 J	0.18 U	0.83 J	0.072 U	1.5	0.94 J	0.55 J	0.25 J	0.65 J	1 J
Toluene	0.072 U	0.072 U	0.18 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.083 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.18 U
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.25 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U
Trichloroethene	1.5	0.57 J	4.4	0.25 U	0.25 U	0.25 U	0.79 J	0.25 U	0.25 U	0.25 U	0.25 U	1.8	0.25 U	0.25 U	0.11 U	0.25 U	4.6	0.25 U	8.9	0.25 U	770
Trichlorofluoromethane	0.11 U	0.11 U	0.28 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.084 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.28 U
Vinyl chloride	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U		0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U

Note:

All concentrations are reported in parts per billion (ug/L)

U = Non Detection

J = Estimated Value

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-202-495-SP13	MW-203-160-SP13	MW-203-360-SP13	MW-203-440-SP13	MW-204-320-SP13	MW-204-470-SP13	MW-205-285-SP13	MW-205-470-SP13	MW-206-320-SP13	MW-206-470-SP13	MW-207-170-SP13	MW-207-250-SP13	MW-207-320-SP13	MW-208-350-SP13	MW-208-540-SP13	MW-209-380-SP13	MW-209-530-SP13
LAB ID	160-2215-29	160-2198-8	160-2198-9	160-2198-5	160-2187-14	160-2187-9	160-2187-26	160-2187-29	160-2187-28	160-2187-27	160-2215-33	160-2215-35	160-2215-34	160-2163-30	160-2163-31	160-2198-6	160-2198-2
SAMPLE DATE	4/25/2013	4/23/2013	4/23/2013	4/23/2013	4/22/2013	4/22/2013	4/22/2013	4/22/2013	4/22/2013	4/22/2013	4/25/2013	4/25/2013	4/25/2013	4/19/2013	4/19/2013	4/23/2013	4/23/2013
URANIUM																	
Uranium	0.183	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0743	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0639 J	0.0618 U	0.0667	0.0618 U
NICKEL																	
Nickel	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 J	13 U
VOCs																	
1,1,1-Trichloroethane	0.069 U	0.72 J	2.1	0.069 U	0.11 J	0.069 U	0.069 U	0.069 U	0.17 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	2.1 J	0.069 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.25 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.49 U	0.098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.87 J	0.1 U	0.1 U	0.1 U	0.1 U	2.4	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	2.2	0.1 U	6.7	0.1 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.38 U	0.15 U	4.8	0.15 U	0.15 U	0.15 U	0.15 U	0.75 U	0.15 U
1,1-Dichloroethane	0.19 J	0.57 J	0.52 J	0.068 U	0.21 J	0.077 J	0.068 U	0.068 U	0.17 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.34 U	0.068 U
1,1-Dichloroethene	0.094 J	3.5	1.5	0.083 U	0.14 J	0.19 J	0.39 J	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	6.6	0.083 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.22 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.44 U	0.087 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.2 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.39 U	0.078 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	2.1 U	0.41 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.64 U	0.13 U
1,2-Dichlorobenzene	0.06 U	0.7 J	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.15 U	0.06 U	0.06 U	0.06 U	0.06 U	0.56 J	0.06 U	0.3 U	0.06 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.24 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.49 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.2 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.39 U	0.078 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.29 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.58 U	0.12 U
1,4-Dioxane	1.2 U	1.7 JM	1.6 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.4 M	1.2 UJ
2-Butanone (MEK)	0.52 U	0.52 U	0.52 U	0.52 U	1.2 J	0.52 U	4.4 J	0.52 U	1.3 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	2.6 U	0.52 U
2-Hexanone	0.3 J	0.22 U	0.22 U	0.22 U	0.5 J	0.22 UJ	0.22 U	0.22 U	0.56 U	0.22 U	0.36 J	0.31 J	0.3 J	0.22 UJ	0.22 UJ	1.1 U	0.22 U
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	1.7 J	0.12 U	0.3 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.61 U	0.12 U
Acetone	6.9	1.6 UJ	2.3 UJ	0.5 UJ	0.34 U	0.34 U	19	2 UJ	2.6 UJ	2.4 UJ	1.6 UJ	1.5 UJ	2.7 UJ	1.8 UJ	2.9 UJ	5.9 UJ	3.3 J
Benzene	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.096 J	0.064 U	0.064 U	0.16 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.32 U	0.064 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.67 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.22 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.44 U	0.088 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.42 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.83 U	0.17 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 UJ	1.8 J	0.8 J	0.63 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U	0.25 U
Carbon disulfide	0.2 J	0.051 U	0.051 U	0.051 U	0.1 J	0.082 J	0.051 U	0.051 U	0.13 U	0.051 U	0.059 J	0.051 U	0.39 J	0.051 U	0.051 U	0.26 U	0.051 U
Carbon tetrachloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.31 U	0.13 U	0.28 J	0.13 U	0.13 U	0.13 U	0.13 U	11	0.13 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.37 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.74 U	0.15 U
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.25 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.5 U	0.099 U
Chloroform	0.15 J	0.2 J	0.15 J	0.1 U	0.62 J	0.1 U	1.2	0.1 U	0.27 J	0.84 J	0.16 J	22	0.1 U	2.3	0.1 U	2 J	0.1 U
Chloromethane	0.077 U	0.077 U	0.077 U	0.077 U	0.18 J	0.16 J	0.78 JM	0.35 J	0.19 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.39 U	0.077 U
cis-1,2-Dichloroethene	1.5	2.2	9.1	0.087 U	2.1	0.33 J	1.4	0.087 U	1.6 J	0.087 U	1.6	0.087 U	0.087 U	0.95 J	0.087 U	150	0.087 U
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.18 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.37 U	0.073 U
Cyclohexane	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UQ	0.067 UQ	0.067 U	0.067 U	0.17 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.34 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.64 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.42 U	0.084 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.22 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.43 U	0.086 U
Isopropylbenzene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.083 U
Methyl acetate	0.37 U	0.47 J	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.92 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	1.8 U	0.37 U
Methyl tert-butyl ether	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.29 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.57 U	0.11 U
Methylcyclohexane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.26 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.52 U	0.1 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.68 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	1.4 U	0.27 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.36 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.71 U	0.14 U
o-Xylene	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.16 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.32 U	0.063 U
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.19 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.37 U	0.074 U
Tetrachloroethene	0.18 U	53	5.4	0.18 U	22	0.45 J	84	0.18 U	270	1.1	300	20	0.18 U	79	3.6	200	13
Toluene	0.19 J	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.18 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.69 J	0.36 U	0.072 U
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.083 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.083 U
Trichloroethene	15	30	150	0.25 U	50	3	110	0.25 U	4.6	0.25 U	3.8	0.25 U	0.25 U	72	0.74 J	610	1.1
Trichlorofluoromethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.28 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.57 U	0.11 U
Vinyl chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.42 U	0.084 U

Note:
All concentrations are reported in parts per billion (ug/L
U = Non Detection
J = Estimated Value

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-20D-SP13	MW-20I-SP13	MW-20S-SP13	MW-210-280-SP13	MW-210-380-SP13	MW-210-470-SP13	MW-211-190-SP13	MW-211-250-SP13	MW-211-455-SP13	MW-212-580-SP13	MW-213-570-SP13	MW-214-570-SP13	MW-21D-SP13	MW-21I-SP13	MW-21S-SP13	MW-22D-SP13	MW-22I-SP13	MW-22S-SP13	MW-23D-SP13
LAB ID	160-2163-37	160-2163-12	160-2163-24	160-2215-21	160-2215-20	160-2215-22	160-2215-5	160-2215-6	160-2215-7	160-2215-23	160-2215-4	160-2215-3	160-2163-26	160-2163-5	160-2163-3	160-2187-17	160-2187-18	160-2163-4	160-2112-24
SAMPLE DATE	4/19/2013	4/18/2013	4/17/2013	4/25/2013	4/25/2013	4/25/2013	4/24/2013	4/24/2013	4/24/2013	4/25/2013	4/24/2013	4/24/2013	4/19/2013	4/18/2013	4/18/2013	4/22/2013	4/22/2013	4/18/2013	4/16/2013
URANIUM																			
Uranium	0.0618 U	3.74	3230	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	1.1	4.09	0.0618 U	0.102	0.0618 U	8.53	0.303
NICKEL																			
Nickel	13 U	13 U	13 U	13 U	13 UQ	13 U	13 UQ	13 UQ	13 UQ	13 U	13 UQ	13 UQ	13 U	13 U	13 U	13 U	13 U	14 J	13 U
VOCs																			
1,1,1-Trichloroethane	0.11 J	0.58 J	0.069 U	0.069 U	0.069 U	0.069 U	0.21 J	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.14 J	0.069 U	0.069 U	0.68 J
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.1 U	0.1 U	0.1 U	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane	0.13 J	0.72 J	0.068 U	0.068 U	0.4 J	0.068 U	1.4	0.3 J	0.41 J	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.16 J	0.068 U	0.068 U	0.73 J
1,1-Dichloroethene	0.11 J	0.55 J	0.083 U	0.083 U	0.48 J	0.083 U	0.31 J	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.089 J	0.083 U	0.083 U	0.46 J
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.19 UJ
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.06 U	0.54 J	0.06 U	1.5	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane	1.2 U	1.2 U	1.2 U	1.2 U	1.6 J	1.2 J	1.2 U	3.3 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	7.3	1.2 U	1.2 U	1.2 U
2-Butanone (MEK)	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
2-Hexanone	0.29 J	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.69 J	0.22 U	0.22 U	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Acetone	0.69 J	1.1 J	1.2 UJ	0.97 J	0.71 J	3	1.4 J	1.5 J	3.1 UJ	1.6 J	2	1.4 J	0.77 UJ	1.1 J	0.69 J	0.34 U	0.57 UJ	1.1 J	1 UJ
Benzene	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.09 J
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.41 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Carbon disulfide	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon tetrachloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U
Chloroform	0.96 J	1.1	3.4	0.3 J	1.9	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	4.4	3.6	0.1 U	0.17 J
Chloromethane	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
cis-1,2-Dichloroethene	0.087 U	0.087 U	0.087 U	5.6	10	7.2	0.49 J	0.23 J	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	1.2	0.087 U
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
Cyclohexane	0.067 UQ	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UQ	0.067 U	0.067 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Methyl acetate	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Methyl tert-butyl ether	0.11 U	0.45 J	0.11 U	0.11 U	0.11 U	0.11 U	0.12 J	0.15 J	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.78 J	0.11 U	0.11 U
Methylcyclohexane	0.1 UQ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
o-Xylene	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Tetrachloroethene	0.2 J	0.76 J	5	110	220	12	0.56 J	0.38 J	0.18 U	4.6	0.18 U	0.18 U	0.18 U	0.18 UM	0.18 U	3	0.18 U	3200	3.2
Toluene	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.43 J	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene	0.25 U	0.25 U	0.25 U	7.7	74	6	4.7	0.25 U	0.25 U	1.5	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	14	1.8
Trichlorofluoromethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.69 J	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Note:
All concentrations are reported in parts per billion (ug/L
U = Non Detection
J = Estimated Value

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-23I-SP13	MW-23S-SP13	MW-24DD-SP13	MW-24S-SP13	MW-25D-SP13	MW-25I-SP13	MW-25S-SP13	MW-26D-SP13	MW-26S-SP13	MW-27DD-SP13	MW-27D-SP13	MW-27S-SP13	MW-28D-SP13	MW-28I-SP13	MW-28S-SP13	MW-29S-SP13	MW-30D-SP13	MW-30I-SP13	MW-30S-SP13	MW-31D-SP13	MW-31I-SP13
LAB ID	160-2112-25	160-2112-14	160-2163-33	160-2163-8	160-2133-3	160-2133-5	160-2112-26	160-2163-27	160-2112-8	160-2112-23	160-2215-32	160-2112-6	160-2163-36	160-2163-34	160-2163-35	160-2215-36	160-2215-16	160-2215-18	160-2215-17	160-2215-26	160-2215-14
SAMPLE DATE	4/16/2013	4/15/2013	4/19/2013	4/18/2013	4/17/2013	4/16/2013	4/16/2013	4/19/2013	4/15/2013	4/16/2013	4/25/2013	4/15/2013	4/19/2013	4/19/2013	4/19/2013	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/25/2013
URANIUM																					
Uranium	5.23	10.9	0.0618 U	28.9	1.31	0.172	11.6	0.654	6.7	0.0618 U	0.846	1.88	0.152	2.53 J	1.43	0.0618 U	0.0618 U	0.0618 UJ	0.0618 U	0.0733	0.0618 U
NICKEL																					
Nickel	16 J	1800	13 U	74	13 U	13 U	30 J	13 U	260	13 U	65	45	13 U	13 U	13 U	14 J	14 JQ	13 UQ	13 UQ	270	13 UQ
VOCs																					
1,1,1-Trichloroethane	0.13 J	0.069 U	1.5	0.069 U	0.069 U	0.069 U	0.069 U	1.5	0.52 J	0.81 J	0.069 U	0.069 U	0.097 J	0.12 J	0.069 U	0.069 U	0.069 U	8.7	0.069 U	0.069 U	0.73 J
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane	0.32 J	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.24 J	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane	0.14 J	0.068 U	2.1	0.068 U	0.068 U	0.068 U	0.068 U	2.4	1	0.77 J	0.068 U	0.068 U	0.083 J	0.15 J	0.068 U	0.068 U	0.068 U	0.39 J	0.068 U	0.068 U	1
1,1-Dichloroethene	0.083 U	0.083 U	1.2	0.083 U	0.083 U	0.083 U	0.083 U	1.3	0.67 J	0.41 J	0.083 U	0.083 U	0.083 U	0.14 J	0.083 U	0.083 U	0.083 U	7.6	0.083 U	0.083 U	0.66 J
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.088 UJ	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.22 UJ	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane	0.1 U	0.1 U	0.11 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane	1.2 U	1.2 U	1.9 J	1.2 U	1.2 U	1.2 U	1.2 U	1.3 JM	1.2 U	1.2 U	7.4 M	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.7 J	1.2 U	1.2 U	1.2 U
2-Butanone (MEK)	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.69 J	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
2-Hexanone	0.22 U	0.22 U	0.26 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.22 U	0.27 J	0.22 U	0.22 U	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.26 J	0.26 J	0.22 U	0.39 J
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Acetone	1.3 UJ	1.6 J	6.5	1.1 J	0.74 UJ	1.4 UJ	0.71 UJ	1.6 UJ	1.2 J	1.4 UJ	1.5 J	1.7 J	0.48 J	1.3 J	0.64 J	0.95 J	1.7 UJ	1.8 UJ	2 UJ	1 J	1.8 UJ
Benzene	0.13 J	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Carbon disulfide	0.051 U	0.46 J	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon tetrachloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U
Chloroform	0.1 U	0.1 U	0.16 J	0.1 U	0.1 U	0.1 U	0.1 U	0.15 J	0.1 U	0.18 J	5.2	0.1 U	5.2	8.3	2.3	0.1 U	0.1 U	0.1 U	0.1 U	3.3	0.1 U
Chloromethane	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
cis-1,2-Dichloroethene	0.087 U	0.087 U	0.14 J	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.78 J	0.087 U	0.087 U	0.087 UJ
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
Cyclohexane	0.067 U	0.067 U	0.067 UQ	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UQ	0.067 UQ	0.067 UQ	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene	0.13 J	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Methyl acetate	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Methyl tert-butyl ether	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 J	0.11 U	0.11 U	0.13 J	0.11 U	0.11 U	0.19 J	0.91 J	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylcyclohexane	0.1 U	0.1 U	0.1 UQ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UQ	0.1 UQ	0.1 UQ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
o-Xylene	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Tetrachloroethene	0.2 J	0.18 U	1.2	42	0.18 U	0.18 U	0.18 U	0.97 J	0.3 JM	1.5	6.8	1.2	6.5	0.58 J	17	63	0.18 U	0.26 J	0.56 J	24	3.4 J
Toluene	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene	0.25 U	0.25 U	5.8	0.34 J	0.25 U	0.25 U	0.25 U	5.9	0.4 J	3.4	0.25 U	0.25 U	0.25 U	0.25 U	0.5 J	0.25 U	0.25 U	2.4	0.25 U	2.5	1.3
Trichlorofluoromethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	1.2	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Note:
All concentrations are reported in parts per billion (ug/L
U = Non Detection
J = Estimated Value

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-32D-SP13	MW-33D-SP13	MW-33S-SP13	MW-34D-SP13	MW-34S-SP13	MW-39S-SP13	MW-3-SP13	MW-41S-SP13	MW-42I-SP13	MW-43S-SP13	MW-44S-SP13	MW-49S-SP13	MW-4-SP13	MW-50I-SP13	MW-51I-SP13	MW-52D-SP13	MW-53S-SP13	MW-55S-SP13	MW-800-SP13	MW-801-SP13	MW-802-SP13	MW-803-SP13
LAB ID	160-2215-27	160-2198-18	160-2198-22	160-2198-24	160-2198-23	160-2215-13	160-2198-13	160-2133-1	160-2163-11	160-2163-23	160-2163-1	160-2187-22	160-2198-15	160-2163-14	160-2215-28	160-2198-27	160-2198-26	160-2198-19	160-2089-13	160-2089-10	160-2112-11	160-2112-15
SAMPLE DATE	4/25/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/25/2013	4/24/2013	4/17/2013	4/18/2013	4/17/2013	4/18/2013	4/22/2013	4/24/2013	4/18/2013	4/25/2013	4/24/2013	4/24/2013	4/23/2013	4/10/2013	4/11/2013	4/15/2013	4/15/2013
URANIUM																						
Uranium	0.0618 U	0.0847	107	0.0755	0.0618 U	0.0618 U	0.0618 U	598	197	33	24.1	0.649	0.0618 U	13.1	0.0618 U	0.0719	30.6	0.0618 U	0.0618 U	0.0618 U	0.0618 U	10.6
NICKEL																						
Nickel	13 U	13 J	13 U	13 U	13 U	13 UQ	52	13 U	13 U	13 U	1200	13 U	13 U	280	29 J	13 U	13 U	13 U	13 U	13 U	13 U	1800
VOCs																						
1,1,1-Trichloroethane	0.069 U	0.069 U	0.69 U	0.54 J	0.069 U	0.38 J	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	1.7 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.98 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	2.5 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane	0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	3.8 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane	0.068 U	0.068 U	0.68 U	1.1	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.56 J	0.068 U	0.068 U	1.7 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene	0.083 U	0.083 U	0.83 U	0.56 J	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.36 J	0.083 U	0.083 U	2.1 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.87 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	2.2 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.78 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	2 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	10 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	1.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	3.2 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.6 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.66 J	0.06 U	0.06 U	1.5 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.097 U	0.097 U	0.97 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	2.4 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.78 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	2 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene	0.12 U	0.12 U	1.2 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	2.9 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Butanone (MEK)	0.52 U	0.52 U	5.2 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	13 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
2-Hexanone	0.22 U	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	5.6 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	1.2 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	3 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Acetone	0.96 J	1 UJ	3.4 U	0.34 U	0.34 U	1.4 UJ	0.71 UJ	0.55 UJ	0.65 J	0.8 UJ	0.74 J	0.95 UJ	0.34 U	1.2 J	1.1 J	1.8 UJ	21 J	1.2 UJ	1.3 UJ	1.3 UJ	0.81 J	0.57 J
Benzene	0.064 U	0.064 U	0.64 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	1.6 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromochloromethane	0.13 U	0.13 U	1.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	3.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U	0.88 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	2.2 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform	0.17 U	0.17 U	1.7 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	4.2 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Bromomethane	0.25 U	0.25 U	2.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	6.3 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Carbon disulfide	0.051 U	0.051 U	0.51 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	1.3 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 UJ
Carbon tetrachloride	0.13 U	0.13 U	1.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	3.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene	0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	3.7 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroethane	0.099 U	0.099 U	0.99 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	2.5 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U
Chloroform	0.94 J	0.1 U	1 U	0.14 J	0.1 U	0.1 U	0.1 U	0.1 U	4.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.6 U	8.6	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.077 U	0.077 U	0.77 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	1.9 U	0.077 U	0.079 J	0.077 U	0.077 U	0.077 U
cis-1,2-Dichloroethene	0.087 U	0.37 J	0.87 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	1	0.087 U	0.087 U	0.47 J	2.2 U	0.087 U	0.68 J	0.087 U	0.087 U	0.087 U
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.73 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	1.8 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
Cyclohexane	0.067 U	0.067 U	0.67 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	1.7 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U	1.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	3.2 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.84 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	2.1 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene	0.086 U	0.086 U	0.86 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	2.2 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene	0.083 U	0.083 U	0.83 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	2.1 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Methyl acetate	0.37 U	0.37 U	3.7 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	9.2 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Methyl tert-butyl ether	0.11 U	0.11 U	1.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	2.9 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylcyclohexane	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	2.6 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene Chloride	0.27 U	0.37 J	2.7 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 J	6.8 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
m-Xylene & p-Xylene	0.14 U	0.14 U	1.4 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	3.6 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
o-Xylene	0.063 U	0.063 U	0.63 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	1.6 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Styrene	0.074 U	0.074 U	0.74 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	1.9 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Tetrachloroethene	13	51	1300 J	3	0.55 J	120	17	5.5	0.18 U	72	31	0.18 U	190	0.42 J	0.79 J	100	6200	0.18 U	11	0.19 J	0.18 U	0.18 U
Toluene	0.072 U	0.16 J	0.72 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	1.8 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.83 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	2.1 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.83 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	2.1 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene	0.53 J	0.35 J	2.5 U	0.67 J	0.25 U	0.25 U	0.52 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.6	0.42 J	0.25 U	0.53 J	13 J	0.25 U	1.1	0.25 U	0.25 U	0.25 U
Trichlorofluoromethane	0.11 U	0.11 U	1.1 UJ	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	2.8 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl chloride	0.084 U	0.084 U	0.84 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	2.1 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Note:
All concentrations are reported in parts per billion (ug/L
U = Non Detection
J = Estimated Value

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-804-SP13	MW-805-SP13	MW-806-SP13	MW-807-SP13	MW-807-SP13	MW-808-SP13	MW-809-SP13	MW-810-SP13	MW-811-SP13	MW-812-SP13	MW-813-SP13	MW-814-SP13	MW-815-SP13	MW-816-SP13	MW-817-SP13	MW-8-SP13	MW-9-SP13	MWP-110-355-SP13	MWP-110-440-SP13	MWP-114-170-SP13
LAB ID	160-2133-10	160-2187-24	160-2133-8	160-2163-28	160-2187-13	160-2163-32	160-2163-29	160-2187-16	160-2187-8	160-2198-20	160-2198-16	160-2198-7	160-2198-28	160-2215-15	160-2215-19	160-2198-14	160-2198-12	160-2198-11	160-2198-10	160-2187-31
SAMPLE DATE	4/16/2013	4/22/2013	4/17/2013	4/19/2013	4/22/2013	4/19/2013	4/19/2013	4/22/2013	4/22/2013	4/23/2013	4/23/2013	4/23/2013	4/24/2013	4/25/2013	4/25/2013	4/24/2013	4/24/2013	4/23/2013	4/23/2013	4/23/2013
URANIUM																				
Uranium	0.0618 UJ	0.0618 U	254	0.587	0.0618 U	0.0618 UJ	2.52 J	0.174	0.0618 U	104	0.0618 U	0.0618 U	26.4	0.0618 U	0.0984 J	0.0618 U	0.0618 U	0.0711	0.0618 U	0.0868
NICKEL																				
Nickel	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 UQ	13 UQ	900	13 U	13 U	13 U	13 U
VOCs																				
1,1,1-Trichloroethane	1.3	60	0.069 U	1.5	0.64 J	0.12 J	0.069 U	1.3 J	0.069 U	0.069 U	0.069 U	0.069 U	1.7 U	0.77 J	7.3	0.069 U	0.069 U	4	0.35 U	0.17 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.25 U	0.098 U	0.098 U	0.098 U	0.098 U	2.5 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.49 U	0.25 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	53	0.1 U	0.1 U	0.1 U	0.1 U	2.2	4.1	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	6.6	0.51 U	0.25 U
1,1,2-Trichloroethane	0.15 U	1.9	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.55 J	0.15 U	0.15 U	0.15 U	0.15 U	3.8 U	0.15 U	0.15 UJ	0.15 U	0.15 U	0.15 U	0.75 U	0.38 U
1,1-Dichloroethane	0.54 J	3.2	0.068 U	2.5	0.57 J	0.16 J	0.068 U	10	0.075 J	0.068 U	0.068 U	0.068 U	1.7 U	1.1	0.36 J	0.068 U	0.068 U	3.5	0.34 U	3.2
1,1-Dichloroethene	0.083 U	120	0.083 U	1.5	0.67 J	0.14 J	0.083 U	16	0.091 J	0.083 U	0.083 U	0.083 U	2.1 U	0.74 J	5.6	0.083 U	0.083 U	7.3	0.42 U	2.5
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.22 U	0.087 U	0.087 U	0.087 U	0.087 U	2.2 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.44 U	0.22 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.2 U	0.078 U	0.078 U	0.078 U	0.078 U	2 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.39 U	0.2 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.41 U	0.41 U	0.41 U	0.41 U	10 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	2.1 U	1 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.13 U	0.13 U	3.2 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.64 U	0.32 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.58 J	0.15 U	0.06 U	0.06 U	0.06 U	0.06 U	1.5 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.3 U	0.15 U
1,2-Dichloroethane	0.1 U	0.65 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.35 J	0.5 U	0.25 U
1,2-Dichloropropane	0.097 U	0.35 J	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.24 U	0.097 U	0.097 U	0.097 U	0.097 U	2.4 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.49 U	0.24 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.2 U	0.078 U	0.078 U	0.078 U	0.078 U	2 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.39 U	0.2 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.29 U	0.12 U	0.12 U	0.12 U	0.12 U	2.9 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.58 U	0.29 U
1,4-Dioxane	1.2 U	52	1.2 U	1.3 JM	1.6 J	1.2 U	1.2 U	36 M	1.2 U	1.2 U	1.2 U	1.3 J	1.2 U	1.2 U	1.8 J	1.2 U	1.2 U	14 M	1.6 J	3.5 UJ
2-Butanone (MEK)	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	1.3 UJ	0.52 U	0.52 U	0.52 U	0.52 U	13 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	2.6 U	1.3 U
2-Hexanone	0.22 U	0.22 U	0.22 U	0.22 UJ	0.22 UJ	0.26 J	0.22 UJ	0.56 U	0.26 J	0.22 U	0.22 U	0.22 U	6.1 J	0.22 UJ	0.22 UJ	0.22 U	0.22 U	0.22 U	1.1 U	0.56 U
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.3 U	0.12 U	0.12 U	0.12 U	0.12 U	3 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.61 U	0.3 U
Acetone	1.1 UJ	2.1 UJ	1.6 UJ	0.85 UJ	0.34 U	1.1 J	1.1 UJ	0.86 UJ	0.34 U	0.34 U	0.34 UJ	4 UJ	18 J	1.1 UJ	0.83 J	0.34 U	0.8 UJ	1.2 UJ	2.6 UJ	3.1 UJ
Benzene	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.23 J	0.077 J	0.064 U	0.064 U	0.064 U	1.6 U	0.064 U	0.064 U	0.064 U	0.064 U	1.5	0.32 U	0.16 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U	0.13 U	3.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.67 U	0.33 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.22 U	0.088 U	0.088 U	0.088 U	0.088 U	2.2 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.44 U	0.22 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.42 U	0.17 U	0.17 U	0.17 U	0.17 U	4.2 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.83 U	0.42 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.63 U	0.45 J	0.25 U	0.25 U	0.25 U	6.3 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.3 U	0.63 U
Carbon disulfide	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.13 U	0.078 J	0.051 U	0.051 U	0.051 U	1.3 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.26 U	0.93 J
Carbon tetrachloride	0.13 U	2.8	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	35	0.13 U	0.13 U	0.13 U	0.13 U	3.1 U	0.13 U	0.13 U	0.13 U	0.13 U	6	0.63 U	0.31 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.37 U	0.15 U	0.15 U	0.15 U	0.15 U	3.7 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.74 U	0.37 U
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.25 U	0.099 U	0.099 U	0.099 U	0.099 U	2.5 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.5 U	0.25 U
Chloroform	0.1 U	31	3.4	0.16 J	0.1 U	8	2.2	320	0.1 U	0.1 U	0.1 U	0.1 U	2.6 U	0.1 U	0.1 U	0.1 U	0.1 U	2.1	0.51 U	0.67 J
Chloromethane	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.19 U	0.22 J	0.077 U	0.077 U	0.077 U	1.9 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.39 U	0.19 U
cis-1,2-Dichloroethene	0.087 U	1.2	0.087 U	0.087 U	0.087 U	0.087 U	0.93 J	9.6	0.28 J	0.087 U	0.087 U	0.087 U	2.2 U	0.088 J	0.67 J	0.087 U	0.087 U	33	3.8 J	33
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.18 U	0.073 U	0.073 U	0.073 U	0.073 U	1.8 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.37 U	0.18 U
Cyclohexane	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UQ	0.067 UQ	0.067 U	0.17 UQ	0.067 UQ	0.067 U	0.067 U	0.067 U	1.7 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.34 U	0.17 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.13 U	0.13 U	3.2 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.64 U	0.32 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.084 U	0.084 U	2.1 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.42 U	0.21 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.22 U	0.086 U	0.086 U	0.086 U	0.086 U	2.2 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.43 U	0.22 U
Isopropylbenzene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	2.1 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.21 U
Methyl acetate	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.92 U	0.37 U	0.37 U	0.37 U	0.37 U	9.2 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	1.8 U	0.92 U
Methyl tert-butyl ether	0.11 U	0.11 U	1.6 J	0.11 U	1.1 J	0.86 J	0.11 U	0.29 U	0.11 U	0.11 U	0.11 U	0.11 U	2.9 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.57 U	0.93 J
Methylcyclohexane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UQ	0.1 U	0.26 U	0.1 U	0.1 U	0.1 U	0.1 U	2.6 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.52 U	0.26 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.68 U	0.27 U	0.27 U	0.27 U	0.27 U	6.8 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	1.4 U	0.68 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.36 U	0.14 U	0.14 U	0.14 U	0.14 U	3.6 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.71 U	0.36 U
o-Xylene	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.16 U	0.063 U	0.063 U	0.063 U	0.063 U	1.6 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.32 U	0.16 U
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.19 U	0.074 U	0.074 U	0.074 U	0.074 U	1.9 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.37 U	0.19 U
Tetrachloroethene	0.18 U	50	0.18 U	0.94 J	0.4 J	0.53 J	77	180	0.46 J	310 J	0.29 J	13	5600	1.2 J	0.18 UJ	0.44 J	440	240	840	6.8
Toluene	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.18 U	0.072 U	0.072 U	0.072 U	0.072 U	1.8 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.36 U	0.18 U
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	2.1 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.21 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	2.1 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.21 U
Trichloroethene	0.25 U	78	0.25 U	5.9	0.57 J	0.25 U	73	570	2.9	1.5 J	0.25 U	1	12 J	1.5	1.9	0.25 U	1.9	450	10	270
Trichlorofluoromethane	0.11 U	9.9	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.41 J	0.11 U	0.11 U	0.11 U	0.11 U	2.8 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.57 U	0.28 U
Vinyl chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.084 U	0.084 U	2.1 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.42 U	1.2 J

Note:
All concentrations are reported in parts per billion (ug/L
U = Non Detection
J = Estimated Value

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MWP-114-290-SP13	PW-02-01-SP13	PW-02-02-SP13	PW-02-03	PW-02-04-SP13	PW-02-05-SP13	PW-02-06-SP13	PW-02-07-SP13	PW-02-07-SP13F	PW-03-01-SP13	PW-03-02-SP13	PW-03-03-SP13	PW-03-04-SP13	PW-03-05-SP13	PW-03-06-SP13	PW-03-07-SP13	PW-04-01	PW-04-02-SP13	PW-04-03-SP13	PW-04-04	PW-04-05-SP13
LAB ID	160-2187-30	160-2163-19	160-2163-10	160-2133-9	160-2163-15	160-2163-16	160-2133-13	160-2163-17	160-2163-18	160-2133-4	160-2112-20	160-2112-22	160-2133-11	160-2133-12	160-2112-19	160-2112-21	160-2089-15	160-2089-1	160-2089-4	160-2089-16	160-2089-5
SAMPLE DATE	4/23/2013	4/17/2013	4/18/2013	4/17/2013	4/18/2013	4/18/2013	4/17/2013	4/18/2013	4/18/2013	4/16/2013	4/16/2013	4/16/2013	4/17/2013	4/17/2013	4/16/2013	4/16/2013	4/10/2013	4/11/2013	4/11/2013	4/10/2013	4/11/2013
URANIUM																					
Uranium	0.111	0.0618 U	0.0618 U	0.176	0.0618 U	0.0618 U	0.0831	0.567	0.0618 U	0.431 J	0.0618 U	0.0618 U	0.301	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U
NICKEL																					
Nickel	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
VOCs																					
1,1,1-Trichloroethane	7.4	0.069 U	0.069 U	0.41 J	0.069 U	0.069 U	0.069 U	0.069 U	N/A	1.4	2.5 J	0.6 J	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	3.2	9.7	0.069 U	0.069 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	N/A	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane	0.15 J	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	N/A	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane	9.4	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	N/A	0.54 J	1.2	0.19 J	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	2.1	6	0.068 U	0.068 U
1,1-Dichloroethene	14	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	N/A	0.083 U	0.3 J	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.31 J	0.79 J	0.083 U	0.083 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	N/A	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	N/A	0.078 U	0.16 J	0.17 UJ	0.078 U	0.078 U	0.078 U	0.16 UJ	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	N/A	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	N/A	0.06 U	0.2 J	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.066 J	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	N/A	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	N/A	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	N/A	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane	9.9	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	N/A	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.5 J	3.4 J	1.9 J	1.2 U	1.2 U
2-Butanone (MEK)	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	N/A	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
2-Hexanone	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	N/A	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.25 J	0.22 U	0.22 U
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	N/A	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Acetone	0.34 U	0.84 J	1.2 J	2.3	1.3 J	1 J	1.2 UJ	1.8 J	N/A	0.95 UJ	2.4 UJ	1.4 UJ	0.93 UJ	0.91 UJ	0.46 J	1.7 UJ	1.1 UJ	1.3 UJ	2.2	1.3 UJ	1.5 UJ
Benzene	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	N/A	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	N/A	0.088 U	0.088 UJ	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.16 J	0.36 J	0.2 J	0.088 U	0.088 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	N/A	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.57 J	0.28 J	0.17 U	0.17 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	N/A	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Carbon disulfide	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	N/A	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon tetrachloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene	0.15 J	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	N/A	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	N/A	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U
Chloroform	1.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.18 J	0.23 J	N/A	0.1 U	0.1 U	0.1 U	0.13 J	0.1 U	0.1 U	0.1 U	0.21 J	0.43 J	0.62 J	0.1 U	0.1 U
Chloromethane	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	N/A	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.1 J	0.077 U
cis-1,2-Dichloroethene	12	0.087 U	0.5 J	0.087 U	0.087 U	0.087 U	0.087 U	0.54 J	N/A	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.19 J	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	N/A	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
Cyclohexane	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	N/A	0.067 U	0.067 UJ	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 J	0.28 J	0.13 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	N/A	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	N/A	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	N/A	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Methyl acetate	0.37 UJ	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	N/A	0.37 U	0.37 UJ	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Methyl tert-butyl ether	0.16 J	0.11 U	0.11 U	0.11 U	0.11 U	0.57 J	1.3 J	0.11 U	N/A	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylcyclohexane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	N/A	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	N/A	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
o-Xylene	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	N/A	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	N/A	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Tetrachloroethene	9.9	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	120	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	6.3	0.18 U	0.22 J	0.18 U	0.18 U	0.18 U
Toluene	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	N/A	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
trans-1,2-Dichloroethene	0.16 J	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	N/A	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	N/A	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene	41	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.7	N/A	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.32 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Trichlorofluoromethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	N/A	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	N/A	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Note:

All concentrations are reported in parts per billion (ug/L

U = Non Detection

J = Estimated Value

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	PW-04-06-3013	PW-04-07-SP13	PW-06-01-SP13	PW-06-02-SP13	PW-06-03-SP13	PW-06-04-SP13	PW-06-05-SP13	PW-06-06-SP13	PW-06-07-SP13	PW-07-01-SP13	PW-07-02-SP13	PW-07-03-SP13	PW-07-04-SP13	PW-07-05-SP13	PW-07-06-SP13	PW-07-07-SP13	S1-325-SP13	S-1-450-SP13	S-1-450-SP13F	W01-120-SP13	W-01-75-SP13
LAB ID	160-2089-2	160-2089-3	160-2187-1	160-2187-2	160-2187-3	160-2187-4	160-2187-5	160-2187-6	160-2187-7	160-2187-12	160-2187-11	160-2112-10	160-2112-13	160-2112-9	160-2187-10	160-2112-12	160-2163-2	160-2163-6	160-2163-7	160-2089-7	160-2089-8
SAMPLE DATE	4/11/2013	4/11/2013	4/21/2013	4/21/2013	4/21/2013	4/21/2013	4/21/2013	4/21/2013	4/21/2013	4/22/2013	4/22/2013	4/15/2013	4/15/2013	4/15/2013	4/22/2013	4/15/2013	4/18/2013	4/18/2013	4/18/2013	4/11/2013	4/11/2013
URANIUM																					
Uranium	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0627	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0828	0.0618 U	0.0618 U	0.0618 U
NICKEL																					
Nickel	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	62	13 U	13 U	13 U
VOCs																					
1,1,1-Trichloroethane	0.069 U	0.069 U	0.069 U	0.51 J	0.48 J	0.069 U	0.069 U	0.069 U	0.069 U	0.6 J	0.19 J	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.92 J	0.36 J	N/A	0.069 U	0.069 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	N/A	0.098 U	0.098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1	N/A	0.1 U	0.1 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	N/A	0.15 U	0.15 U
1,1-Dichloroethane	0.068 U	0.068 U	0.068 U	0.24 J	0.37 J	0.068 U	0.068 U	0.068 U	0.068 U	0.5 J	0.14 J	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.38 J	0.068 U	N/A	0.068 U	0.66 J
1,1-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.32 J	0.083 U	0.083 U	0.083 U	0.083 U	0.61 J	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	1.1	0.67 J	N/A	0.083 U	0.083 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	N/A	0.087 U	0.087 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	N/A	0.078 U	0.16 UJ
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	N/A	0.41 U	0.41 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	N/A	0.06 U	270
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.1 U	0.1 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	N/A	0.097 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	N/A	0.078 U	0.078 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	N/A	0.12 U	0.12 U
1,4-Dioxane	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 UJ	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	N/A	1.2 U	1.2 U
2-Butanone (MEK)	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	N/A	0.52 U	0.52 U
2-Hexanone	0.22 U	0.22 U	0.22 U	0.31 J	0.22 U	0.29 J	0.22 U	0.28 J	0.22 U	0.27 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	N/A	0.22 U	0.3 J
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	N/A	0.12 U	0.12 U
Acetone	1.4 UJ	1.2 UJ	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.1 J	0.34 U	0.34 U	2.3	0.68 J	0.66 J	0.34 U	0.8 J	1.3 UJ	1.5 UJ	N/A	0.9 UJ	1.5 UJ
Benzene	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	N/A	0.064 U	0.064 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	N/A	0.088 U	0.088 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	N/A	0.17 U	0.17 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	N/A	0.25 U	0.25 U
Carbon disulfide	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	N/A	0.051 U	0.051 U
Carbon tetrachloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	1.9	3.7	N/A	0.13 U	0.13 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	N/A	0.15 U	0.15 U
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	N/A	0.099 U	0.099 U
Chloroform	0.1 U	0.12 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 J	0.33 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.38 J	0.55 J	N/A	0.1 U	0.11 J
Chloromethane	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	N/A	0.077 U	0.12 J
cis-1,2-Dichloroethene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.51 J	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.81 J	15	N/A	1.2	39
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	N/A	0.073 U	0.073 U
Cyclohexane	0.067 U	0.067 U	0.067 UQ	0.067 UQ	0.067 UQ	0.067 UQ	0.067 UQ	0.067 UQ	0.067 U	0.067 UQ	0.067 UQ	0.067 U	0.067 U	0.067 U	0.067 UQ	0.067 U	0.067 U	0.067 U	N/A	0.067 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.14 J	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	N/A	0.084 U	0.084 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	N/A	0.086 U	74
Isopropylbenzene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	N/A	0.083 U	0.083 U
Methyl acetate	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	N/A	0.37 U	0.37 U
Methyl tert-butyl ether	0.11 U	0.11 U	15	0.11 U	0.11 U	0.18 J	0.11 U	0.27 J	0.11 U	1.1 J	0.11 U	0.11 U	0.11 U	4.5	0.11 U	0.11 U	0.11 U	0.11 U	N/A	0.11 U	0.11 U
Methylcyclohexane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.1 U	0.1 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	N/A	0.27 U	0.27 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	N/A	0.14 U	260
o-Xylene	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	N/A	0.063 U	120
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	N/A	0.074 U	0.074 U
Tetrachloroethene	0.18 U	0.18 U	0.18 U	0.18 U	0.4 J	1.1	0.77 J	3.6	110	0.42 J	0.18 U	0.18 U	0.18 U	0.88 J	0.18 U	0.18 U	18	270	N/A	4.4	180
Toluene	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	N/A	0.072 U	0.99 J
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	N/A	0.083 U	0.57 J
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	N/A	0.083 U	0.083 U
Trichloroethene	0.25 U	0.25 U	0.25 U	0.25 U	0.55 J	0.25 U	0.25 U	0.25 U	1.5	0.55 J	0.25 U	0.25 U	0.25 U	2.9	0.25 U	0.25 U	16	130	N/A	3.1	250
Trichlorofluoromethane	0.11 U	0.11 U	0.15 J	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	N/A	0.11 U	0.11 U
Vinyl chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	N/A	0.084 U	0.084 U

Note:

All concentrations are reported in parts per billion (ug/L

U = Non Detection

J = Estimated Value

Table 3.1-1 Complete Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	W-03-112-SP13	W-03-72-SP13	W-10-120-SP13	W-10-71-SP13	W-11-70-SP13	W-12-120-SP13	W-12-70-2013	W-14-150-SP13	W-16-148-SP13	W-17-130-SP13	W-18-150-SP13	W-19-110-SP13	W-19-150-SP13	W20-120-SP13	W20-160-SP13	W-22-95-SP13	W-23-110-SP13	W-23-110-SP13F	W-24-260-SP13	W-25-150-SP13	W-25-188-SP13
LAB ID	160-2089-12	160-2089-14	160-2089-17	160-2089-19	160-2089-22	160-2112-1	160-2089-11	160-2089-6	160-2112-4	160-2089-21	160-2163-9	160-2089-25	160-2089-26	160-2089-28	160-2089-29	160-2089-23	160-2112-16	160-2112-17	160-2133-7	160-2112-18	160-2163-13
SAMPLE DATE	4/10/2013	4/10/2013	4/10/2013	4/10/2013	4/11/2013	4/15/2013	4/11/2013	4/11/2013	4/15/2013	4/11/2013	4/18/2013	4/12/2013	4/12/2013	4/12/2013	4/12/2013	4/11/2013	4/15/2013	4/15/2013	4/16/2013	4/16/2013	4/18/2013
URANIUM																					
Uranium	0.0618 U	0.81	0.0618 U	0.136	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.114	0.17	0.0979	0.0618 U	0.0618 U	0.0758	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.288	0.0765	0.0688
NICKEL																					
Nickel	13 U	13 U	13 U	13 U	29 J	41	13 U	17 J	16 J	23 J	110	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
VOCs																					
1,1,1-Trichloroethane	0.069 U	0.069 U	0.25 J	0.069 U	0.069 U	0.17 U	0.069 U	0.069 U	0.35 U	0.069 U	0.069 U	0.69 U	0.35 U	0.069 U	0.069 U	0.069 UJ	0.069 U	N/A	0.069 U	0.069 U	0.069 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.25 U	0.098 U	0.098 U	0.49 U	0.098 U	0.098 U	0.98 U	0.49 U	0.098 U	0.098 U	0.098 U	0.098 U	N/A	0.098 U	0.098 U	0.098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.51 U	0.1 U	0.1 U	1 U	0.51 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.58 J	0.1 U	0.1 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.38 U	0.15 U	0.15 U	0.75 U	0.15 U	0.15 U	1.5 U	0.75 U	0.15 U	0.15 U	0.15 UJ	0.15 U	N/A	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.17 U	0.068 U	0.068 U	0.34 U	0.068 U	0.068 U	0.68 U	0.34 U	0.11 J	0.54 J	0.068 U	0.068 U	N/A	0.35 J	0.068 U	0.068 U
1,1-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.42 U	0.083 U	3	0.83 U	0.99 J	0.083 U	2.3	0.083 U	0.083 U	N/A	1.4	0.083 U	0.91 J
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.22 U	0.087 U	0.087 U	0.44 U	0.087 U	0.087 U	0.87 U	0.44 U	0.087 U	0.087 U	0.087 U	0.087 U	N/A	0.087 U	0.087 U	0.087 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	0.083 UJ	0.078 U	0.2 U	0.078 U	0.078 U	0.39 U	0.078 U	0.078 U	0.78 U	0.39 U	0.078 U	0.24 UJ	0.078 U	0.078 U	N/A	0.61 J	0.078 U	0.49 J
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.41 U	0.41 U	2.1 U	0.41 U	0.41 U	4.1 U	2.1 U	0.41 U	0.41 U	0.41 U	0.41 U	N/A	0.41 U	0.41 U	0.41 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.64 U	0.13 U	0.13 U	1.3 U	0.64 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U	0.13 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.13 J	0.06 U	0.06 U	0.15 U	0.06 U	0.06 U	0.3 U	0.06 U	0.06 U	1.4 J	0.51 J	0.78 J	110	0.06 U	0.06 U	N/A	0.41 J	0.96 J	70
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.24 U	0.097 U	0.097 U	0.49 U	0.097 U	0.097 U	0.97 U	0.49 U	0.097 U	0.097 U	0.097 U	0.097 U	N/A	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.2 U	0.078 U	0.078 U	0.39 U	0.078 U	0.078 U	0.78 U	0.39 U	0.078 U	0.078 U	0.078 U	0.078 U	N/A	0.078 U	0.078 U	0.63 J
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.29 U	0.12 U	0.12 U	0.58 U	0.12 U	0.12 U	1.2 U	0.58 U	0.12 U	0.12 U	0.12 U	0.12 U	N/A	0.12 U	0.12 U	3
1,4-Dioxane	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 UJ	1.2 U	1.2 U	1.2 U	1.8 J	1.2 U	1.2 U	1.2 U	N/A	1.2 U	1.2 U	1.2 U
2-Butanone (MEK)	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	1.3 U	0.52 U	0.52 U	2.6 U	0.52 U	0.52 U	5.2 U	2.6 U	0.52 U	0.52 U	0.52 U	0.52 U	N/A	0.52 U	0.52 U	0.52 U
2-Hexanone	0.22 U	0.27 J	0.22 U	0.22 U	0.22 U	0.56 U	0.22 U	0.22 U	1.1 U	0.22 U	0.22 U	2.2 U	1.1 U	0.22 U	0.22 U	0.4 J	0.22 U	N/A	0.22 U	0.22 U	0.22 U
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.3 U	0.12 U	0.12 U	0.61 U	0.12 U	0.12 U	1.2 U	0.61 U	0.12 U	0.12 U	0.12 U	0.12 U	N/A	0.12 U	0.12 U	0.12 U
Acetone	1.3 UJ	1.8 UJ	0.84 UJ	1.7 UJ	1.2 UJ	0.86 U	1.6 UJ	0.93 UJ	2.6 UJ	0.96 UJ	1.3 UJ	8.4 UJ	4 UJ	1.4 UJ	1 UJ	1.5 UJ	0.81 J	N/A	0.49 UJ	1.3 J	0.66 J
Benzene	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.16 U	0.064 U	0.064 U	0.32 U	0.064 U	0.064 U	0.64 U	0.32 U	0.064 U	0.064 U	0.064 UJ	0.064 U	N/A	0.064 U	0.064 U	0.064 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.67 U	0.13 U	0.13 U	1.3 U	0.67 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.22 U	0.088 U	0.088 U	0.44 U	0.088 U	0.088 U	0.88 U	0.44 U	0.088 U	0.088 U	0.088 U	0.088 U	N/A	0.088 U	0.088 U	0.088 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.42 U	0.17 U	0.17 U	0.83 U	0.17 U	0.17 U	1.7 U	0.83 U	0.17 U	0.17 U	0.17 U	0.17 U	N/A	0.17 U	0.17 U	0.17 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.63 U	0.25 U	0.25 U	1.3 U	0.25 U	0.25 U	2.5 U	1.3 U	0.25 U	0.25 U	0.25 U	0.25 U	N/A	0.25 U	0.25 U	0.25 U
Carbon disulfide	0.051 U	0.064 J	0.051 U	0.051 U	0.051 U	0.13 U	0.051 U	0.051 U	0.26 U	0.051 U	0.051 U	0.51 U	0.26 U	0.051 U	0.051 U	0.051 U	0.051 U	N/A	0.051 U	0.051 U	0.051 U
Carbon tetrachloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.31 U	0.13 U	0.13 U	0.63 U	0.13 U	0.13 U	1.3 U	0.63 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U	0.13 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.37 U	0.15 U	0.15 U	0.74 U	0.15 U	0.15 U	1.5 U	0.74 U	0.15 U	0.99 J	0.15 U	0.15 U	N/A	0.15 U	0.15 U	2.6
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.25 U	0.099 U	0.099 U	0.5 U	0.099 U	0.099 U	0.99 U	0.5 U	0.099 U	0.099 U	0.099 U	0.099 U	N/A	0.099 U	0.099 U	0.099 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.26 U	0.1 U	0.1 U	3 J	0.1 U	0.1 U	1 U	11	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.1 U	0.1 U	0.1 U
Chloromethane	0.077 UJ	0.077 U	0.077 U	0.077 U	0.077 U	0.19 U	0.077 U	0.077 U	0.39 U	0.077 U	0.077 U	0.77 U	0.39 U	0.077 U	0.077 U	0.077 U	0.077 U	N/A	0.077 U	0.077 U	0.077 U
cis-1,2-Dichloroethene	0.68 J	6.8	0.13 J	0.087 U	0.087 U	0.22 U	0.087 U	0.087 U	3.8 J	0.087 U	470	15	300	2.9	18	0.087 U	0.087 U	N/A	7.1	0.087 U	17
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.18 U	0.073 U	0.073 U	0.37 U	0.073 U	0.073 U	0.73 U	0.37 U	0.073 U	0.073 U	0.073 U	0.073 U	N/A	0.073 U	0.073 U	0.073 U
Cyclohexane	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.17 U	0.067 U	0.067 U	0.34 U	0.067 U	0.067 U	0.67 U	0.34 U	0.067 U	0.067 U	0.067 U	0.067 U	N/A	0.067 U	0.067 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.64 U	0.13 U	0.13 U	1.3 U	0.64 U	0.13 U	0.13 U	0.13 U	0.13 U	N/A	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.42 U	0.084 U	0.084 U	0.84 U	0.42 U	0.084 U	0.084 U	0.084 U	0.084 U	N/A	0.084 U	0.084 U	0.084 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.22 U	0.086 U	0.086 U	0.43 U	0.086 U	0.086 U	0.86 U	0.43 U	0.086 U	0.086 U	0.086 U	0.086 U	N/A	0.086 U	0.086 U	0.086 U
Isopropylbenzene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.42 U	0.083 U	0.083 U	0.83 U	0.42 U	0.083 U	0.48 J	0.083 U	0.083 U	N/A	0.083 U	0.083 U	0.083 U
Methyl acetate	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.92 U	0.37 U	0.37 U	1.8 U	0.37 U	0.37 U	3.7 U	1.8 U	0.37 U	0.37 U	0.37 U	0.37 U	N/A	0.37 U	0.37 U	0.37 U
Methyl tert-butyl ether	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.29 U	0.11 U	0.11 U	0.57 U	0.11 U	0.61 J	1.1 U	0.71 J	0.15 J	0.33 J	0.11 U	0.11 U	N/A	0.11 U	0.11 U	0.11 U
Methylcyclohexane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.26 U	0.1 U	0.1 U	0.52 U	0.1 U	0.1 U	1 U	0.52 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	0.1 U	0.1 U	0.1 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.68 U	0.27 U	0.27 U	1.4 U	0.27 U	0.27 U	2.7 U	1.4 U	0.27 U	0.27 U	0.27 U	0.27 U	N/A	0.27 U	0.27 U	0.27 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.36 U	0.14 U	0.14 U	0.71 U	0.14 U	0.14 U	1.4 U	0.71 U	0.14 U	0.14 U	0.14 U	0.14 U	N/A	0.14 U	0.14 U	0.14 U
o-Xylene	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.16 U	0.063 U	0.063 U	0.32 U	0.063 U	0.063 U	0.63 U	0.32 U	0.063 U	0.063 U	0.063 U	0.063 U	N/A	0.063 U	0.063 U	0.063 U
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.19 U	0.074 U	0.074 U	0.37 U	0.074 U	0.074 U	0.74 U	0.37 U	0.074 U	0.074 U	0.074 U	0.074 U	N/A	0.074 U	0.074 U	0.074 U
Tetrachloroethene	10	16	390	3.3	0.18 U	280	0.18 U	0.25 J	600	120 J	250	1800	1100	21	130	8.2	28	N/A	14	0.9 J	8.9
Toluene	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.18 U	0.072 U	0.072 U	0.36 U	0.072 U	0.072 U	0.72 U	0.36 U	0.072 U	0.072 U	0.072 U	0.072 U	N/A	0.072 U	0.072 U	0.072 U
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.42 U	0.083 U	2.6	0.83 U	1.7 J	0.1 J	0.42 J	0.083 U	0.083 U	N/A	0.083 U	0.083 U	0.083 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.42 U	0.083 U	0.083 U	0.83 U	0.42 U	0.083 U	0.083 U	0.083 U	0.083 U	N/A	0.083 U	0.083 U	0.083 U
Trichloroethene	1	1.9	0.25 J	4.3	0.25 U	0.63 U	0.25 U	0.25 U	11	0.54 J	120	24	190	31	37	28	3.4	N/A	10	1.6	22
Trichlorofluoromethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.28 U	0.11 U	0.11 U	0.57 U	0.11 U	0.11 U	1.1 U	0.57 U	0.11 U	0.11 U	0.11 UJ	0.11 U	N/A	0.11 U	0.11 U	0.11 U
Vinyl chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.42 U	0.084 U	26	0.84 U	2.4 J	0.084 U	5.7	0.084 U	0.084 U	N/A	0.084 U	0.084 U	7.8

Note:

All concentrations are reported in parts per billion (ug/L

U = Non Detection

J = Estimated Value

Table 3.1-2 Complete Trip Blank and Rinsate Blank Results for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	RB-01-SP13	RB-02-SP13	RB-03-SP13	RB-04-SP13	RB-05-SP13	TB01-SP13	TB02-SP13	TB-03-SP13	TB-04-SP13	TB-05-SP13	TB-06-SP13	TB-07-SP13	TB-08-SP13
LAB ID	160-2089-24	160-2112-27	160-2112-7	160-2187-25	160-2198-25	160-2089-27	160-2112-28	160-2133-14	160-2163-38	160-2187-32	160-2198-29	160-2215-37	160-2215-38
SAMPLE DATE	4/12/2013	4/16/2013	4/15/2013	4/22/2013	4/24/2013	4/12/2013	4/16/2013	4/17/2013	4/19/2013	4/23/2013	4/24/2013	4/25/2013	4/25/2013
URANIUM													
Uranium	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NICKEL													
Nickel	13 U	13 U	13 U	13 U	13 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOCs													
1,1,1-Trichloroethane	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
1,2,4-Trichlorobenzene	0.18 J	0.19 UJ	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dibromoethane (EDB)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-Dichlorobenzene	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane	1.2 U	1.2 U	1.2 U	10	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Butanone (MEK)	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
2-Hexanone	0.22 U	0.42 J	0.22 U	0.22 U	0.22 U	0.22 U	0.29 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
4-Methyl-2-pentanone (MIBK)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Acetone	6.1	3.8 UJ	3.4	3.8 UJ	3.9 UJ	1.6 UJ	2.8 UJ	1.3 UJ	1.1 J	1.3 UJ	1.4 J	1.3 UJ	1.1 UJ
Benzene	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Carbon disulfide	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon tetrachloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.12 J	0.099 U	0.099 U	0.15 J	0.099 U	0.099 U	0.099 U	0.099 U
Chloroform	0.1 U	0.2 J	0.1 U	0.15 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
cis-1,2-Dichloroethene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
Cyclohexane	0.067 U	3.3	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UQ	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Methyl acetate	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Methyl tert-butyl ether	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylcyclohexane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UQ	0.1 U	0.1 UJ	0.1 U	0.1 U
Methylene Chloride	0.27 U	0.71 J	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
m-Xylene & p-Xylene	0.14 U	0.14 U	0.58 J	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
o-Xylene	0.063 U	0.063 U	0.27 JM	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Tetrachloroethene	0.18 U	0.18 U	0.18 U	0.18 U	1.1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.28 J	0.18 U	0.18 U
Toluene	0.072 U	0.73 J	0.93 J	0.4 J	0.21 J	0.11 J	0.075 J	0.072 U	0.082 J	0.072 U	0.072 U	0.072 U	0.072 U
trans-1,2-Dichloroethene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Trichlorofluoromethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-3 Complete Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-10-SU13	MW-11-SU13	MW-12-SU13	MW-13D-SU13	MW-13S-SU13	MW-14DD-SU13	MW-14D-SU13	MW-14S-SU13	MW-15DD-SU13	MW-15D-SU13	MW-15S-SU13	MW-16D-SU13	MW-16S-SU13	MW-17S-SU13	MW-18I-SU13	MW-18S-SU13	MW-19D-SU13	MW-19S-SU13	MW-201-220-SU13	MW-202-220-SU13
LAB ID	160-3532-6	160-3575-5	160-3575-4	160-3543-17	160-3429-9	160-3429-6	160-3429-4	160-3429-5	160-3429-12	160-3429-14	160-3429-8	160-3377-11	160-3377-8	160-3441-3	160-3414-10	160-3414-13	160-3398-9	160-3398-12	160-3575-2	160-3532-1
SAMPLE DATE	08/23/2013	08/28/2013	08/28/2013	08/27/2013	08/19/2013	08/19/2013	08/19/2013	08/19/2013	08/19/2013	08/19/2013	08/19/2013	08/13/2013	08/13/2013	08/20/2013	08/16/2013	08/16/2013	08/14/2013	08/14/2013	08/28/2013	8/22/2013
URANIUM																				
Uranium	0.0952	0.1 U	9.37	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.118	0.1 U	0.318 J	431	8840	0.1 U	6.10	0.1 U	N/A
ISOTOPIC URANIUM																				
Uranium-233/234	N/A	N/A	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2660 J	N/A	N/A	N/A	N/A
Uranium-235/236	N/A	N/A	0.167	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	137 J	N/A	N/A	N/A	N/A
Uranium-238	N/A	N/A	3.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2720 J	N/A	N/A	N/A	N/A
NICKEL																				
Nickel	40 U	20 J	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	14 J	40 U	40 U	40 U	40 U
FERROUS IRON																				
Ferrous iron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1 UHF	0.1 UHF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOCs																				
1,1,1-Trichloroethane	5 U	2.5 U	10 U	1 U	1 U	0.27 J	0.91 J	1 U	0.14 J	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1.2	1 U	1.3	0.21 J
1,1,2,2-Tetrachloroethane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5 U	2.5 U	10 U	1 U	1 U	0.39 J	1.4	1 U	0.39 J	1 U	1 U	1.4	1 U	1 U	1 U	1 U	1.8	1 U	1 U	0.47 J
1,1-Dichloroethene	5 U	2.5 U	10 U	1 U	1 U	0.37 J	0.81 J	1 U	1 U	1 U	1 U	0.52 J	1 U	1 U	1 U	1 U	1.1	1 U	0.96 J	0.31 J
1,2,3-Trichlorobenzene	10 U	5 UQ	20 UQ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UQ	2 U
1,2,4-Trichlorobenzene	25 U	13 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	0.46 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	25 U	13 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	25 U	13 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	25 U	13 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	6 UJ	2 UJ	20 U	2 U	2 U	2	2	1.7 J	4.3 UJ	1.4 J	0.37 J	4.3 UJ	3.8 UJ	1.6 UJ	2.9	5.7 UJ	3.3 J	2.7 J	0.94 J	2.2 UJ
Benzene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	5 U	2.5 U	10 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	10 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	10 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5 U	2.5 U	10 U	1 U	1 U	1 U	0.35 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	10 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	10 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	5 U	2.5 U	2.2 J	1 U	1 U	0.13 J	0.14 J	1 U	1 U	1 U	11	1 U	0.19 J	1 U	6.4	0.15 J	0.15 J	1 U	0.42 J	0.13 J
Chloromethane	10 U	5 U	20 U	2 U	2 U	0.18 J	2 U	2 U	2 U	2 U	2 U	0.2 J	0.16 J	2 U	2 U	2 U	0.19 J	0.42 J	2 U	2 U
cis-1,2-Dichloroethene	0.77 J	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.11 J	1 U	1 U	1 U	0.27 J	0.16 J	1 U	0.59 J	1 U
cis-1,3-Dichloropropene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	5 U	2.5 U	10 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	10 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate	130 U	63 U	250 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Methyl tert-butyl ether	10 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.21 J	2 U	2 U	2 U	0.89 J	2 U	2 U	2 U	0.11 J	2 U
Methylcyclohexane	20 U	10 U	40 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-Xylene & p-Xylene	10 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	5 U	2.5 U	10 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1600	240	1100	1 U	1 U	1 U	1 U	0.36 J	1 U	1 U	1 U	0.32 J	1 U	1.4	0.85 J	2	0.77 UJ	0.52 UJ	0.2 J	0.56 J
Toluene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.12 J	0.11 J	1 U	1 U	1 U	1 U	1 U	1 U	0.19 J
trans-1,2-Dichloroethene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	8.6	2.5 U	7.8 J	1 U	1 U	1 U	0.85 J	1 U	1 U	1 U	1 U	2.8	1 U	0.59 J	1 U	0.49 J	4.6	1 U	7.1	0.7 J
Trichlorofluoromethane	5 U	2.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	10 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-3 Complete Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-202-380-SU13	MW-202-495-SU13	MW-203-160-SU13	MW-203-360-SU13	MW-203-440-SU13	MW-204-320-SU13	MW-205-285-SU13	MW-205-470-SU13	MW-206-320-SU13	MW-206-470-SU13	MW-207-170-SU13	MW-207-250-SU13	MW-207-320-SU13	MW-208-350-SU13	MW-208-540-SU13	MW-209-380-SU13
LAB ID	160-3532-2	160-3563-12	160-3543-19	160-3543-16	160-3543-15	160-3563-5	160-3543-2	160-3543-6	160-3543-4	160-3543-9	160-3532-7	160-3532-9	160-3532-12	160-3543-10	160-3543-11	160-3532-17
SAMPLE DATE	8/22/2013	8/28/2013	08/27/2013	08/27/2013	08/27/2013	08/27/2013	08/26/2013	08/26/2013	08/26/2013	08/26/2013	08/23/2013	08/23/2013	08/23/2013	8/26/2013	8/26/2013	8/26/2013
URANIUM																
Uranium	N/A	N/A	0.1 U	0.1 U	0.1 U	0.1 U	0.248	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	N/A	N/A
ISOTOPIC URANIUM																
Uranium-233/234	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-235/236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NICKEL																
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	14 J
FERROUS IRON																
Ferrous iron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOCs																
1,1,1-Trichloroethane	19	1 U	0.75 J	3.4	1 U	0.12 J	0.15 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,1,2,2-Tetrachloroethane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5 U	1 U	1 U	1 U	1 U	0.12 J	2.1	1 U	2.5 U	1 U	1 U	1 U	1 U	1.4	1 U	5
1,1,2-Trichloroethane	1.2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,1-Dichloroethane	1.2 J	0.19 J	0.63 J	0.52 J	1 U	0.21 J	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 J
1,1-Dichloroethene	20	1 U	2.8	2	1 U	0.12 J	0.24 J	1 U	2.5 U	1 U	1 U	1 U	1 U	0.14 U	1 U	6.7
1,2,3-Trichlorobenzene	10 U	2 UQ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
1,2,4-Trichlorobenzene	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U
1,2-Dibromo-3-Chloropropane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,2-Dibromoethane (EDB)	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,2-Dichlorobenzene	5 U	1 U	0.75 J	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	0.82 J	1 U	2.5 U
1,2-Dichloroethane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,2-Dichloropropane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,3-Dichlorobenzene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,4-Dichlorobenzene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,4-Dioxane	53 M	5 U	2 J	1.9 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5	5 U	5.8 M
2-Butanone (MEK)	25 U	5 U	5 U	5 U	5 U	1.3 J	2.3 J	5 U	13 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U
2-Hexanone	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U
4-Methyl-2-pentanone (MIBK)	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U
Acetone	5.7 J	6.9	1.2 UJ	3.1 J	1.5 UJ	11	20	2 U	4.2 UJ	2 U	3.5 UJ	3.5 UJ	5.7 J	2.7 UJ	2.1 UJ	8.4 UJ
Benzene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Bromochloromethane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Bromodichloromethane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Bromoform	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Bromomethane	10 U	0.38 J	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
Carbon disulfide	10 U	0.2 J	2 U	2 U	2 U	0.43 J	0.18 J	2 U	5 U	2 U	2 U	2 U	2 U	0.23 U	2 U	5 U
Carbon tetrachloride	0.68 J	1 U	1 U	0.16 J	1 U	1 U	0.15 J	1 U	2.5 U	1 U	0.32 J	1 U	1 U	0.17 J	1 U	16
Chlorobenzene	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
Chloroethane	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
Chloroform	5 U	0.17 J	0.25 J	0.15 U	1 U	0.55 J	0.93 J	1 U	0.35 J	0.68 J	0.18 J	21	1 U	2.6	1 U	2.1 J
Chloromethane	10 U	0.15 J	2 U	2 U	2 U	2 U	0.2	0.13 J	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
cis-1,2-Dichloroethene	7.3	1.8	2.2 U	7.1	1 U	2.1	1.4 U	1 U	2.4 J	1 U	1.5	1 U	1 U	0.72 J	1 U	120
cis-1,3-Dichloropropene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Cyclohexane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Dibromochloromethane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Dichlorodifluoromethane	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
Ethylbenzene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Isopropylbenzene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Methyl acetate	130 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	63 U	25 U	25 U	25 U	25 U	25 U	25 U	63 U
Methyl tert-butyl ether	10 U	2 U	2 U	0.14 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	0.15 J	2 U	2 U	5 U
Methylcyclohexane	20 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	10 U	4 U	4 U	4 U	4 U	4 U	4 U	10 U
Methylene Chloride	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
m-Xylene & p-Xylene	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
o-Xylene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Styrene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Tetrachloroethene	1.2 J	1 U	54	4.1	1 U	17	100	0.34 J	410	0.83 J	330	22	1 U	61	2.6	180
Toluene	5 U	0.21 J	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	0.36 J	2.5 U
trans-1,2-Dichloroethene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.92 J
trans-1,3-Dichloropropene	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Trichloroethene	680	14	30	120	1 U	39	110	1 U	3.6	1 U	3.8	0.35 J	1 U	59 U	0.54 J	580
Trichlorofluoromethane	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Vinyl chloride	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-3 Complete Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-209-530-SU13	MW-20D-SU13	MW-20I-SU13	MW-20S-SU13	MW-210-280-SU13	MW-210-380-SU13	MW-210-470-SU13	MW-211-190-SU13	MW-211-250-SU13	MW-211-455-SU13	MW-212-580-SU13	MW-213-570-SU13	MW-214-570-SU13	MW-21D-SU13	MW-21I-SU13	MW-21S-SU13	MW-22D-SU13
LAB ID	160-3532-18	160-3414-5	160-3414-4	160-3414-6	160-3532-11	160-3532-5	160-3532-10	160-3543-12	160-3543-13	160-3543-14	160-3464-1	160-3563-8	160-3563-10	160-3377-4	160-3377-5	160-3377-9	160-3377-1
SAMPLE DATE	8/26/2013	08/15/2013	08/15/2013	08/15/2013	8/23/2013	8/23/2013	8/23/2013	8/27/2013	8/27/2013	8/27/2013	8/20/2013	8/28/2013	08/28/2013	08/14/2013	08/14/2013	08/14/2013	08/14/2013
URANIUM																	
Uranium	N/A	0.1 U	7.31	11700	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1 U	0.1 U	0.1 U	0.1 U	0.098
ISOTOPIC URANIUM																	
Uranium-233/234	N/A	N/A	N/A	3660 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-235/236	N/A	N/A	N/A	184 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-238	N/A	N/A	N/A	3730 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NICKEL																	
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
FERROUS IRON																	
Ferrous iron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOCs																	
1,1,1-Trichloroethane	1 U	0.21 J	1 U	1 U	1 U	0.76 J	1 U	0.3 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	0.11 J	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	0.23 J	1 U	1 U	0.13 J	0.47 J	0.11 J	2.1	0.41 J	0.4 J	1 U	1 U	1 U	0.13 J	1 U	1 U	0.17 J
1,1-Dichloroethene	1 U	0.36 J	1 U	1 U	1 U	0.65 J	1 U	0.37	1 U	1 U	1 U	1 U	1 U	0.12 J	1 U	1 U	1 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	2	2 U	2 U	2 U	2 UQ	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	0.29 J	5 U	5 U	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1.4	1 U	1.7	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	5 U	1.8 JM	1.7 JM	2.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	5.7 J	1.7 UJ	1.7 UJ	2.2	4 UJ	4.4 UJ	7 J	1.7 UJ	2 U	2.4 UJ	2.8 UJ	0.94 UJ	0.87 J	3.4 UJ	6.3 UJ	3.5 UJ	4.3 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	2 U	2 U	2 U	2 U	2 U	2 U	0.14 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	0.62 J	6.5	1.1	0.54 J	2	0.2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.7
Chloromethane	2 U	2 U	0.18 UJ	2 U	0.1 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.19 J	0.26 J	0.18 J	0.35 J
cis-1,2-Dichloroethene	0.11 J	1 U	1 U	1 U	12	13	8	0.67 J	0.27 J	1 U	0.24 J	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	25 U
Methyl tert-butyl ether	2 U	2 U	0.35 J	2 U	2 U	2 U	2 U	0.21 J	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methylcyclohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.81 J	0.78 J	1 U
Tetrachloroethene	13	0.7 UJ	0.33 UJ	8.4	180	220	13	0.62 J	0.47 J	1 U	6.3	1 U	1 U	0.33 J	1 U	1 U	2.7
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.12 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	0.69 J	0.48 J	0.56 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1.2	1 U	1 U	1 U	25	79	8.1	6.3	1 U	1 U	2.3	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	2 U	2 U	2 U	2 U	0.39 J	2 U	0.82 J	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-3 Complete Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-22I-SU13	MW-22S-SU13	MW-23D-SU13	MW-23I-SU13	MW-23S-SU13	MW-24DD-SU13	MW-24S-SU13	MW-25D-SU13	MW-25I-SU13	MW-25S-SU13	MW-26D-SU13	MW-26S-SU13	MW-27DD-SU13	MW-27D-SU13	MW-27S-SU13	MW-28D-SU13	MW-28I-SU13	MW-28S-SU13	MW-29S-SU13	MW-30D-SU13
LAB ID	160-3377-3	160-3398-19	160-3543-20	160-3543-7	160-3543-18	160-3398-23	160-3398-24	160-3563-3	160-3563-4	160-3441-8	160-3398-10	160-3398-11	160-3543-8	160-3543-5	160-3543-1	160-3464-13	160-3464-10	160-3464-12	160-3429-21	160-3563-7
SAMPLE DATE	08/14/2013	08/15/2013	08/27/2013	08/26/2013	08/27/2013	08/15/2013	08/15/2013	08/27/2013	08/27/2013	08/20/2013	08/14/2013	08/14/2013	08/26/2013	08/26/2013	08/26/2013	08/21/2013	08/21/2013	08/21/2013	08/19/2013	08/28/2013
URANIUM																				
Uranium	0.1 U	22.7	0.214	5.80	11.5	0.1 U	27.4	0.1 U	0.1 U	10.4	0.622	6.71	0.1 U	2.76	1.94	0.130	2.13	1.51	0.0837	0.1 U
ISOTOPIC URANIUM																				
Uranium-233/234	N/A	N/A	N/A	N/A	N/A	N/A	7.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-235/236	N/A	N/A	N/A	N/A	N/A	N/A	0.514	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-238	N/A	N/A	N/A	N/A	N/A	N/A	8.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NICKEL																				
Nickel	40 U	40 U	40 U	40 U	1600	40 U	69	40 U	40 U	15 J	40 U	330	40 U	71	45 J	40 U	40 U	40 U	18 J	15 J
FERROUS IRON																				
Ferrous iron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOCs																				
1,1,1-Trichloroethane	1 U	1 U	0.4 J	0.32 J	1 U	1.3	1 U	1 U	0.11 J	1 U	0.62 J	0.32 J	0.63 J	1 U	1 U	1 U	0.11 J	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.24 J	1 U	0.53 J	0.36 J	1 U	1.7	1 U	1 U	1 U	1 U	0.78 J	0.65 J	0.73 J	1	1 U	1 U	0.14 J	1 U	1 U	0.16 J
1,1-Dichloroethene	1 U	1 U	0.24 J	0.15 U	1 U	1	1 U	1 U	1 U	1 U	0.6 J	0.36 J	0.39 J	1 U	1 J	1 U	0.11 J	1 U	1 U	1 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	0.68 J	0.13 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	3.9 UJ	2.6 J	0.98 UJ	2 U	0.98 UJ	1.6 UJ	1.7 J	0.85 UJ	0.92 UJ	2 U	3.4 J	2.3 J	2 UJ	1.4 UJ	1.3 UJ	1.1 UJ	0.94 UJ	1.3 UJ	1.5 UJ	1.3 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.15 J
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	2	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	5.9	1 U	0.21 J	0.11 J	1 U	0.17 J	1 U	1 U	1 U	1 U	1 U	1 U	0.18 J	7.2	1	4	6.9	0.34 J	1 U	1 U
Chloromethane	0.27 J	0.4 J	2 U	2 U	2 U	2 U	0.34 J	2 U	2 U	2 U	0.17 J	0.22 J	2 U	2	2	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	1 U	6.2	1 U	1 U	1 U	0.11 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate	25 U	25 U	25 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25	25	25 U	25 U	25 U	25 U	25 U
Methyl tert-butyl ether	1.1 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.15 J	2 U	2 U	0.15 J	1.6 J	2 U	2 U	2 U
Methylcyclohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	7.5	1 U
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	0.19 J	5600	3.5	0.21 U	1 U	1.4 J	74	1 U	1 U	1 U	0.75 UJ	0.24 UJ	0.94 J	7.4 U	0.83 U	3.7	0.46 J	10	88	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	30	0.99 J	0.49 J	1 U	5.6	0.44 J	1 U	1 U	1 U	2.9	0.32 J	2.5	0.4 U	1 U	1 U	1 U	0.54 J	0.69 J	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-3 Complete Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-30I-SU13	MW-30S-SU13	MW-31D-SU13	MW-31I-SU13	MW-32D-SU13	MW-33D-SU13	MW-33S-SU13	MW-34-285-SU13	MW-34D-SU13	MW-34S-SU13	MW-39S-SU13	MW-3-SU13	MW-41S-SU13	MW-42I-SU13	MW-43S-SU13	MW-44S-SU13	MW-49S-SU13	MW-4-SU13	MW-50I-SU13	MW-51I-SU13	MW-52D-SU13
LAB ID	160-3563-6	160-3414-8	160-3532-16	160-3532-4	160-3575-6	160-3441-11	160-3464-6	160-3464-17	160-3441-10	160-3464-5	160-3414-19	160-3464-14	160-3398-16	160-3414-14	160-3398-28	160-3414-12	160-3429-7	160-3563-13	160-3429-1	160-3429-19	160-3464-3
SAMPLE DATE	08/27/2013	08/15/2013	08/26/2013	08/23/2013	08/28/2013	08/20/2013	08/20/2013	8/21/2013	08/20/2013	08/20/2013	08/16/2013	08/21/2013	08/15/2013	08/16/2013	08/15/2013	08/16/2013	08/19/2013	08/28/2013	08/19/2013	08/19/2013	08/20/2013
URANIUM																					
Uranium	0.1 U	0.482	0.145	0.1 U	0.1 U	0.237	114	N/A	0.095	0.1 U	0.102	0.1 U	933	149	34.3	19.9	0.741	0.1 U	10.5	0.1 U	0.1 U
ISOTOPIC URANIUM																					
Uranium-233/234	N/A	N/A	N/A	N/A	N/A	N/A	34.4	N/A	N/A	N/A	N/A	N/A	348	44.4	12	5.93	N/A	N/A	N/A	N/A	N/A
Uranium-235/236	N/A	N/A	N/A	N/A	N/A	N/A	2.08	N/A	N/A	N/A	N/A	N/A	17.5	2.05	0.675	0.347	N/A	N/A	N/A	N/A	N/A
Uranium-238	N/A	N/A	N/A	N/A	N/A	N/A	34.6	N/A	N/A	N/A	N/A	N/A	351	46.8	12.5	7.23	N/A	N/A	N/A	N/A	N/A
NICKEL																					
Nickel	40 U	40 U	210	40 U	40 U	15 J	40 U	40 U	40 U	40 U	40 U	140	40 U	40 U	40 U	1000	40 U	40 U	220	31 J	40 U
FERROUS IRON																					
Ferrous iron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.074 JHF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1 UHF	N/A	0.1 UHF	N/A
VOCs																					
1,1,1-Trichloroethane	5.9	1 U	0.26 J	0.69 J	1 U	1 U	10 U	1 U	0.51 J	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.42 J	0.19 J	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	0.17 J	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.31 J	1 U	0.28 J	1	1 U	1 U	10 U	1 U	1.1	1 U	10 U	1 U	1 U	0.13 J	1 U	1 U	1 U	1 U	0.85 J	0.17 J	1 U
1,1-Dichloroethene	4.7	1 U	0.19 J	0.56 J	1 U	1 U	10 U	1 U	0.53 J	1 U	10 U	1 U	1 U	0.26 J	1 U	1 U	1 U	1 U	0.64 J	0.14 J	1 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 UQ	2 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UQ	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.48 J	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	4 J	5 U
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	1.2 UJ	2.7	3.5 UJ	2.8 UJ	0.91 J	0.57 UJ	10 J	1.2 UJ	3.7 J	2.8 UJ	7.6 UJ	1.3 UJ	4.7 UJ	2.1 UJ	1.6 J	2.1	2 U	2 U	2 U	1.4 UJ	3.3 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	20 UQ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	0.11 J	2 U	0.21 J	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	0.81 J	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	1 U	2.8	1 U	1.1	1 U	10 U	5.4	0.24 J	1 U	10 U	1 U	1 U	0.63 J	1 U	1 U	1 U	1 U	1 U	0.15 J	1 U
Chloromethane	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	20 UQ	2 U	0.33 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	0.67 J	1 U	1 U	1 U	0.17 J	0.68 J	10 U	2.9	1 U	1 U	1.8 JD	1 U	1 U	1 U	1 U	1 U	1 U	1.5	1 U	1 U	0.93 J
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate	25 U	25 U	25 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Methyl tert-butyl ether	0.14 J	2 U	0.17 J	2 U	2 U	2 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methylcyclohexane	4 U	4 U	4 U	4 U	4 U	4 U	40 U	4 U	4 U	4 U	40 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	0.53 J	6.5 J	1 U	1 U	0.3 J	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.74 J	1.9
m-Xylene & p-Xylene	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	0.21 J	1	25	0.74 J	20	110	2400	8.2	2.6	1 U	1800 D	18	6.7	0.21 J	160	35	1 U	150	0.54 J	0.64 J	150
Toluene	0.11 J	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.14 J	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1.8	1 U	2.6	1.1	0.67 J	1.2	3.8 J	2.6	0.7 J	1 U	10 U	0.32 J	1 U	1 U	0.56 J	1 U	1 U	2.2	0.66 J	0.38 J	0.96 J
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	2 U	2 U	2 U	2 U	2 U	2 U	20 U	0.4 J	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-3 Complete Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-53S-SU13	MW-55S-SU13	MW-600-SU13	MW-601-SU13	MW-602-SU13	MW-603-SU13	MW-604-SU13	MW-605-SU13	MW-606-SU13	MW-607-SU13	MW-608-SU13	MW-609-SU13	MW-610-SU13	MW-611-SU13	MW-612-SU13	MW-613-SU13	MW-614-SU13	MW-8-SU13	MW-9-SU13	MW-P110-355-SU13
LAB ID	160-3441-12	160-3441-9	160-3398-22	160-3398-17	160-3464-15	160-3377-7	160-3398-4	160-3398-8	160-3414-11	160-3429-13	160-3441-4	160-3464-11	160-3575-1	160-3414-21	160-3429-2	160-3532-8	160-3543-3	160-3575-3	160-3532-3	160-3563-1
SAMPLE DATE	08/20/2013	08/20/2013	08/15/2013	08/15/2013	8/21/2013	08/13/2013	08/14/2013	08/14/2013	08/16/2013	08/19/2013	08/20/2013	08/21/2013	08/28/2013	8/16/2013	8/19/2013	08/23/2013	8/26/2013	08/28/2013	08/23/2013	8/27/2013
URANIUM																				
Uranium	30.7	0.1 U	0.1 U	25.3	N/A	0.1 U	0.1 U	6.32	18.8	0.1 U	0.0652 J	2.00	0.1 U	N/A	N/A	0.1 U	N/A	0.1 U	0.1 U	N/A
ISOTOPIC URANIUM																				
Uranium-233/234	9.51	N/A	0.177 U	N/A	N/A	N/A	N/A	N/A	6.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-235/236	0.199 U	N/A	0.0491 U	N/A	N/A	N/A	N/A	N/A	0.338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-238	10.4	N/A	0.0295 U	N/A	N/A	N/A	N/A	N/A	5.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NICKEL																				
Nickel	40 U	40 U	40 U	13 J	110	40 U	40 U	340	1100	40 U	40 U	40 U	790	40 U	40 U	40 U	40 U	820	40 U	40 U
FERROUS IRON																				
Ferrous iron	0.1 UHF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOCs																				
1,1,1-Trichloroethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	0.34 J	1 U	0.12 J	1 U	0.12 J	1 U	0.15 J	1 U	1 U	1 U	1 U	2.5 U	3.4
1,1,2,2-Tetrachloroethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	4.6
1,1,2-Trichloroethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,1-Dichloroethane	25 U	1 U	0.36 J	1 U	0.31 J	1 U	1 U	0.64 J	1 U	0.38 J	1 U	0.14 J	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.9
1,1-Dichloroethene	25 U	1 U	0.28 J	1 U	4.1	1 U	1 U	0.37 J	1 U	0.32 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	5.1
1,2,3-Trichlorobenzene	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UQ	5 U	5 U
1,2,4-Trichlorobenzene	130 U	5 U	0.16 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	13 U
1,2-Dibromo-3-Chloropropane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,2-Dibromoethane (EDB)	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,2-Dichlorobenzene	25 U	1 U	100	0.11 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,2-Dichloroethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,2-Dichloropropane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,3-Dichlorobenzene	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,4-Dichlorobenzene	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	14	9.3 M
2-Butanone (MEK)	130 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	13 U
2-Hexanone	130 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	13 U
4-Methyl-2-pentanone (MIBK)	130 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	13 U
Acetone	50 U	2 U	2.4 UJ	4.3 J	3.3 UJ	3.5 UJ	3.5 J	2.4 J	3.1	2.6	0.36 UJ	1.3 UJ	1.3 UJ	3.4	2 U	3.3 UJ	2.6 UJ	1.1 UJ	2.7 UJ	2.3 UJ
Benzene	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1.1 J
Bromochloromethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Bromodichloromethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Bromoform	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Bromomethane	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UQ	2 U	2 U	2 U	2 U	5 U	5 U
Carbon disulfide	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Carbon tetrachloride	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	5.2
Chlorobenzene	50 U	2 U	3.2	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Chloroethane	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Chloroform	25 U	15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.9	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1.9 J
Chloromethane	50 U	2 U	2 U	0.33 J	2 U	0.23 J	0.14 J	0.18 J	0.23 J	2 U	2 U	2 U	2 U	0.7 JQ	2 U	2 U	2 U	2 U	5 U	5 U
cis-1,2-Dichloroethene	25 U	1 U	40	5.9	280	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.12 J	0.13 J	1 U	1 U	1 U	2.5 U	28
cis-1,3-Dichloropropene	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Cyclohexane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Dibromochloromethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Dichlorodifluoromethane	50 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Ethylbenzene	25 U	1 U	3.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Isopropylbenzene	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Methyl acetate	630 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	63 U	63 U
Methyl tert-butyl ether	50 U	2 U	2 U	2 U	0.72 J	2 U	2 U	2 U	2 U	2 U	2 U	1.7 J	2 U	4.4	0.13 J	0.13 J	2 U	2 U	5 U	5 U
Methylcyclohexane	100 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	10 U	10 U
Methylene Chloride	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
m-Xylene & p-Xylene	50 U	2 U	23	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U
o-Xylene	25 U	1 U	59	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Styrene	25 U	1 U	1 U	1 U	1 U	0.79 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Tetrachloroethene	9500	1 U	140	4900	210	1 U	6	0.28 UJ	33	1 U	1.3	0.43 J	0.26 J	0.69 J	9.8	1 U	2.6	0.21 J	420	220
Toluene	25 U	1 U	0.24 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.31 J	1 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	25 U	1 U	0.27 J	1 U	2.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	0.69 J
trans-1,3-Dichloropropene	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Trichloroethene	20 J	1 U	240	29	78	1 U	16	0.26 J	1 U	1 U	0.4 J	1 U	1 U	2.6	0.28 J	1 U	0.42 J	1 U	0.63 J	380
Trichlorofluoromethane	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	2.5 U
Vinyl chloride	50 U	2 U	0.69 J	2 U	39	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-3 Complete Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	MW-P110-440-SU13	MW-P114-170R-SU13	MW-P114-290-SU13	MW-P204-470-SU13	PW-02-05-SU13	PW-02-06-SU13	PW-02-07-SU13	PW-06-05-SU13	PW-06-06-SU13	PW-06-07-SU13	PW-07-05-SU13	PW-07-06-SU13	PW-07-07-SU13	S-1-325-SU13	S-1-450-SU13	W-01-120-SU13	W-01-75-SU13	W-02-70-SU13
LAB ID	160-3441-1	160-3464-7	160-3464-8	160-3563-2	160-3398-15	160-3398-20	160-3398-14	160-3532-13	160-3532-15	160-3532-14	160-3414-20	160-3398-3	160-3398-2	160-3441-7	160-3441-2	160-3377-13	160-3398-21	160-3563-11
SAMPLE DATE	8/20/2013	8/21/2013	8/21/2013	8/27/2013	08/15/2013	08/15/2013	08/15/2013	8/24/2013	8/24/2013	8/24/2013	8/16/2013	8/14/2013	8/14/2013	8/20/2013	8/20/2013	08/14/2013	08/15/2013	08/28/2013
URANIUM																		
Uranium	N/A	N/A	N/A	0.1 U	0.1 U	0.145	0.162	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1 U	0.1 U	0.1 U
ISOTOPIC URANIUM																		
Uranium-233/234	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.132 U	N/A
Uranium-235/236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0352 U	N/A
Uranium-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0659 U	N/A
NICKEL																		
Nickel	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	74
FERROUS IRON																		
Ferrous iron	N/A	N/A	N/A	N/A	N/A	0.15 HF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.083 JHF	6.7 HF	N/A	N/A
VOCs																		
1,1,1-Trichloroethane	2.5 U	1 U	7.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.14 J	1 U	1 U	0.97 J	2.5 U	1 U	1 U	1
1,1,2,2-Tetrachloroethane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 J	1 U	1 U	1 U
1,1,2-Trichloroethane	2.5 U	0.25 J	0.16 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,1-Dichloroethane	2.5 U	3	7.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 J	2.5 U	1 U	0.33 J	0.65 J
1,1-Dichloroethene	2.5 U	2	12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2	0.98 J	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 UQ
1,2,4-Trichlorobenzene	13 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,2-Dichlorobenzene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	110	1 U
1,2-Dichloroethane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,2-Dichloropropane	2.5 U	0.17 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,3-Dichlorobenzene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
1,4-Dichlorobenzene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	4 M	1 U
1,4-Dioxane	5 U	3.2 J	7.5	3.4 JM	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	4.4 J	5 U	5 U	5 U	5 U
2-Butanone (MEK)	13 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	5 U	5 U	5 U
2-Hexanone	13 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	13 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13 U	5 U	5 U	5 U
Acetone	11	1.2 UJ	1.6 UJ	5.2 J	3.6 J	2.2 UJ	2.5 UJ	3.1 UJ	2.9 UJ	3.1 UJ	1.7 UJ	3.6 J	3.3 J	1.8 UJ	5 U	4.2 UJ	3.6 UJ	1.6 J
Benzene	2.5 U	0.25 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Bromochloromethane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Bromodichloromethane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Bromoform	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Bromomethane	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UQ	2 U	2 U	2 U	5 U	2 U	2 U	2 U
Carbon disulfide	5 U	2 U	2 U	0.21 J	2 U	0.18 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U
Carbon tetrachloride	1.7 J	0.25 J	1 U	1 U	1 U	1 U	0.22 J	1 U	1 U	1 U	1 U	1 U	1 U	1.8	4.1	1 U	1 U	1 U
Chlorobenzene	5 U	0.17 J	0.27 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	3.3	2 U
Chloroethane	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U
Chloroform	2.5 U	0.67 J	1.1	1 U	1 U	0.29 J	0.28 J	1 U	1 U	0.33 J	1 U	1 U	1 U	0.37 J	0.55 J	1 U	0.12 J	1 U
Chloromethane	5 U	2 U	2 U	2 U	0.62 J	0.23 J	0.35 J	2 U	2 U	2 U	0.34 JQ	0.4 J	2 U	2 U	5 U	0.16 UJ	0.26 UJ	2 U
cis-1,2-Dichloroethene	3.6	29	11	0.22 J	1 U	1 U	0.57 J	1 U	1 U	0.38 J	1 U	1 U	1 U	0.43 J	14	0.54 UJ	36	1.3
cis-1,3-Dichloropropene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Cyclohexane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Dibromochloromethane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Dichlorodifluoromethane	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U
Ethylbenzene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	2.9	1 U
Isopropylbenzene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Methyl acetate	63 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	63 U	25 U	25 U	25 U
Methyl tert-butyl ether	5 U	0.84 J	0.19 J	2 U	0.39 J	1.2 J	2 U	0.23 J	0.15 J	2 U	4.3	2 U	2 U	2 U	5 U	2 U	2 U	2 U
Methylcyclohexane	10 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	10 U	4 U	4 U	4 U
Methylene Chloride	2.5 U	0.28 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
m-Xylene & p-Xylene	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	20	2 U
o-Xylene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	59	1 U
Styrene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Tetrachloroethene	890	6.4	10	0.38 J	0.23 UJ	0.29 UJ	140	0.85 J	0.84 J	83	0.67 J	1 U	1 U	17	440	4.4	140	2.9
Toluene	2.5 U	1 U	1 U	0.13 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	0.25 J	1 U
trans-1,2-Dichloroethene	2.5 U	0.21 J	0.13 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.68 J	1 U	0.22 J	1 U
trans-1,3-Dichloropropene	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Trichloroethene	9.4	230	36	2	1 U	1 U	2.3	1 U	1 U	1.2	2.5	1 U	1 U	17	160	2.5	250	1.2
Trichlorofluoromethane	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	1 U	1 U
Vinyl chloride	5 U	0.59 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	0.77 J	2 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-3 Complete Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	W-03-112-SU13	W-03-72-SU13	W-05-78-SU13	W-06-79-SU13	W-10-120-SU13	W-10-71-SU13	W-11-70-SU13	W-12-120-SU13	W-12-70-SU13	W-14-150-SU13	W-16-148-SU13	W-17-130-SU13	W-18-150-SU13	W-19-110-SU13	W-19-150-SU13	W-20-120-SU13	W-20-160-SU13	W-22-95-SU13	W-23-110-SU13
LAB ID	160-3377-10	160-3377-2	160-3398-7	160-3398-6	160-3464-9	160-3414-7	160-3398-5	160-3563-9	160-3377-6	160-3377-12	160-3414-3	160-3414-9	160-3464-16	160-3414-15	160-3414-17	160-3414-16	160-3414-22	160-3398-1	160-3398-25
SAMPLE DATE	08/13/2013	08/14/2013	08/14/2013	08/14/2013	08/21/2013	08/15/2013	08/14/2013	08/28/2013	08/13/2013	08/14/2013	08/15/2013	08/15/2013	8/21/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	08/14/2013	8/15/2013
URANIUM																			
Uranium	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3.96	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	N/A	N/A	N/A	N/A	N/A	0.1 U	N/A
ISOTOPIC URANIUM																			
Uranium-233/234	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-235/236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NICKEL																			
Nickel	40 U	40 U	40 U	40 U	16 J	40 U	40	95	40 U	23 J	17 J	40 U	120	40 U	40 U	40 U	40 U	40 U	40 U
FERROUS IRON																			
Ferrous iron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1 UHF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16 HF
VOCs																			
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	0.15 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.16 J	1 U	0.28 J	5 U	2.5 U	1 U	0.83 J	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4	5 U	1.2 J	1 U	1.7	1 U	0.36 J
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	13 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.11 UJ	1 U	1 U	5 U	2.5 U	1 U	85	1 U	0.13 J
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	3.1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	13 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	13 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	13 U	5 U	5 U	5 U	5 U
Acetone	4.4 UJ	5.6 UJ	2.5 UJ	3.6 J	1.6 UJ	2.3 UJ	3.8 J	1.2 UJ	4.3 UJ	4.4 UJ	2.2 UJ	1.2 UJ	4.1 UJ	5.8 UJ	6.8 UJ	3.1 UJ	3.1 UJ	2 UJ	2.3 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	2 U	2 UQ	2 U	2 U
Carbon disulfide	2 U	2 U	0.25 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	0.17 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	2 U	0.53 J	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	2 U	2 U	2 U	2 U
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.9	1 U	1 U	5 U	11	1 U	1 U	1 U	1 U
Chloromethane	0.11 UJ	0.27 UJ	2 U	0.15 UJ	2 U	2 U	0.15 UJ	2 U	2 U	0.17 UJ	2 U	2 U	2 U	10 U	5 U	2 U	0.2 JQ	0.17 UJ	2 U
cis-1,2-Dichloroethene	0.75 UJ	16	1 U	1 U	0.11 J	1 U	1 U	1 U	1 U	1 U	18	1 U	290	8.7	200	2.4	15	1 U	0.29 UJ
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	0.22 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Methyl acetate	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	130 U	63 U	25 U	25 U	25 U	25 U
Methyl tert-butyl ether	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.56 J	2 U	0.71 J	10 U	5 U	2 U	0.21 J	2 U	2 U
Methylcyclohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	20 U	10 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
m-Xylene & p-Xylene	2 U	0.62 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	5 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	0.74 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Tetrachloroethene	6.8	23	6.2	0.39 UJ	47 J	3	1 U	300	1 U	0.59 UJ	3300	130	210	1600	930	15	96 D	6.5	14
Toluene	0.1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.1 UJ	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 J	1 U	2.3	5 U	1.9 J	0.17 J	0.35 J	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Trichloroethene	0.52 J	1.8	17	1 U	0.3 J	4.3	1 U	0.91 J	1 U	1 U	62	0.43 J	80	16	150	24	33	18	2.5
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	2.5 U	1 U	1 U	1 U	1 U
Vinyl chloride	0.13 J	0.11 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	38	10 U	2.3 J	2 U	5.4	2 U	2 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

Table 3.1-4 Complete Trip Blank and Rinsate Blank Results for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

SAMPLE ID	RB-01-SU13	RB-02-SU13	RB-03-SU13	TB01-SU13	TB02-SU13	TB03-SU13	TB04-SU13	TB05-SU13	TB-06	TB-07	TB-08	TB-09	TB-10	TB-11	TB12-SU13	TB13-SU13	TB14-SU13	TB15-SU13	TB15-SU13
LAB ID	160-3414-18	160-3464-2	160-3575-7	160-3377-14	160-3398-26	160-3398-27	160-3414-23	160-3414-24	160-3429-22	160-3429-23	160-3441-13	160-3441-14	160-3464-18	160-3464-19	160-3532-19	160-3532-20	160-3543-21	160-3563-14	160-3575-8
SAMPLE DATE	8/16/2103	8/20/2013	8/29/2013	8/14/2013	8/15/2013	8/15/2013	8/16/2103	8/16/2103	8/19/2013	8/19/2013	8/20/2013	8/20/2013	8/21/2013	8/21/2013	8/26/2013	8/26/2013	8/27/2013	8/28/2013	8/27/2013
URANIUM																			
Uranium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ISOTOPIC URANIUM																			
Uranium-233/234	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-235/236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Uranium-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NICKEL																			
Nickel	40 U	40 U	40 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FERROUS IRON																			
Ferrous iron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VOCs																			
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	0.29 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	1.6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	9.7	4.9 UJ	4.6	2	0.61 J	0.86 J	0.42 UJ	0.54 J	1.9 UJ	1.8 UJ	2 U	0.51 J	0.85 UJ	0.91 UJ	1.2 UJ	1.1 UJ	1.3 UJ	0.99 UJ	1.2 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	2 UQ	2 U	2 U	2 U	2 U	2 U	2 UQ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	2 U	2 U	2 U	2 U	2 U	0.44 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	0.14 JQ	2 U	2 U	2 U	2 U	2 U	2 UQ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	0.12 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Methyl tert-butyl ether	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methylcyclohexane	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.64 J	0.83 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-Xylene & p-Xylene	2 U	2 U	2 U	0.54 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	0.35 J	1 U	1 U	1 U	0.22 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	0.13 J	0.16 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.25 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

Note:
All concentrations are reported in parts per billion (ug/L)
U = Non Detection
J = Estimated Value

4 System Audits

A field audit was scheduled for the Summer 2013 monitoring well sampling event. The audit is summarized in Table 4-1 and included in Appendix C. No field audit was performed during the Spring 2013 monitoring well sampling event.

Table 4-1 Summary of System Audits

Audit Dates	Company	Scope of Audit and Summary of Findings
8/19/2013	LBG	A field audit of the health and safety, sampling, decontamination, and shipping procedures was performed during the Summer 2013 Monitoring Well sampling event. Field logbooks, sample COCs, and instrument calibration logs were reviewed. Minor deviations from the WP were noted and corrected.

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5 Data Completeness and QA/QC Problems

This section summarizes the degree to which the analytical systems met or failed the data quality objectives (DQOs) listed in the QAPP. A discussion is provided for each phase of fieldwork.

5.1 Spring 2013 Groundwater Data Completeness

5.1.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.1-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.1. Data points that were qualified as estimated are considered usable for the purposes of this project. A total of 99.99% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.1-1 Summary of Data for Spring 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	R	Total	Rejected
Water	SW6010C	17	17	168	0	0	202	0%
	SW8260C	359	674	9543	187	1	10764	0.01%
	ASTM D5174	69	8	125	0	0	202	0%
Totals		**445**	**699**	**9836**	**187**	**1**	**11168**	**0.01%**

5.1.2 QC Summary and Recommended Changes

Field Sampling Problems

- Duplicate sample MW-807-SP13 was collected twice (160-2163-28 and 160-2187-13) due to inaccurate field records. Results for both samples have been reported; however, only sample 160-2187-13 and its parent sample PW-07-01-SP13 (160-2187-12) are being used for site characterization and QC purposes.

Analytical Method Problems

The following issues were noted with the analytical methods used for the samples collected:

- Field duplicate sample precision for a minority of the analytes was not within QC criteria. Field duplicate sampling procedures does not appear to be a concern.

- The laboratory did not spike the full list of compounds into all MS/MSD pairs, however all Compounds of Concern were spiked and did not indicate any problems with the analysis.

- Calibration %D was exceeded for a minority of the analytes, this did not indicate a gross analytical issue with the laboratory analysis

- Acetone, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were consistently detected in the method blank samples at concentrations above the MDL but below the reporting limit. 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene are not considered a common laboratory contaminants. Concentrations detected in the field samples were consistent with the method blank levels. None of the affected levels were above the PQL, and therefore should not impact data usability significantly.

- Low levels of acetone were detected in the trip blank samples. However this can be attributed to the above mentioned method blank contamination, and does not impact data usability.

- Several compounds were detected in the rinsate blank samples. These detections did cause some compounds to be qualified as non-detect but they do not impact data usability.

- Some matrix effects were noted for varying analytes in the MS/MSD. There are no recommended changes for problems based on sample matrix.

- Some analytes in the LCS/LCSD were out of QC criteria; however, they were not compounds of concern, and therefore should not impact data usability significantly.

- Results of tetrachloroethene in sample MW-812-SP13 (160-2198-20) were rejected. The laboratory cannot confirm that the proper dilution was used during sample preparation and therefore the final reported result could not be confirmed.

5.2 Summer 2013 Groundwater Data Completeness

5.2.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.2-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.2. Data points that were qualified as estimated are considered usable for the purposes of this project. No sample results were rejected and 100% of the

data are useable. The completeness goals for the project were met based on this percentage.

Table 5.2-1 Summary of Data for Summer 2013 Monitoring Well Sampling, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	R	Total	Rejected
Water	SW6010C	20	16	132	0	0	168	0%
	SW8260C	265	630	8475	146	0	9516	0%
	ASTM D5174	44	2	70	0	0	116	0%
	A-01-R	23	6	7	0	0	36	0%
	SM 3500 FE D	6	2	9	0	0	17	0%
Totals		**358**	**656**	**8693**	**146**	**0**	**9853**	**0%**

5.2.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

The following issues were noted with the analytical methods used for the samples collected:

- Ferrous iron has method defined holding times of 15 minutes and these analyses are typically performed in the field; however, 15 duplicate samples were delivered to the laboratory for ferrous iron. Therefore, results of ferrous iron were analyzed outside of holding time and have been given the "HF" qualifier to denote that analysis was performed outside of the method defined holding time.

- Field duplicate sample precision for a minority of the analytes was not within QC criteria. Field duplicate sampling procedures does not appear to be a concern.

- The laboratory did not spike the full list of compounds into all MS/MSD pairs, however all Compounds of Concern were spiked and did not indicate any problems with the analysis.

- Calibration %D was exceeded for a minority of the analytes, this did not indicate a gross analytical issue with the laboratory analysis

- Acetone was consistently detected in the method blank samples at concentrations above the MDL but below the reporting limit.

- Low levels of acetone were detected in the trip blank samples. However this can be attributed to the above mentioned method blank contamination, and does not impact data usability.

- Several compounds were detected in the rinsate blank samples. These detections did cause some compounds to be qualified as non-detect but they do not impact data usability.

- Some matrix effects were noted for varying analytes in the MS/MSD. There are no recommended changes for problems based on sample matrix.

- Some analytes in the LCS/LCSD were out of QC criteria; however, they were not compounds of concern, and therefore should not impact data usability significantly.

6 PARCC Summary

6.1 PARCC Parameters

Sampling and analysis were performed using methods and techniques designed to optimize and evaluate precision, accuracy, representativeness, completeness, and comparability (PARCC; the primary data quality indicators) in the data. Meeting PARCC objectives was optimized by following the work plans; using quality laboratories; and management oversight of the work. Instances of questionable QC performance were evaluated and the findings presented in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems. Additional details can be found in the Data Usability Summary Reports included in Appendix A. The PARCC parameters are defined as follows:

- **Precision.** Precision was evaluated through the use of field and analytical duplicate samples.
- **Accuracy.** Accuracy was evaluated through the use of analytical standards, QC samples such as spikes and LCSs, and blank samples.
- **Representativeness.** Representativeness of the data was evaluated through the use of field and analytical duplicate samples, and laboratory and field blanks.
- **Completeness.** The analytical completeness, i.e., the percentage of obtained measurements that are judged to be valid and usable (excludes data that are qualified with R or UR).
- **Comparability.** Comparability of the data was evaluated through the use of field and analytical QC samples; through the use of consistent CRDLs and ensuring that the laboratories met them; and by management oversight, which determined that the work was performed consistently with previous techniques.

The following sections summarize the PARCC parameters and data usability for each sample event.

6.2 Data Usability

6.2.1 Spring 2013

All PARCC parameters met the objectives for usability except as noted below. Quality control results that did not meet PARCC objectives are discussed in detail in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems.

Precision and Representativeness were acceptable with the field duplicates exhibited overall good reproducibility and no background contamination impacting results (see accuracy discussion below). There were several instances where poor precision was noted and the results were qualified, but there was no overall impact to data usability or potential concerns with the sampling methodology. The precision between MS and MSD and LCS and LCSD results were acceptable. Sample MW-807-SP13 was collected twice (160-2163-28 and 160-2187-13) due to inaccurate field records. Both of the results were reported; however, only samples 160-2187-13 and its parent sample PW-07-01-SP13 (160-2187-12) were used for site characterization and QC purposes.

Accuracy was acceptable with laboratory spikes and field and laboratory blanks exhibited overall good recoveries and minimal background contamination. Laboratory control samples were generally good, with the exception of a low recovery of methylcyclohexane, which resulted in the associated results being qualified as estimated. In several of the SDGs, the continuing calibration results exceeded the percent difference from the initial calibration. The analytes associated with the failures were qualified "J" if detected or "UJ" if non-detect. Of the nine samples analyzed as MS/MSDs, there were two instances where an analyte failed QC criteria and the results were "J" qualified. Several compounds were detected in the method, rinsate and trip blanks; however, all of the blank detections were less than the QL. The results were either "J" or "UJ" qualified based on the level of contamination versus the amount present in the project sample.

Completeness of the results was acceptable as noted on Table 5.1-1. The only sample results rejected were MW-812-SP13 as noted below. The overall completeness of data was 99.99%.

Comparability of results for volatiles analysis of MW-812-SP13 are compromised due to a laboratory dilution reporting error. The results were reported as rejected.

6.2.2 Summer 2013

All PARCC parameters met the objectives for usability except as noted below. Quality control results that did not meet PARCC objectives are discussed in detail in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems.

Precision and Representativeness were acceptable with the field duplicates exhibited overall good reproducibility and no background contamination impacting results (see accuracy discussion below). There were several instances where poor

precision was noted and the results were qualified, but there was no overall impact to data usability or potential concerns with the sampling methodology. The precision between MS and MSD and LCS and LCSD results were acceptable.

Accuracy was acceptable with laboratory spikes and field and laboratory blanks exhibited overall good recoveries and minimal background contamination. Overall, the LCS recoveries were generally good. No qualifications were required for LCS recoveries that exceeded QC criteria and the associated samples were non-detect. In several of the SDGs, the continuing calibration results exceeded the percent difference from the initial calibration. The analytes associated with the failures were qualified "J" if detected or "UJ" if non-detect. Of the eight samples analyzed as MS/MSDs, there were three instances where analytes failed QC criteria and the detected results were "J" qualified. Acetone was detected in the method, rinsate and trip blanks and in addition, several other compounds were detected in two of the rinsate blanks; however, all of the blank detections were less than the QL. The results were either "J" or "UJ" qualified based on the level of contamination versus the amount present in the project sample. The tracer recovery was outside of QC limits in method A-01-R and the associated results were "J" qualified. Ferrous iron is typically a field test with a holding time of 15 minutes. The test was completed in the field; however, 15 duplicate samples were also submitted to the laboratory for analysis. The laboratory results were qualified with an "HF" to denote that the analysis was performed outside of the defined holding time.

Completeness of the results was acceptable as noted on Table 5.2-1. All of the results were acceptable and valid for an overall completeness of data of 100%.

Comparability of results was acceptable as all data was usable and valid. Approximately 10% of the ferrous iron results were analyzed in the laboratory for comparison. If the results were non-detect in the field, then they were non-detect in the laboratory; however, detectable amounts of ferrous iron from the field samples did not correlate well with the laboratory duplicate results. The laboratory results are considered quantitative despite the analysis being outside of holding time.

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7 References

United States Army Corps of Engineers (USACE), 2011, Work Plan, Health and Safety Plan, and Quality Assurance Project Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York. Prepared by The Louis Berger Group, Inc. (LBG).

United States Army Corps of Engineers (USACE), 2011, Quality Control Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York. Prepared by The Louis Berger Group, Inc. (LBG).

United States Army Corps of Engineers (USACE), 2013, Work Plan Amendment Memorandum, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York. Prepared by The Louis Berger Group, Inc. (LBG).

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A Data Usability Summary Reports

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Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2089**
Date Completed: 6/27/013	**Data Validation Chemist: S. Elliot, J. Christopher**
Date Performed: 7/16/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No - Sample PW-04-06-SP13 (160-2089-2) was logged in at GEL as PW-04-06-2013 (160-2089-2); GEL sample ID 32404002; Sample W-12-70-SP13 (160-2089-11) was logged in at GEL as W-12-70-2013 (160-2089-11); GEL sample ID 32404011; this was corrected by the validator in the EDD only.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No – some containers received broken however sufficient sample remained for analysis. Specific samples affected were not noted.
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/SE/JC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2089**
Date Completed: 6/27/013	**Data Validation Chemist: S. Elliot, J. Christopher**
Date Performed: 7/16/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, and acetone were detected in the method blanks 160-46403/2, 160-46687/2, and 160-46896/2. 1,2,4-trichlorobenzene and acetone were detected in rinse blank RB-01-SP13 Acetone, chloroethane, and toluene were detected in trip blank TB-01-SP13
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples across multiple batches were qualified for method blank contamination. Rinsate blanks qualified multiple analytes in multiple samples.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of dibromofluoromethane and 1,2-dichloroethane-d4 was reported for sample W-12-70-SP13 (160-2089-11). No target analytes associated with dibromofluoromethane and 1,2-dichloroethane-d4 were reported and therefore, no qualification of sample results was performed. High recovery of dibromofluoromethane was reported in the MSD prepared with project sample W-17-130-SP13 (160-2089-21 MSD). All other surrogate recoveries were within QC limits. No qualification of sample results has been performed.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2089**
Date Completed: 6/27/013	**Data Validation Chemist: S. Elliot, J. Christopher**
Date Performed: 7/16/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – Due to high concentrations in the native sample, recovery of tetrachloroethene is outside of QC limits for the MS/MSD prepared with project sample W-17-130-SP13 (160-2089-21). The LCS is within QC limits and no qualification of sample results has been performed.
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – Acetone exhibited poor precision in MW-804-SP13.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No field blanks included with this SDG.)

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2089**
Date Completed: 6/27/013	**Data Validation Chemist: S. Elliot, J. Christopher**
Date Performed: 7/16/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 4	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2089**
Date Completed: 6/27/013	**Data Validation Chemist: S. Elliot, J. Christopher**
Date Performed: 7/16/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Sample containers broken during shipping to the laboratory; however, there was sufficient sample to perform the required analyses.
Minor Concerns
VOC results qualified based on method and trip blank contamination. Transcription errors during sample login at GEL for total U analysis.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	LAB SDG ID: 160-2089
Date Completed: 6/27/013	Data Validation Chemist: S. Elliot, J. Christopher
Date Performed: 7/16/2013	Data Validation Review: J. Nelson

Key:

AP	=	Acid Phenol
BN	=	Base Neutral
CCV	=	Continuing calibration verification
COC	=	Chain-of-custody
CVAA	=	Cold Vapor Automatic Absorption
GC	=	Gas Chromatography
GC/MS	=	Gas Chromatography/Mass Spectrometry
ICP	=	Inductively Coupled Plasma Argon Spectrometry
ICS	=	Interference check standard
ICV	=	Initial calibration verification
NA	=	Not Applicable
LCS	=	Laboratory Control Sample
MS/MSD	=	Matrix Spike/Matrix Spike Duplicate
QAPP	=	Quality Assurance Project Plan
QC	=	Quality Control
SD	=	Serial Dilution
SVOCs	=	Semivolatile Organic Compounds
TIC	=	Tentatively Identified Compound
VOCs	=	Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-2089

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
PW-04-02-SP13	160-2089-1	Groundwater	4/11/2013	
PW-04-06-SP13	160-2089-2	Groundwater	4/11/2013	
PW-04-07-SP13	160-2089-3	Groundwater	4/11/2013	
PW-04-03-SP13	160-2089-4	Groundwater	4/11/2013	
PW-04-05-SP13	160-2089-5	Groundwater	4/11/2013	
W-14-150-SP13	160-2089-6	Groundwater	4/11/2013	
W-01-120-SP13	160-2089-7	Groundwater	4/11/2013	
W-01-75-SP13	160-2089-8	Groundwater	4/11/2013	
W-6-79-SP13	160-2089-9	Groundwater	4/11/2013	Field Duplicate
MW-801-SP13	160-2089-10	Groundwater	4/11/2013	Field Duplicate
W-12-70-SP13	160-2089-11	Groundwater	4/11/2013	
W-03-112-SP13	160-2089-12	Groundwater	4/10/2013	Field Duplicate
MW-800-SP13	160-2089-13	Groundwater	4/10/2013	Field Duplicate
W-03-72-SP13	160-2089-14	Groundwater	4/10/2013	
PW-04-01	160-2089-15	Groundwater	4/10/2013	
PW-04-04	160-2089-16	Groundwater	4/10/2013	
W-10-120-SP13	160-2089-17	Groundwater	4/10/2013	
W-5-78-SP13	160-2089-18	Groundwater	4/10/2013	
W-10-71-SP13	160-2089-19	Groundwater	4/10/2013	
W-32-110-SP13	160-2089-20	Groundwater	4/11/2013	
W-17-130-SP13	160-2089-21	Groundwater	4/11/2013	MS/MSD
W-11-70-SP13	160-2089-22	Groundwater	4/11/2013	
W-22-95-SP13	160-2089-23	Groundwater	4/11/2013	
RB-01-SP13	160-2089-24	Rinse Blank	4/12/2013	Rinse Blank
W-19-110-SP13	160-2089-25	Groundwater	4/12/2013	
W-19-150-SP13	160-2089-26	Groundwater	4/12/2013	
TB01-SP13	160-2089-27	Trip Blank	4/12/2013	Trip Blank
W20-120-SP13	160-2089-28	Groundwater	4/12/2013	
W20-160-SP13	160-2089-29	Groundwater	4/12/2013	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-2089

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	29
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	29
Groundwater	SW846 6010B	Nickel	28
Groundwater	ASTM D5174	KPA, Total U, Liquid	28
Rinsate Blank	SW846 8260B	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 6010B	Nickel	1
Rinsate Blank	ASTM D5174	KPA, Total U, Liquid	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes

Matrix: **Groundwater**
Units: **ug/L**

Sylvania Corning FUSRAP
SDG: 160-2089

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
PW-04-02-SP13	160-2089-1	Acetone	0.747	1.30	J	1.30	UJ	Qualify	1
PW-04-06-SP13	160-2089-2	Acetone	0.747	1.40	J	1.40	UJ	Qualify	1
PW-04-07-SP13	160-2089-3	Acetone	0.747	1.20	J	1.20	UJ	Qualify	1
PW-04-03-SP13	160-2089-4	Acetone	0.747	2.20		2.20	UJ	Qualify	1
PW-04-05-SP13	160-2089-5	Acetone	0.747	1.50	J	1.50	UJ	Qualify	1
W-14-150-SP13	160-2089-6	Acetone	0.747	0.93	J	0.93	UJ	Qualify	1
W-01-120-SP13	160-2089-7	Acetone	0.747	0.90	J	0.90	UJ	Qualify	1
W-01-75-SP13	160-2089-8	Acetone	0.747	1.50	J	1.50	UJ	Qualify	1
		1,2,4-Trichlorobenzene	0.128	0.16	J	0.16	UJ	Qualify	1
W-6-79-SP13	160-2089-9	Acetone	0.747	1.70	J	1.70	UJ	Qualify	1
MW-801-SP13	160-2089-10	Acetone	0.747	1.30	J	1.30	UJ	Qualify	1
W-12-70-SP13	160-2089-11	Acetone	0.747	1.60	J	1.60	UJ	Qualify	1
W-03-112-SP13	160-2089-12	Acetone	0.516	1.30	J	1.30	UJ	Qualify	1
MW-800-SP13	160-2089-13	Acetone	0.747	1.30	J	1.30	UJ	Qualify	1
W-03-72-SP13	160-2089-14	Acetone	0.747	1.80	J	1.80	UJ	Qualify	1
PW-04-01	160-2089-15	Acetone	0.747	1.10	J	1.10	UJ	Qualify	1
PW-04-04	160-2089-16	Acetone	0.747	1.30	J	1.30	UJ	Qualify	1
W-10-120-SP13	160-2089-17	Acetone	0.747	0.84	J	0.84	UJ	Qualify	1
W-5-78-SP13	160-2089-18	Acetone	0.747	1.10	J	1.10	UJ	Qualify	1
W-10-71-SP13	160-2089-19	Acetone	0.516	1.70	J	1.70	UJ	Qualify	1
		1,2,4-Trichlorobenzene	0.113	0.083	J	0.083	UJ	Qualify	1
W-32-110-SP13	160-2089-20	Acetone	0.515	0.95	J	0.95	UJ	Qualify	1
W-17-130-SP13	160-2089-21	Acetone	0.516	0.96	J	0.96	UJ	Qualify	1
W-11-70-SP13	160-2089-22	Acetone	0.516	1.20	J	1.20	UJ	Qualify	1
W-22-95-SP13	160-2089-23	Acetone	0.516	1.50	J	1.50	UJ	Qualify	1
RB-01-SP13	160-2089-24	1,2,4-Trichlorobenzene	0.220	0.18	J	0.18	UJ	Qualify	1
W-19-110-SP13	160-2089-25	Acetone	<20	8.4	J	8.4	UJ	Qualify	2
W-19-150-SP13	160-2089-26	Acetone	<10	4.0	J	4.0	UJ	Qualify	2
TB01-SP13	160-2089-27	Acetone	0.516	1.60	J	1.60	UJ	Qualify	1
W20-120-SP13	160-2089-28	Acetone	0.516	1.40	J	1.40	UJ	Qualify	1
W20-160-SP13	160-2089-29	1,2,4-Trichlorobenzene	0.220	0.24	J	0.24	UJ	Qualify	1
		Acetone	0.5160	1.00	J	1.00	UJ	Qualify	1

Notes:

1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.

2 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-2089

Primary Sample ID: MW-800-SP13 Lab ID: 160-2089-13
Duplicate Sample ID: W-03-112-SP13 Lab ID: 160-2089-12

Method	Analyte	MW-800-SP13	W-03-112-SP13	RPD	Rating	Qualifier
SW8260	Acetone	1.3	1.3	0.0	Good	None
SW8260	cis-1,2-Dichloroethene	0.68	0.68	0.0	Good	None
SW8260	Tetrachloroethene	11	10	9.5	Good	None
SW8260	Trichloroethene	1.1	1.0	9.5	Good	None
SW8260	Chloromethane	0.079	ND	--	Poor	J/UJ

Primary Sample ID: MW-801-SP13 Lab ID: 160-2089-10
Duplicate Sample ID: W-6-79-SP13 Lab ID: 160-2089-9

Method	Analyte	MW-801-SP13	W-6-79-SP13	RPD	Rating	Qualifier
SW8260	Acetone	1.3	1.7	26.7	Good	None
SW8260	Tetrachloroethene	0.19	0.21	10.0	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2112**
Date Completed: 6/27/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes – however, lab issued a revision to the report due to client request to change sample IDs W-30-28S-SP13 to W-30-285-SP13, W-27-28S-SP13 to W-27-285-SP13, and MW-27I-SP13 to MW-23I-SP13
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No – PW-03-07-SP13, RB-02-SP13 arrived broken; however, sufficient volume remained for analysis.
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/SE/JC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2112**
Date Completed: 6/27/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, and acetone were detected in method blanks 160-46896/2 and 160-47099/2 1,2,4-trichlorobenzene, 2-hexanone, acetone, chloroform, cyclohexane, methylene chloride, and toluene were detected in rinse blank RB02-SP13 Acetone, m&p-xylene, o-xylene, and toluene were detected in rinse blank RB03-SP13 Acetone, 2-hexanone, and toluene were detected in trip blank TB02-SP13.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples across multiple batches were qualified for method blank contamination. Rinsate blanks qualified multiple analytes in multiple samples.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of dibromofluoromethane was reported for the diluted analysis of W-27-28S-SP13 (160-2112-30 DL). No target analytes associated with dibromofluoromethane were reported and therefore, no qualification of sample results was performed.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – High recovery of cyclohexane, methyl acetate, methylcyclohexane was reported for the MS and high recovery of 1,1,1-trichloroethane, cyclohexane, bromodichloromethane, and methylcyclohexane was reported for the MSD prepared with project sample PW-03-02-SP13 (160-2112-20). Positive results of cyclohexane, methyl acetate, 1,1,1-trichloroethane, bromodichloromethane, and methylcyclohexane for PW-03-02-SP13 were qualified as estimated.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2112**
Date Completed: 6/27/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No - Acetone and carbon disulfide exhibited poor precision for MW-803-SP13 and MW-23S-SP13.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (Two equipment rinsate blanks included in this SDG)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2112**
Date Completed: 6/27/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 4	Yes - 2 field duplicates were associated with this SDG.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2112**
Date Completed: 6/27/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - Trichlorofluoromethane, 1,1,2-trichloro-1,2,2-fluoromethane, carbon tetrachloride, and 1,1,1-trichloroethane are outside of the upper QC limit for the continuing calibration with file ID ZCCV7256.D. Associated sample results are non-detects. Therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Sample containers broken during shipping to the laboratory; however, there was sufficient sample to perform the required analyses.
Minor Concerns
VOC results qualified based on method and trip blank contamination, and MS and MSD recovery. Laboratory report was revised to correct three sample IDs.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	LAB SDG ID: 160-2112
Date Completed: 6/27/2013	Data Validation Chemist: S. Elliott, J. Christopher
Date Performed: 7/22/2013	Data Validation Review: J. Nelson

GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-2112

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
W-12-120-SP13	160-2112-1	Groundwater	4/15/2013	
W-2-70-SP13	160-2112-2	Groundwater	4/15/2013	
W-31-95-SP13	160-2112-3	Groundwater	4/15/2013	MS/MSD
W-16-148-SP13	160-2112-4	Groundwater	4/15/2013	
W-8-71-SP13	160-2112-5	Groundwater	4/15/2013	
MW-27S-SP13	160-2112-6	Groundwater	4/15/2013	
RB-03-SP13	160-2112-7	Rinse Blank	4/15/2013	Rinse Blank
MW-26S-SP13	160-2112-8	Groundwater	4/15/2013	
PW-07-05-SP13	160-2112-9	Groundwater	4/15/2013	
PW-07-03-SP13	160-2112-10	Groundwater	4/15/2013	
MW-802-SP13	160-2112-11	Groundwater	4/15/2013	Field Duplicate
PW-07-07-SP13	160-2112-12	Groundwater	4/15/2013	
PW-07-04-SP13	160-2112-13	Groundwater	4/15/2013	Field Duplicate
MW-23S-SP13	160-2112-14	Groundwater	4/15/2013	Field Duplicate
MW-803-SP13	160-2112-15	Groundwater	4/15/2013	Field Duplicate
W-23-110-SP13	160-2112-16	Groundwater	4/15/2013	
W-23-110-SP13 F	160-2112-17	Groundwater	4/15/2013	
W-25-150-SP13	160-2112-18	Groundwater	4/16/2013	
PW-03-06-SP13	160-2112-19	Groundwater	4/16/2013	
PW-03-02-SP13	160-2112-20	Groundwater	4/16/2013	MS/MSD
PW-03-07-SP13	160-2112-21	Groundwater	4/16/2013	
PW03-03-SP13	160-2112-22	Groundwater	4/16/2013	
MW-27DD-SP13	160-2112-23	Groundwater	4/16/2013	
MW-23D-SP13	160-2112-24	Groundwater	4/16/2013	
MW-27I-SP13	160-2112-25	Groundwater	4/16/2013	
MW-25S-SP13	160-2112-26	Groundwater	4/16/2013	
RB-02-SP13	160-2112-27	Rinse Blank	4/16/2013	Rinse Blank
TB02-SP13	160-2112-28	Trip Blank	4/16/2013	Trip Blank
W-30-285-SP13	160-2112-29	Groundwater	4/16/2013	
W-27-285-SP13	160-2112-30	Groundwater	4/16/2013	
W-27-240-SP13	160-2112-31	Groundwater	4/16/2013	
W-26-270-SP13	160-2112-32	Groundwater	4/16/2013	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-2112

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	29
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	29
Groundwater	SW846 6010B	Nickel	31
Groundwater	ASTM D5174	KPA, Total U, Liquid	31
Rinsate Blank	SW846 8260B	Volatile Organics by GC/MS	2
Rinsate Blank	SW846 8260B SIM	Volatile Organics by GC/MS	2
Rinsate Blank	SW846 6010B	Nickel	2
Rinsate Blank	ASTM D5174	KPA, Total U, Liquid	2
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-2112

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
W-2-70-SP13	160-2112-2	Acetone	<2.0	2.90		2.90	UJ	Qualify	3
W-31-95-SP13	160-2112-3	Acetone	<2.0	1.4	J	1.4	UJ	Qualify	3
W-16-148-SP13	160-2112-4	Acetone	<2.0	2.6	J	2.6	UJ	Qualify	3
W-8-71-SP13	160-2112-5	Acetone	<2.0	1.4	J	1.4	UJ	Qualify	3
W-23-110-SP13	160-2112-16	Acetone	<2.0	0.81	J	0.81	UJ	Qualify	3
W-25-150-SP13	160-2112-18	Acetone	<2.0	1.3	J	1.3	UJ	Qualify	3
PW-03-02-SP13	160-2112-20	Acetone	0.524	2.4	J	2.4	UJ	Qualify	1
		1,1,1-Trichloroethane	<1.0	2.5	J	2.5	J	Qualify	4
PW-03-07-SP13	160-2112-21	1,2,4-Trichlorobenzene	0.220	0.16	J	0.16	UJ	Qualify	1
		Acetone	0.524	1.7	J	1.7	UJ	Qualify	1
PW-03-03-SP13	160-2112-22	1,2,4-Trichlorobenzene	0.220	0.17	J	0.17	J	Qualify	1
		Acetone	0.524	1.4	J	1.4	UJ	Qualify	1
MW-27DD-SP13	160-2112-23	1,2,3-Trichlorobenzene	0.0979	0.088	J	0.088	UJ	Qualify	1
		1,2,4-Trichlorobenzene	0.220	0.22	J	0.22	UJ	Qualify	1
		Acetone	0.524	1.4	J	1.4	UJ	Qualify	1
MW-23D-SP13	160-2112-24	1,2,4-Trichlorobenzene	0.220	0.19	J	0.19	UJ	Qualify	1
		Acetone	0.524	1.0	J	1.0	UJ	Qualify	1
MW-27I-SP13	160-2112-25	Acetone	0.525	1.3	J	1.3	UJ	Qualify	1
MW-25S-SP13	160-2112-26	Acetone	0.525	0.71	J	0.71	UJ	Qualify	1
RB-02-SP13	160-2112-27	1,2,4-Trichlorobenzene	0.220	0.19	J	0.19	UJ	Qualify	1
		Acetone	0.524	3.8		3.8	J	Qualify	2
TB02-SP13	160-2112-28	Acetone	0.524	2.8		2.80	UJ	Qualify	1
W-30-285-SP13	160-2112-29	1,2,4-Trichlorobenzene	0.220	0.17	J	0.17	UJ	Qualify	1
		Acetone	0.524	1.5	J	1.5	UJ	Qualify	1
W-27-285-SP13	160-2112-30	1,2,3-Trichlorobenzene	0.0979	0.12	J	0.12	UJ	Qualify	1
		1,2,4-Trichlorobenzene	0.220	0.68	J	0.68	UJ	Qualify	1
		Acetone	0.524	1.400	J	1.400	UJ	Qualify	1
		Chloroform	<1.0	0.14	J	0.14	UJ	Qualify	3
W-27-240-SP13	160-2112-31	1,2,4-Trichlorobenzene	0.220	0.29	J	0.29	UJ	Qualify	1
		Acetone	0.524	1.7	J	1.7	UJ	Qualify	1
		Chloroform	<1.0	0.32	J	0.32	UJ	Qualify	3
W-26-270-SP13	160-2112-32	Acetone	0.524	1.2	J	1.2	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in the associated method blank.
3 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.
4 - The reported result has been qualified as estimated. The recovery of the MS or MSD is outside of QC limits.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-2112

Primary Sample ID: MW-802-SP13 Lab ID: 160-2112-11
Duplicate Sample ID: PW-07-04-SP13 Lab ID: 160-2112-13

Method	Analyte	MW-802-SP13	PW-07-04-SP13	RPD	Rating	Qualifier
SW8260	Acetone	0.81	0.68	17.4	Good	None

Primary Sample ID: MW-803-SP13 Lab ID: 160-2112-15
Duplicate Sample ID: MW-23S-SP13 Lab ID: 160-2112-14

Method	Analyte	MW-803-SP13	MW-23S-SP13	RPD	Rating	Qualifier
SW8260	Acetone	0.57	1.6	94.9	Poor	J/UJ
SW8260	Carbon disulfide	--	0.46	--	Poor	J/UJ
SW6010B	Nickel	1800	1800	0.0	Good	None
ASTM D5174	Total U	10.9	10.6	2.8	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2133**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No – analyses not marked on the COC. Lab confirmed with PM. One vial for TB-03-SP13 received with headspace.
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/SE/JC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2133**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Acetone was detected in trip blank TB-03-SP13.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for trip blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2133**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No
Do field duplicate results show good precision for all compounds? See Table 4	No - Acetone exhibited poor precision in samples MW-806-SP13 and MW-18I-SP13.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No equipment rinsate blanks included in this SDG)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	No. The uranium concentration for the sample that was designated for MS/MSD for this SDG (MW-41S-SP13 (160-2133-1)) was more than 4X the spike amount, and required a 50X dilution for analysis; therefore, no results were qualified on this basis.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2133**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 4	No – 2 field duplicate sample pairs were associated with this SDG. Uranium in one duplicate pair was qualified due to poor precision.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to confirm quenching; two samples were diluted due to high uranium concentrations; only one result was reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2133**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
One sample received by laboratory for VOC analysis with headspace. Requested analyses not logged on COC (corrected and confirmed with PM).
Minor Concerns
VOC results qualified based on trip blank contamination. Total U: MS/MSD recoveries outside criteria due to uranium concentration in parent sample > 4X spike concentration; precision for one field duplicate sample pair outside criteria.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-2133

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-41S-SP13	160-2133-1	Groundwater	4/17/2013	MS/MSD
MW-18S-SP13	160-2133-2	Groundwater	4/17/2013	
MW-25D-SP13	160-2133-3	Groundwater	4/17/2013	
PW-03-01-SP13	160-2133-4	Groundwater	4/16/2013	Field Duplicate
MW-25I-SP13	160-2133-5	Groundwater	4/16/2013	
MW-18I-SP13	160-2133-6	Groundwater	4/17/2013	Field Duplicate
W-24-260-SP14	160-2133-7	Rinse Blank	4/16/2013	
MW-806-SP13	160-2133-8	Groundwater	4/17/2013	Field Duplicate
PW-02-03-SP13	160-2133-9	Groundwater	4/17/2013	
MW-804-SP13	160-2133-10	Groundwater	4/16/2013	Field Duplicate
PW-03-04-SP13	160-2133-11	Groundwater	4/17/2013	
PW-03-05-SP13	160-2133-12	Groundwater	4/17/2013	
PW-02-06-SP13	160-2133-13	Groundwater	4/17/2013	
TB-03-SP13	160-2133-14	Groundwater	4/17/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-2133

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	13
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	13
Groundwater	SW846 6010B	Nickel	13
Groundwater	ASTM D5174	KPA, Total U, Liquid	13
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-2133

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-41S-SP13	160-2133-1	Acetone	<2.0	0.55	J	0.55	UJ	Qualify	1
MW-18S-SP13	160-2133-2	Acetone	<2.0	0.95	J	0.95	UJ	Qualify	1
MW-25D-SP13	160-2133-3	Acetone	<2.0	0.74	J	0.74	UJ	Qualify	1
PW-03-01-SP13	160-2133-4	Acetone	<2.0	0.95	J	0.95	UJ	Qualify	1
MW-25I-SP13	160-2133-5	Acetone	<2.0	1.4	J	1.4	UJ	Qualify	1
MW-18I-SP13	160-2133-6	Acetone	<2.0	0.85	J	0.85	UJ	Qualify	1
W-24-260-SP13	160-2133-7	Acetone	<2.0	0.49	J	0.49	UJ	Qualify	1
MW-806-SP13	160-2133-8	Acetone	<2.0	1.5	J	1.5	UJ	Qualify	1
PW-02-03-SP13	160-2133-9	Acetone	<2.0	2.3		2.3	UJ	Qualify	1
MW-804-SP13	160-2133-10	Acetone	<2.0	1.1	J	1.1	UJ	Qualify	1
PW-03-04-SP13	160-2133-11	Acetone	<2.0	0.93	J	0.93	UJ	Qualify	1
PW-03-05-SP13	160-2133-12	Acetone	<2.0	0.91	J	0.91	UJ	Qualify	1
PW-02-06-SP13	160-2133-13	Acetone	<2.0	1.2	J	1.2	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-2133

Primary Sample ID: MW-804-SP13 Lab ID: 160-2133-10
Duplicate Sample ID: PW-03-01-SP13 Lab ID: 160-2133-4

Method	Analyte	MW-804-SP13	PW-03-01-SP13	RPD	Rating	Qualifier
SW8260	1,1,1-Trichloroethane	1.3	1.4	7.4	Good	None
SW8260	1,1-Dichloroethane	0.54	0.54	0.0	Good	None
SW8260	Acetone	1.1	0.95	14.6	Good	None
ASTM D5174	Total U	--	0.431	--	Poor	J/UJ

Primary Sample ID: MW-806-SP13 Lab ID: 160-2133-8
Duplicate Sample ID: MW-18I-SP13 Lab ID: 160-2133-6

Method	Analyte	MW-806-SP13	MW-18I-SP13	RPD	Rating	Qualifier
SW8260	Acetone	1.6	0.85	61.2	Poor	J/UJ
SW8260	Chloroform	3.4	3.2	6.1	Good	None
SW8260	Methyl tert-butyl ether	1.6	1.2	28.6	Good	None
ASTM D5174	Total U	254	269	5.7	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2163**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. GEL received sample 160-2163-F-20; however this sample was not listed on the COC; email included in the data package confirms that analysis for this sample was canceled and the location would be resampled; the sample was not analyzed. Analyses not marked on page 4 of the COCs. Lab confirmed with PM correct analysis. Sample ID's did not match (specific samples not noted). Lab logged per COC with slight modification per the PM.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/SE/JC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2163**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip, and field blanks? See Table 3	Yes – Acetone, chloroethane, and toluene were detected in trip blank TB-04-SP13 (160-2163-38). Acetone was detected in the method blank 160-47749/1
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples across multiple batches were qualified for method blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of 4-bromofluorobenzene was reported in the diluted analysis of samples MW-24S-SP13 DL (160-2163-8), PW-02-07-SP13 DL (160-2163-17), MW-809-SP13 DL (160-2163-29), and MW-208-350-SP13 DL (160-2163-30). High recovery of dibromofluoromethane, 1,2-dichloroethane-d4, toluene-d8, and 4-bromofluorobenzene was reported in sample MW-20D-SP13 (160-2163-37). High recovery of dibromofluoromethane, 1,2-dichloroethane-d4, and toluene-d8 was reported in sample TB-04-SP13 (160-2163-38) No target analytes associated with the above surrogate compounds were detected above the reporting limit; therefore, no qualification of sample results was performed.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2163**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Insufficient sample volume was available to perform MS/MSD analysis for the VOCs and therefore, MS/MSD performance could not be evaluated.
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No - High recovery of cyclohexane and methylcyclohexane are outside of the upper QC limit for the LCS with lab ID 160-47751/3. Cyclohexane and methylcyclohexane were not detected in associated project samples. No qualification of sample results has been performed.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No - 2-hexanone exhibited poor precision for MW-808-SP13 and MW-28I-SP13 and Acetone exhibited poor precision for MW-809-SP13 and MW-208-350-SP13.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No equipment rinsate blanks included in this SDG)

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2163**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 4	No - Field duplicate samples MW-809-SP13 (160-2163-29) and MW-808-SP13 (160-2163-32) may have been switched in transfer to subcontractor laboratory (see Table 4). If samples were switched there would be good precision for both field duplicate sample pairs.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; one sample was diluted due to high uranium concentration; only one result was reported per sample.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2163**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - 2-hexanone is outside of the lower QC limit for the continuing calibration with file ID LCCV0073.D. Associated sample results have been qualified as estimated.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2163**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Summary of Potential Impacts on Data Usability
Major Concerns
Two of three field duplicate sample pairs appear to have been switched for Total U analysis; results qualified due to poor precision (precision would have been good for both pairs if sample pairs were switched).
Minor Concerns
VOC results qualified based on method and trip blank contamination, and continuing calibration recovery.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-2163

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-44S-SP13	160-2163-1	Groundwater	4/18/2013	MS/MSD
S1-325-SP13	160-2163-2	Groundwater	4/18/2013	
MW-21S-SP13	160-2163-3	Groundwater	4/18/2013	
MW-22S-SP13	160-2163-4	Groundwater	4/18/2013	
MW-21I-SP13	160-2163-5	Groundwater	4/18/2013	
S-1-450-SP13	160-2163-6	Groundwater	4/18/2013	
S-1-450-SP13F	160-2163-7	Groundwater	4/18/2013	MS/MSD
MW-24S-SP13	160-2163-8	Groundwater	4/18/2013	
W-18-150-SP13S	160-2163-9	Groundwater	4/18/2013	
PW-02-02-SP13	160-2163-10	Groundwater	4/18/2013	
MW-42I-SP13	160-2163-11	Groundwater	4/18/2013	
MW-20I-SP13	160-2163-12	Groundwater	4/18/2013	
W-25-188-SP13	160-2163-13	Groundwater	4/18/2013	
MW-50-SP13	160-2163-14	Groundwater	4/18/2013	
PW-02-04-SP13	160-2163-15	Groundwater	4/18/2013	
PW-02-05-SP13	160-2163-16	Groundwater	4/18/2013	
PW-02-07-SP13	160-2163-17	Groundwater	4/18/2013	
PW-02-07-SP13F	160-2163-18	Groundwater	4/18/2013	MS/MSD
PW-02-01-SP13	160-2163-19	Groundwater	4/17/2013	
W-36-448-SP13	160-2163-21	Groundwater	4/17/2013	
W-36-390-SP13	160-2163-22	Groundwater	4/17/2013	
MW-42S-SP13	160-2163-23	Groundwater	4/17/2013	
MW-20S-SP13	160-2163-24	Groundwater	4/17/2013	Field Duplicate
MW-21D-SP13	160-2163-26	Groundwater	4/19/2013	
MW-26D-SP13	160-2163-27	Groundwater	4/19/2013	Field Duplicate
MW-807-SP13	160-2163-28	Groundwater	4/19/2013	Field Duplicate
MW-809-SP13	160-2163-29	Groundwater	4/19/2013	Field Duplicate
MW-208-250-SP13	160-2163-30	Groundwater	4/19/2013	Field Duplicate
MW-208-540-SP13	160-2163-31	Groundwater	4/19/2013	
MW-808-SP13	160-2163-32	Groundwater	4/19/2013	Field Duplicate
MW-24DD-SP13	160-2163-33	Groundwater	4/19/2013	
MW-28I-SP13	160-2163-34	Groundwater	4/19/2013	
MW-28S-SP13	160-2163-35	Groundwater	4/19/2013	
MW-28D-SP13	160-2163-36	Groundwater	4/19/2013	
MW-20D-SP13	160-2163-37	Groundwater	4/19/2013	
TB-04-SP13	160-2163-38	Trip Blank	4/19/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-2163

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	33
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	33
Groundwater	SW846 6010B	Nickel	35
Groundwater	ASTM D5174	KPA, Total U, Liquid	35
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-2163

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
S1-325-SP13	160-2163-2	Acetone	<2.0	1.30	J	1.30	UJ	Qualify	3
S-1-450-SP13	160-2163-6	Acetone	<2.0	1.5	J	1.5	UJ	Qualify	3
		Chloroform	<1.0	0.55	J	0.55	UJ	Qualify	3
W-18-150-SP13	160-2163-9	Acetone	<2.0	1.3	J	1.3	UJ	Qualify	3
W-25-188-SP13	160-2163-13	Acetone	<2.0	0.66	J	0.66	UJ	Qualify	3
W-36-448-SP13	160-2163-21	Acetone	<2.0	0.69	J	0.69	UJ	Qualify	3
		Chloroform	<1.0	0.78	J	0.78	UJ	Qualify	3
W-36-390-SP13	160-2163-22	Acetone	<1.0	1.80	J	1.80	UJ	Qualify	3
MW-43S-SP13	160-2163-23	Acetone	0.801	0.80	J	0.80	UJ	Qualify	1
		2-Hexanone	<5.0	0.22	U	0.22	UJ	Qualify	2
MW-20S-SP13	160-2163-24	Acetone	0.801	1.2	J	1.2	UJ	Qualify	1
		2-Hexanone	<5.0	0.22	U	0.22	UJ	Qualify	2
MW-21D-SP13	160-2163-26	Acetone	0.801	0.77	J	0.77	UJ	Qualify	1
		2-Hexanone	<5.0	0.22	U	0.22	UJ	Qualify	2
MW-26D-SP13	160-2163-27	Acetone	0.801	1.6	J	1.6	UJ	Qualify	1
		2-Hexanone	<5.0	0.22	U	0.22	UJ	Qualify	2
MW-807-SP13	160-2163-28	Acetone	0.801	0.85	J	0.85	UJ	Qualify	1
		2-Hexanone	<5.0	0.22	U	0.22	UJ	Qualify	2
MW-809-SP13	160-2163-29	Acetone	0.801	1.1	J	1.1	UJ	Qualify	1
		2-Hexanone	<5.0	0.22	U	0.22	UJ	Qualify	2
MW-208-250-SP13	160-2163-30	Acetone	0.801	1.8	J	1.8	UJ	Qualify	1
		2-Hexanone	<5.0	0.22	U	0.22	UJ	Qualify	2
MW-208-540-SP13	160-2163-31	Acetone	0.801	2.9	J	2.9	UJ	Qualify	1
		2-Hexanone	<5.0	0.22	U	0.22	UJ	Qualify	2

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The percent difference (%D) between the relative response factor of the initial calibration and the continuin calibration is outside of QC limits.
3 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-2163

Primary Sample ID: MW-807-SP13 Lab ID: 160-2163-28
Duplicate Sample ID: MW-26D-SP13 Lab ID: 160-2163-27

Method	Analyte	MW-807-SP13	MW-26D-SP13	RPD	Rating	Qualifier
SW8260	1,4-Dioxane	1.3	1.3	0.0	Good	None
SW8260	1,1,1-Trichloroethane	1.5	1.5	0.0	Good	None
SW8260	1,1-Dichloroethene	1.5	1.3	14.3	Good	None
SW8260	1,1-Dichloroethane	2.5	2.4	4.1	Good	None
SW8260	Acetone	0.85	1.6	61.2	Poor	None
SW8260	Chloroform	0.16	0.15	6.5	Good	None
SW8260	Tetrachloroethene	0.94	0.97	3.1	Good	None
SW8260	Trichloroethene	5.9	5.9	0.0	Good	None
ASTM D5174	Total U	0.587	0.654	10.8	Good	None

Primary Sample ID: MW-808-SP13 Lab ID: 160-2163-32
Duplicate Sample ID: MW-28I-SP13 Lab ID: 160-2163-34

Method	Analyte	MW-808-SP13	MW-28I-SP13	RPD	Rating	Qualifier
SW8260	1,1,1-Trichloroethane	0.12	0.12	0.0	Good	None
SW8260	1,1-Dichloroethene	0.14	0.14	0.0	Good	None
SW8260	1,1-Dichloroethane	0.16	0.15	6.5	Good	None
SW8260	2-Hexanone	0.26	--	--	Poor	J/UJ
SW8260	Acetone	1.1	1.3	16.7	Good	None
SW8260	Chloroform	8.0	8.3	3.7	Good	None
SW8260	Methyl tert-butyl ether	0.86	0.91	5.6	Good	None
SW8260	Tetrachloroethene	0.53	0.58	9.0	Good	None
ASTM D5174	Total U	--	2.53	--	Poor	J/UJ

Primary Sample ID: MW-809-SP13 Lab ID: 160-2163-29
Duplicate Sample ID: MW-208-350-SP13 Lab ID: 160-2163-30

Method	Analyte	MW-809-SP13	MW-208-350-SP13	RPD	Rating	Qualifier
SW8260	1,1,2-Trichloro-1,2,2-trifluoroethane	2.2	2.2	0.0	Good	None
SW8260	1,2-Dichlorobenzene	0.58	0.56	3.5	Good	None
SW8260	Acetone	1.1	1.8	48.3	Poor	J/UJ
SW8260	Chloroform	2.2	2.3	4.4	Good	None
SW8260	cis-1,2-Dichloroethene	0.93	0.95	2.1	Good	None
SW8260	Tetrachloroethene	77	79	2.6	Good	None
SW8260	Trichloroethene	73	72	1.4	Good	None
ASTM D5174	Total U	2.52	0.0639	190.1	Poor	J/UJ

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2187**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Cooler temperature not noted in case narrative or in the Login Sample Receipt Checklist. One vial broken for MW-810-SP13, MW-206-470-SP13, MW-205-470-SP13; Two vials broken for MW-49S-SP13. COC not relinquished (signed).
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/SE/JC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2187**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone were detected in method blanks 160-47958/2 and 160-48625/2 1,4-dioxane, acetone, chloroform, and toluene were detected in rinse blank RB-04-SP13 Acetone was detected in trip blank TB-05-SP13.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples across multiple batches were qualified for method blank contamination. Rinsate blanks qualified multiple analytes in multiple samples.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of 4-bromofluorobenzene was reported in samples MW-810-SP13 (160-2187-16) and MW-805-SP13 (160-2187-25). No associated target analytes were detected; therefore, no qualification of sample results was performed.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – High recovery of cyclohexane was reported in the MS/MSD pair prepared with project sample W-37-385-SP13 (160-2187-21). Cyclohexane was not detected in associated project samples and no qualification of sample results has been performed. Low recovery of methyl acetate was reported for the MS/MSD pair prepared with project sample MWP-114-290-SP13 (160-2187-30). Results of methyl acetate for the associated project sample have been qualified as estimated.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2187**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No - High recovery of cyclohexane was reported for the LCS with lab ID 160-48078/4. Cyclohexane was not detected in the associated samples; therefore, no qualification of sample results has been performed.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No - Multiple analytes exhibited poor precision across several duplicate pairs. Refer to Table 4.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (One equipment rinsate blank included in this SDG)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2187**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/22/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 4	Yes - 4 field duplicates were associated with this SDG.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to confirm quenching; only one result was reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - 1,2,3-trichlorobenzne is outside of the upper QC limit for the CC with lab file ID ZCCV7357.D. Associated sample results have been qualified as estimated if detectable.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	LAB SDG ID: 160-2187
Date Completed: 6/28/2013	Data Validation Chemist: S. Elliott, J. Christopher
Date Performed: 7/22/2013	Data Validation Review: J. Nelson

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Sample containers broken during shipping to the laboratory; however, there was sufficient sample to perform the required analyses; cooler temperature upon receipt not noted on COC.
Minor Concerns
VOC results qualified based on method, rinse, and trip blank contamination, and MS and MSD recovery. COC not signed for relinquishing samples.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable

LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-2187

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
PW-06-01-SP13	160-2187-1	Groundwater	4/21/2013	
PW-06-02-SP13	160-2187-2	Groundwater	4/21/2013	
PW-06-03-SP13	160-2187-3	Groundwater	4/21/2013	
PW-06-04-SP13	160-2187-4	Groundwater	4/21/2013	
PW-06-05-SP13	160-2187-5	Groundwater	4/21/2013	
PW-06-06-SP13	160-2187-6	Groundwater	4/21/2013	
PW-06-07-SP13	160-2187-7	Groundwater	4/21/2013	
MW-811-SP13	160-2187-8	Groundwater	4/22/2013	Field Duplicate
MW-204-470-SP13	160-2187-9	Groundwater	4/22/2013	
PW-07-06-SP13	160-2187-10	Groundwater	4/22/2013	MS/MSD
PW-07-02-SP13	160-2187-11	Groundwater	4/22/2013	
PW-07-01-SP13	160-2187-12	Groundwater	4/22/2013	
MW-807-SP13	160-2187-13	Groundwater	4/22/2013	Field Duplicate
MW-204-320-SP13	160-2187-14	Groundwater	4/22/2013	Field Duplicate
MW-19S-SP13	160-2187-15	Groundwater	4/22/2013	
MW-810-SP13	160-2187-16	Groundwater	4/22/2013	Field Duplicate
MW-22D-SP13	160-2187-17	Groundwater	4/22/2013	
MW-22I-SP13	160-2187-18	Groundwater	4/22/2013	
MW-13S-SP13	160-2187-19	Groundwater	4/22/2013	
MW-19D-SP13	160-2187-20	Groundwater	4/22/2013	
W-37-385-SP13	160-2187-21	Groundwater	4/22/2013	MS/MSD, Field Duplicate
MW-49S-SP13	160-2187-22	Groundwater	4/22/2013	
W-37-325-SP13	160-2187-23	Groundwater	4/22/2013	
MW-805-SP13	160-2187-24	Groundwater	4/22/2013	Field Duplicate
RB-04-SP13	160-2187-25	Rinse Blank	4/22/2013	Rinse Blank
MW-205-285-SP13	160-2187-26	Groundwater	4/22/2013	
MW-206-470-SP13	160-2187-27	Groundwater	4/22/2013	
MW-206-320-SP13	160-2187-28	Groundwater	4/22/2013	
MW-205-470-SP13	160-2187-29	Groundwater	4/22/2013	
MWP-114-290-SP13	160-2187-30	Groundwater	4/22/2013	MS/MSD
MWP-114-120-SP13	160-2187-31	Groundwater	4/23/2013	
TB-05-SP13	160-2187-32	Trip Blank	4/23/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-2187

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	30
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	30
Groundwater	SW846 6010B	Nickel	31
Groundwater	ASTM D5174	KPA, Total U, Liquid	31
Rinsate Blank	SW846 8260B	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 6010B	Nickel	1
Rinsate Blank	ASTM D5174	KPA, Total U, Liquid	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-2187

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-22I-SP13	160-2187-18	Acetone	0.497	0.57	J	0.57	UJ	Qualify	1
MW-13S-SP13	160-2187-19	Acetone	0.497	0.68	J	0.68	UJ	Qualify	1
MW-19D-SP13	160-2187-20	Acetone	0.497	0.81	J	0.81	UJ	Qualify	1
W-37-385-SP13	160-2187-21	Acetone	0.497	1.4	J	1.4	UJ	Qualify	1
		1,4-Dioxane	<5.0	50	J	50	J	Qualify	4
MW-49S-SP13	160-2187-22	Acetone	0.497	0.95	J	0.95	UJ	Qualify	1
W-37-325-SP13	160-2187-23	Acetone	0.497	7.9	J	7.9	UJ	Qualify	1
MW-805-SP13	160-2187-24	Acetone	0.497	2.1	J	2.1	UJ	Qualify	1
RB-04-SP13	160-2187-25	Acetone	0.497	3.8	J	3.8	J	Qualify	2
MW-206-470-SP13	160-2187-27	Acetone	0.497	2.4		2.4	UJ	Qualify	1
MW-206-320-SP13	160-2187-28	Acetone	0.497	2.6		2.6	J	Qualify	2
MW-205-470-SP13	160-2187-29	Acetone	0.497	2.0		2.0	UJ	Qualify	1
MWP-114-290-SP13	160-2187-30	1,4-Dioxane	<5.0	9.9		9.9	UJ	Qualify	3
		Methyl acetate	<5.0	0.37	U	0.37	UJ	Qualify	4
MWP-14-120-SP13	160-2187-31	Acetone	0.497	3.1	J	3.1	UJ	Qualify	1
		1,4-Dioxane	<5.0	3.5	J	3.5	UJ	Qualify	3
TB-05-SP13	160-2187-32	Acetone	0.497	1.3	J	1.3	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in the associated method blank.
3 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.
4 - The reported result has been qualified as estimated. The percent recovery (%R) of the associated matrix spike (MS) and/or matrix spike duplicate (MSD) is outside of QC limits.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-2187

Primary Sample ID: MW-805-SP13 Lab ID: 160-2187-24
Duplicate Sample ID: W-37-385-SP13 Lab ID: 160-2187-21

Method	Analyte	MW-805-SP13	W-37-385-SP13	RPD	Rating	Qualifier
SW8260 SIM	1,4-Dioxane	52	50	3.9	Good	None
SW8260	1,1,2-Trichloroethane	1.9	1.9	0.0	Good	None
SW8260	1,1-Dichloroethane	3.2	3.2	0.0	Good	None
SW8260	1,2-Dichloroethane	0.65	0.67	3.0	Good	None
SW8260	1,2-Dichloropropane	0.35	--	--	Poor	J/UJ
SW8260	Acetone	2.1	1.4	40.0	Good	None
SW8260	Carbon tetrachloride	2.8	2.9	3.5	Good	None
SW8260	Chloroform	31	32	3.2	Good	None
SW8260	cis-1,2-Dichloroethene	1.2	1.2	0.0	Good	None
SW8260	Trichlorofluoromethane	9.9	10	1.0	Good	None
SW8260	1,1,1-Trichloroethane	60	63	4.9	Good	None
SW8260	1,1,2-Trichloro-1,2,2-trifluoroethane	53	54	1.9	Good	None
SW8260	1,1-Dichloroethene	120	120	0.0	Good	None
SW8260	Tetrachloroethene	50	52	3.9	Good	None
SW8260	Trichloroethene	78	83	6.2	Good	None

Primary Sample ID: MW-807-SP13 Lab ID: 160-2187-13
Duplicate Sample ID: PW-07-01-SP13 Lab ID: 160-2187-12

Method	Analyte	MW-807-SP13	PW-07-01-SP13	RPD	Rating	Qualifier
SW8260	1,1,1-Trichloroethane	0.64	0.60	6.5	Good	None
SW8260	1,1-Dichloroethene	0.67	0.61	9.4	Good	None
SW8260	1,1-Dichloroethane	1	0.50	13.1	Good	None
SW8260	2-Hexanone	--	0.27	--	Poor	J/UJ
SW8260	Methyl tert-butyl ether	1.10	1.10	0.0	Good	None
SW8260	Tetrachloroethene	0.40	0.42	4.9	Good	None
SW8260	Trichloroethene	0.57	0.55	3.6	Good	None
SW8260 SIM	1,4-Dioxane	1.6	--	--	Poor	J/UJ

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-2187

Primary Sample ID: MW-810-SP13 Lab ID: 160-2187-16
Duplicate Sample ID: W-37-325-SP13 Lab ID: 160-2187-23

Method	Analyte	MW-810-SP13	W-37-325-SP13	RPD	Rating	Qualifier
SW8260 SIM	1,4-Dioxane	36	19	61.8	Good	None
SW8260	1,1,1-Trichloroethane	1.3	--	--	Poor	J/UJ
SW8260	1,1,2-Trichloro-1,2,2-trifluoroethane	4.1	3.6	13.0	Good	None
SW8260	1,1,2-Trichloroethane	0.55	--	--	Poor	J/UJ
SW8260	1,1-Dichloroethene	16	15	6.5	Good	None
SW8260	1,1-Dichloroethane	10	9.7	3.0	Good	None
SW8260	Benzene	0.23	--	--	Poor	J/UJ
SW8260	2-Butanone (MEK)	--	9.1	--	Poor	J/UJ
SW8260	Acetone	--	7.9	--	Poor	J/UJ
SW8260	Carbon tetrachloride	35	32	9.0	Good	None
SW8260	cis-1,2-Dichloroethene	9.6	8.8	8.7	Good	None
SW8260	Trichlorofluoromethane	0.41	--	--	Poor	J/UJ
SW8260	Chloroform	320	330	3.1	Good	None
SW8260	Tetrachloroethene	180	150	18.2	Good	None
SW8260	Trichloroethene	570	550	3.6	Good	None
ASTM D5174	Total U	0.174	0.170	2.3	Good	None

Primary Sample ID: MW-811-SP13 Lab ID: 160-2187-8
Duplicate Sample ID: MW-204-470-SP13 Lab ID: 160-2187-9

Method	Analyte	MW-811-SP13	MW-204-470-SP13	RPD	Rating	Qualifier
SW8260	1,1-Dichloroethene	0.091	0.19	70.5	Poor	None
SW8260	1,1-Dichloroethane	0.075	0.077	2.6	Good	None
SW8260	2-Hexanone	0.26	--	--	Poor	J/UJ
SW8260	Benzene	0.077	0.096	22.0	Good	None
SW8260	Bromomethane	0.45	--	--	Poor	J/UJ
SW8260	Carbon disulfide	0.078	0.082	5.0	Good	None
SW8260	Chloromethane	0.22	0.16	31.6	Good	None
SW8260	cis-1,2-Dichloroethene	0.28	0.33	16.4	Good	None
SW8260	Tetrachloroethene	0.46	0.45	2.2	Good	None
SW8260	Trichloroethene	2.9	3.0	3.4	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2198**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/SE/JC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2198**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone were detected in method blank 160-48625/2 Acetone, tetrachloroethene, and toluene were detected in rinse blank RB-05-SP13 Acetone and tetrachloroethene were detected in trip blank TB-06-SP13
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples across multiple batches were qualified for method blank contamination. Rinsate blanks qualified multiple analytes in multiple samples.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of 4-bromofluorobenzene was reported in samples MW-203-160-SP13 (160-2198-8) and MWP-110-355-SP13 (160-2198-11). No target analytes associated with 4-bromofluorobenzene were reported and therefore, no qualification of sample results was performed.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No – Low recovery of methyl acetate was reported for the MS/MSD pair prepared with sample 160-2187-30. This MS/MSD is not associated with samples collected as part of this SDG and therefore no qualification of sample results has been performed.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2198**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No - Low recovery of methylcyclohexane was reported for the LCS and LCSD with lab ID 160-49272/4. Associated project results have been qualified as estimated.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No - Several analytes exhibited poor precision across multiple duplicate pairs. Refer to Table 4.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (One equipment rinsate blank included in this SDG)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
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Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Do field duplicate results show good precision? See Table 4	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result was reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2198**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - Acetone, methyl acetate, methyl tert-butyl ether, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, and 1,1,2,2-tetrachloroethane are outside of the lower QC limit for the continuing calibration with file ID MCCV6488.D. Associated sample results have been qualified as estimated.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
VOC results qualified based on method, rinse, and trip blank contamination, and continuing calibration criteria.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry

ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-2198

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-15D-SP13	160-2198-1	Groundwater	4/23/2013	MS/MSD
MW-209-530-SP13	160-2198-2	Groundwater	4/23/2013	Field Duplicate
MW-13D-SP13	160-2198-3	Groundwater	4/23/2013	Field Duplicate
MW-14S-SP13	160-2198-4	Groundwater	4/23/2013	
MW-203-440-SP13	160-2198-5	Groundwater	4/23/2013	
MW-209-380-SP13	160-2198-6	Groundwater	4/23/2013	
MW-814-SP13	160-2198-7	Groundwater	4/23/2013	Field Duplicate
MW-203-160-SP13	160-2198-8	Groundwater	4/23/2013	
MW-203-360-SP13	160-2198-9	Groundwater	4/23/2013	
MWP-110-440-SP13	160-2198-10	Groundwater	4/23/2013	
MWP-110-355-SP13	160-2198-11	Groundwater	4/23/2013	
MW-9-SP13	160-2198-12	Groundwater	4/24/2013	
MW-3-SP13	160-2198-13	Groundwater	4/24/2013	
MW-8-SP13	160-2198-14	Groundwater	4/24/2013	
MW-4-SP13	160-2198-15	Groundwater	4/24/2013	
MW-813-SP13	160-2198-16	Groundwater	4/23/2013	Field Duplicate
MW-14DD-SP13	160-2198-17	Groundwater	4/23/2013	
MW-33D-SP13	160-2198-18	Groundwater	4/23/2013	
MW-55S-SP13	160-2198-19	Groundwater	4/23/2013	
MW-812-SP13	160-2198-20	Groundwater	4/23/2013	Field Duplicate
MW-14D-SP13	160-2198-21	Groundwater	4/23/2013	
MW-33S-SP13	160-2198-22	Groundwater	4/23/2013	
MW-34S-SP13	160-2198-23	Groundwater	4/23/2013	Field Duplicate
MW-34D-SP13	160-2198-24	Groundwater	4/23/2013	
RB-05-SP13	160-2198-25	Rinse Blank	4/24/2013	Rinse Blank
MW-53S-SP13	160-2198-26	Groundwater	4/24/2013	Field Duplicate
MW-52D-SP13	160-2198-27	Groundwater	4/24/2013	
MW-815-SP13	160-2198-28	Groundwater	4/24/2013	Field Duplicate
TB-06-SP13	160-2198-29	Trip Blank	4/24/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-2198

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	27
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	27
Groundwater	SW846 6010B	Nickel	28
Groundwater	ASTM D5174	KPA, Total U, Liquid	28
Rinsate Blank	SW846 8260B	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1
Rinsate Blank	SW846 6010B	Nickel	1
Rinsate Blank	ASTM D5174	KPA, Total U, Liquid	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-2198

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-209-520-SP13	160-2198-2	Acetone	<2.0	3.3		3.3	UJ	Qualify	3
MW-13D-SP13	160-2198-3	Acetone	<2.0	0.48	J	0.48	UJ	Qualify	3
MW-14S-SP13	160-2198-4	Acetone	<2.0	0.52	J	0.52	UJ	Qualify	3
MW-203-440-SP13	160-2198-5	Acetone	<2.0	0.50	J	0.50	UJ	Qualify	3
MW-209-380-SP13	160-2198-6	Acetone	<2.0	5.9	J	5.9	UJ	Qualify	3
MW-814-SP13	160-2198-7	Acetone	<2.0	4.0		4.0	UJ	Qualify	3
MW-203-160-SP13	160-2198-8	Acetone	<2.0	1.6	J	1.6	UJ	Qualify	3
MW-203-360-SP13	160-2198-9	Acetone	<2.0	2.3	J	2.3	UJ	Qualify	3
MWP-110-440-SP13	160-2198-10	Acetone	<2.0	2.6	J	2.6	UJ	Qualify	3
MWP-110-355-SP13	160-2198-11	Acetone	0.483	1.2	J	1.2	UJ	Qualify	1
MW-9-SP13	160-2198-12	Acetone	0.483	0.80	J	0.80	UJ	Qualify	1
MW-3-SP13	160-2198-13	Acetone	<2.0	0.71	J	0.71	UJ	Qualify	3
MW-8-SP13	160-2198-14	Tetrachloroethene	<1.0	0.44	J	0.44	UJ	Qualify	3
MW-33D-SP13	160-2198-18	Acetone	0.483	1.0	J	1.0	UJ	Qualify	1
MW-55S-SP13	160-2198-19	Acetone	<2.0	1.2	J	1.2	UJ	Qualify	3
		Methylcyclohexane	<4.0	0.10	U	0.10	UJ	Qualify	4
MW-14D-SP13	160-2198-21	Acetone	<2.0	0.34	U	0.34	UJ	Qualify	5
		Methyl acetate	<5.0	0.37	U	0.37	UJ	Qualify	5
		Methyl tert-butyl ether	<2.0	0.11	U	0.11	UJ	Qualify	5
		2-Butanone	<5.0	0.52	U	0.52	UJ	Qualify	5
		4-Methyl-2-pentanone	<5.0	0.12	U	0.12	UJ	Qualify	5
		2-Hexanone	<5.0	0.52	U	0.52	UJ	Qualify	5
		1,1,2,2-Tetrachloroethane	<1.0	0.098	U	0.098	UJ	Qualify	5
RB-05-SP13	160-2198-25	Acetone	0.483	3.9	J	3.9	UJ	Qualify	2
MW-53S-SP13	160-2198-26	Methylcyclohexane	<4.0	2.6	U	2.6	UJ	Qualify	4
MW-52D-SP13	160-2198-27	Acetone	<2.0	1.8	J	1.8	UJ	Qualify	3
		Methylcyclohexane	<4.0	0.10	U	0.10	UJ	Qualify	4
MW-815-SP13	160-2198-28	Methylcyclohexane	<4.0	2.6	U	2.6	UJ	Qualify	4
TB-06-SP13	160-2198-29	Methylcyclohexane	<4.0	0.10	U	0.10	UJ	Qualify	4

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in the associated method blank.
3 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.
4 - The reported result has been qualified as estimated. The percent recovery (%R) is outside of QC limits for the associated laboratory control sample.
5 - The reported result has been qualified as estimated. The percent difference (%D) between the initial calibration relative response factor (RRF) and the continuing calibration RRF is outside of QC limits.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-2198

Primary Sample ID: MW-812-SP13 Lab ID: 160-2198-20
Duplicate Sample ID: MW-33S-SP13 Lab ID: 160-2198-22

Method	Analyte	MW-812-SP13	MW-33S-SP13	RPD	Rating	Qualifier
SW8260	Trichloroethene	1.5	--	--	Poor	J/UJ
SW8260	Tetrachloroethene	310	1300	123.0	Poor	J/UJ
ASTM D5174	Total U	104	107	2.8	Good	None

Primary Sample ID: MW-813-SP13 Lab ID: 160-2198-16
Duplicate Sample ID: MW-13D-SP13 Lab ID: 160-2198-3

Method	Analyte	MW-813-SP13	MW-13D-SP13	RPD	Rating	Qualifier
SW8260	Tetrachloroethene	0.29	--	--	Poor	J/UJ
SW8260	Acetone	--	0.48	--	Poor	J/UJ

Primary Sample ID: MW-814-SP13 Lab ID: 160-2198-7
Duplicate Sample ID: MW-209-530-SP13 Lab ID: 160-2198-2

Method	Analyte	MW-814-SP13	MW-209-530-SP13	RPD	Rating	Qualifier
SW8260	Acetone	4.0	3.3	19.2	Good	None
SW8260	Tetrachloroethene	13	13	0.0	Good	None
SW8260	Trichloroethene	1.0	1.1	9.5	Good	None
SW8260	1,4-Dioxane	1.3	--	--	Poor	J/UJ

Primary Sample ID: MW-815-SP13 Lab ID: 160-2198-28
Duplicate Sample ID: MW-53S-SP13 Lab ID: 160-2198-26

Method	Analyte	MW-815-SP13	MW-53S-SP13	RPD	Rating	Qualifier
SW8260	Acetone	18	21	15.4	Good	None
SW8260	Trichloroethene	12	13	8.0	Good	None
SW8260	Tetrachloroethene	5600	6200	10.2	Good	None
SW8260	2-Hexanone	6.1	--	--	Poor	J/UJ
ASTM D5174	Total U	26.4	30.6	14.7	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2215**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No - One empty vial received for MW-12-SP13 and MW-30I-SP13
Frequency of Field QC Samples Correct?	Yes
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/SE/JC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2215**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, and acetone were detected in method blank 160-49042/2 Acetone was detected in trip blanks TB-07-SP13 and TB-08-SP13.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples across multiple batches were qualified for method blank contamination. Rinsate and trip blanks qualified multiple analytes in multiple samples.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of 1,2-dichloroethane-d4 was reported in sample MW-30S-SP13 (160-2215-17). No target analytes associated with 1,2-dichloroethane were reported and therefore, no qualification of sample results was performed.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	Yes
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2215**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No - Multiple analytes exhibited poor precision across both duplicate pairs. Refer to Table 4.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	No. (No equipment rinsate blanks included in this SDG)
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2215**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 4	No - Two field duplicate sample pairs were associated with this SDG. Uranium in one duplicate pair was qualified due to poor precision.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to confirm quenching; only one result was reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - Dichlorodifluoromethane is outside of the upper QC limit for the CCs with file IDs ZICV7488.D and ZCCV7500.D. Associated sample results are non-detects. Therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-2215**
Date Completed: 6/28/2013	**Data Validation Chemist: S. Elliott, J. Christopher**
Date Performed: 7/23/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
VOC results qualified based on method and rinse blank contamination. Total U: Precision for one field duplicate sample pair outside criteria.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Spring 2013
Laboratory: TestAmerica	LAB SDG ID: 160-2215
Date Completed: 6/28/2013	Data Validation Chemist: S. Elliott, J. Christopher
Date Performed: 7/23/2013	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-2215

Sample ID	Lab ID	Matrix	Date Sampled	Lab QC
MW-15S-SP13	160-2215-1	Groundwater	4/24/2013	MS/MSD
MW-15DD-SP13	160-2215-2	Groundwater	4/24/2013	
MW-214-570-SP13	160-2215-3	Groundwater	4/24/2013	
MW-213-570-SP13	160-2215-4	Groundwater	4/24/2013	
MW-211-190-SP13	160-2215-5	Groundwater	4/24/2013	
MW-211-250-SP13	160-2215-6	Groundwater	4/24/2013	
MW-211-455-SP13	160-2215-7	Groundwater	4/24/2013	
MW-10-SP13	160-2215-8	Groundwater	4/24/2013	
MW-11-SP13	160-2215-9	Groundwater	4/24/2013	
MW-12-SP13	160-2215-10	Groundwater	4/24/2013	
MW-16S-SP13	160-2215-11	Groundwater	4/24/2013	
MW-16D-SP13	160-2215-12	Groundwater	4/24/2013	
MW-39S-SP13	160-2215-13	Groundwater	4/25/2013	
MW-31I-SP13	160-2215-14	Groundwater	4/25/2013	Field Duplicate
MW-816-SP13	160-2215-15	Groundwater	4/25/2013	Field Duplicate
MW-30D-SP13	160-2215-16	Groundwater	4/25/2013	
MW-30S-SP13	160-2215-17	Groundwater	4/25/2013	
MW-30I-SP13	160-2215-18	Groundwater	4/25/2013	Field Duplicate
MW-817-SP13	160-2215-19	Groundwater	4/25/2013	Field Duplicate
MW-210-380-SP13	160-2215-20	Groundwater	4/25/2013	
MW-210-280-SP13	160-2215-21	Groundwater	4/25/2013	
MW-210-470-SP13	160-2215-22	Groundwater	4/25/2013	MS/MSD
MW-212-580-SP13	160-2215-23	Groundwater	4/25/2013	
MW-17S-SP13	160-2215-24	Groundwater	4/25/2013	
MW-201-220-SP13	160-2215-25	Groundwater	4/25/2013	
MW-31D-SP13	160-2215-26	Groundwater	4/25/2013	
MW-32D-SP13	160-2215-27	Groundwater	4/25/2013	
MW-51I-SP13	160-2215-28	Groundwater	4/25/2013	
MW-202-495-SP13	160-2215-29	Groundwater	4/25/2013	MS/MSD
MW-202-220-SP13	160-2215-30	Groundwater	4/25/2013	
MW-202-380-SP13	160-2215-31	Groundwater	4/25/2013	
MW-27D-SP13	160-2215-32	Groundwater	4/25/2013	
MW-207-170-SP13	160-2215-33	Groundwater	4/25/2013	
MW-207-320-SP13	160-2215-34	Groundwater	4/25/2013	
MW-207-250-SP13	160-2215-35	Groundwater	4/25/2013	
MW-29S-SP13	160-2215-36	Groundwater	4/25/2013	
TB-07-SP13	160-2215-37	Trip Blank	4/25/2013	Trip Blank
TB-08-SP13	160-2215-38	Trip Blank	4/25/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-2215

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	36
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	36
Groundwater	SW846 6010B	Nickel	36
Groundwater	ASTM D5174	KPA, Total U, Liquid	36
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	2
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	2

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-2215

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-211-455-SP13	160-2215-7	Acetone	0.656	3.1		3.1	UJ	Qualify	1
MW-10-SP13	160-2215-8	Acetone	<2.0	1.9	J	1.9	UJ	Qualify	2
MW-11-SP13	160-2215-9	Acetone	<2.0	2.7		2.7	UJ	Qualify	2
MW-12-SP13	160-2215-10	Acetone	<2.0	2.4	J	2.4	UJ	Qualify	2
MW-16S-SP13	160-2215-11	Acetone	0.656	1.4	J	1.4	UJ	Qualify	1
MW-16D-SP13	160-2215-12	Acetone	0.656	1.4	J	1.4	UJ	Qualify	1
MW-39S-SP13	160-2215-13	Acetone	0.656	1.4	J	1.4	UJ	Qualify	1
MW-31I-SP13	160-2215-14	Acetone	0.656	1.8	J	1.8	UJ	Qualify	1
MW-816-SP13	160-2215-15	Acetone	0.656	1.1	J	1.1	UJ	Qualify	1
MW-30D-SP13	160-2215-16	Acetone	0.656	1.7	J	1.7	UJ	Qualify	1
MW-30S-SP13	160-2215-17	Acetone	0.656	2.0	J	2.0	UJ	Qualify	1
MW-30I-SP13	160-2215-18	Acetone	0.656	1.8	J	1.8	UJ	Qualify	1
MW-201-220-SP13	160-2215-25	1,2,3-Trichlorobenzene	0.140	0.18	J	0.18	UJ	Qualify	1
		1,2,4-Trichlorobenzene	0.083	0.13	J	0.13	UJ	Qualify	1
		Acetone	0.656	1.5	J	1.5	UJ	Qualify	1
MW-202-220-SP13	160-2215-30	1,2,3-Trichlorobenzene	0.083	0.13	J	0.13	UJ	Qualify	1
		Acetone	0.656	1.9	J	1.9	UJ	Qualify	1
MW-202-380-SP13	160-2215-31	Acetone	0.656	3.10	J	3.10	UJ	Qualify	1
MW-207-170-SP13	160-2215-33	Acetone	0.656	1.6	J	1.6	UJ	Qualify	1
MW-207-320-SP13	160-2215-34	Acetone	0.656	2.7		2.7	UJ	Qualify	1
MW-207-250-SP13	160-2215-35	Acetone	0.656	1.5	J	1.5	UJ	Qualify	1
TB-07-SP13	160-2215-37	Acetone	0.656	1.3	J	1.3	UJ	Qualify	1
TB-08-SP13	160-2215-38	Acetone	0.656	1.1	J	1.1	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-2215

Primary Sample ID: MW-816-SP13 Lab ID: 160-2215-15
Duplicate Sample ID: MW-31I-SP13 Lab ID: 160-2215-14

Method	Analyte	MW-816-SP13	MW-31I-SP13	RPD	Rating	Qualifier
SW8260	1,1,1-Trichloroethane	0.77	0.73	5.3	Good	None
SW8260	1,1-Dichloroethene	0.74	0.66	11.4	Good	None
SW8260	1,1-Dichloroethane	1.1	1.0	9.5	Good	None
SW8260	2-Hexanone	--	0.39	--	Poor	J/UJ
SW8260	Acetone	1.1	1.8	48.3	Good	None
SW8260	cis-1,2-Dichloroethene	0.088	--	--	Poor	J/UJ
SW8260	Tetrachloroethene	1.2	3.4	95.7	Poor	J/UJ
SW8260	Trichloroethene	1.5	1.3	14.3	Good	None

Primary Sample ID: MW-817-SP13 Lab ID: 160-2215-19
Duplicate Sample ID: MW-30I-SP13 Lab ID: 160-2215-18

Method	Analyte	MW-817-SP13	MW-30I-SP13	RPD	Rating	Qualifier
SW8260 SIM	1,4-Dioxane	1.8	1.7	5.7	Good	None
SW8260	1,1,1-Trichloroethane	7.3	8.7	17.5	Good	None
SW8260	1,1,2-Trichloroethane	--	0.24	--	Poor	J/UJ
SW8260	1,1-Dichloroethene	5.6	7.6	30.3	Good	None
SW8260	1,1-Dichloroethane	0.36	0.39	8.0	Good	None
SW8260	2-Hexanone	--	0.26	--	Poor	J/UJ
SW8260	Acetone	0.83	1.8	73.8	Good	None
SW8260	cis-1,2Dichloroethene	0.67	0.78	15.2	Good	None
SW8260	Tetrachloroethene	--	0.26	--	Poor	J/UJ
SW8260	Trichloroethene	1.9	2.4	23.3	Good	None
ASTM D5174	Total U	0.0984	--	--	Poor	J/UJ

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3377**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes - The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data. The date for sample W-12-70-SU13 was incorrectly entered on the COC as 8/14/13 (and subsequently in the hard copy report and the EDD). The date was corrected to 8/13/13 by the validator in the EDD and DUSR.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - One field duplicate sample pair was included with this SDG
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3377**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes - Ferrous iron analysis is typically performed in the field and has a method recommended holding time of 15 minutes. All ferrous iron results have been qualified as "HF" to denote that samples were analyzed outside of the method recommended holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone and m&p-xylene were detected in trip blank TB01-SU13
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for trip blank contamination. Rinsate blanks qualified multiple analytes in multiple samples.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3377**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – Chloromethane and styrene exhibited poor precisions in field duplicate MW-603-SU13; however, results of chloromethane and styrene were below the reporting limit. No qualification of sample results has been performed.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 3	Yes - Total U: Uranium was detected in equipment rinsate blank sample RB-01-SU13 (160-3414-18); GEL ID 331916014 at 0.297 µg/L concentration. One associated sample result (W-03-72-SU13 [160-3377-2]) was U qualified for rinsate blank contamination.
Were all samples run under acceptable calibration?	Yes
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3377**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	N/A – No isotopic U alpha spec analyses were performed for this SDG.
Do field duplicate results show good precision? See Table 4	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3377**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for chloromethane, vinyl chloride, and bromomethane is outside of the upper QC limit for the CC with file ID MCCV7724.D. Samples were results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
None
Minor Concerns
VOC results qualified based on trip blank contamination. Total U: Date correction for one sample; uranium detected in equipment rinsate blank causing one result to be U-qualified.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3377
Date Completed: 11/26/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3377
Date Completed: 11/26/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3377

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
MW-22D-SU13	160-3377-1	331728001	Groundwater	8/14/2013	
W-03-72-SU13	160-3377-2	331728002	Groundwater	8/14/2013	
MW-22I-SU13	160-3377-3	331728003	Groundwater	8/14/2013	
MW-21D-SU13	160-3377-4	331728004	Groundwater	8/14/2013	
MW-21I-SU13	160-3377-5	331728005	Groundwater	8/14/2013	MS/MSD
W-12-70-SU13	160-3377-6	331728006	Groundwater	8/13/2013	
MW-603-SU13	160-3377-7	331728007	Groundwater	8/13/2013	Field Duplicate
MW-16S-SU13	160-3377-8	331728008	Groundwater	8/13/2013	
MW-21S-SU13	160-3377-9	331728009	Groundwater	8/14/2013	
W-03-112-SU13	160-3377-10	331728010	Groundwater	8/13/2013	
MW-16D-SU13	160-3377-11	331728011	Groundwater	8/13/2013	
W-14-150-SU13	160-3377-12	331728012	Groundwater	8/14/2013	
W-01-120-SU13	160-3377-13	331728013	Groundwater	8/14/2013	
TB01-SU13	160-3377-14	N/A	Trip Blank	8/14/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3377

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	13
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	13
Groundwater	SW846 6010B	Nickel	13
Groundwater	ASTM D5174	KPA, Total U, Liquid	13
Groundwater	SM 3500 FE D	Iron, Ferrous and Feric	2
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3377

Matrix: **Groundwater**
Units: **ug/L, pCi/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-22D-SU13	160-3377-1	Acetone	<2.0	4.30		4.30	UJ	Qualify	1
W-03-72-SU13	160-3377-2	Acetone	<2.0	5.60		5.60	UJ	Qualify	1
		Chloromethane	<2.0	0.27	J	0.27	UJ	Qualify	1
		m&p-Xylene	<2.0	0.62	J	0.62	UJ	Qualify	1
		Total Uranium	0.297	0.147		0.147	UJ	Qualify	1
MW-22I-SU13	160-3377-3	Acetone	<2.0	3.90		3.90	UJ	Qualify	1
MW-21D-SU13	160-3377-4	Acetone	<2.0	3.40		3.40	UJ	Qualify	1
MW-21I-SU13	160-3377-5	Acetone	<2.0	6.30		6.30	UJ	Qualify	1
W-12-70-SU13	160-3377-6	Acetone	<2.0	4.30		4.30	UJ	Qualify	1
MW-603-SU13	160-3377-7	Acetone	<2.0	3.50		3.50	UJ	Qualify	1
MW-16S-SU13	160-3377-8	Acetone	<2.0	3.80		3.80	UJ	Qualify	1
MW-21S-SU13	160-3377-9	Acetone	<2.0	3.50		3.50	UJ	Qualify	1
W-03-112-SU13	160-3377-10	Acetone	<2.0	4.40		4.40	UJ	Qualify	1
		Chloromethane	<2.0	0.11	J	0.11	UJ	Qualify	1
		cis-1,2-Dichloroethene	<1.0	0.75	J	0.75	UJ	Qualify	1
		Toluene	<1.0	0.10	J	0.10	UJ	Qualify	1
MW-16D-SU13	160-3377-11	Acetone	<2.0	4.30		4.30	UJ	Qualify	1
W-14-150-SU13	160-3377-12	Acetone	<2.0	4.40		4.40	UJ	Qualify	1
		Chloromethane	<2.0	0.17	J	0.17	UJ	Qualify	1
		Tetrachloroethene	<1.0	0.59	J	0.59	UJ	Qualify	1
		Toluene	<1.0	0.10	J	0.10	UJ	Qualify	1
W-01-120-SU13	160-3377-13	Chloromethane	<2.0	0.16	J	0.16	UJ	Qualify	1
		cis-1,2-Dichloroethene	<1.0	0.54	J	0.54	UJ	Qualify	1
		Acetone	<2.0	4.20		4.20	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3377

Primary Sample ID: W-12-70-SU13 Lab ID: 160-3377-6
Duplicate Sample ID: MW-603-SU13 Lab ID: 160-3377-7

Method	Analyte	W-12-70-SU13	MW-603-SU13	RPD	Rating	Qualifier
SW8260	Acetone	4.3	3.5	20.5	Good	None
SW8260	Chloromethane	ND	0.23	--	Poor	J / UJ
SW8260	Styrene	ND	0.79	--	Poor	J / UJ

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3398**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes - The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data. Five samples in this SDG were analyzed for isotopic uranium by alpha spectroscopy.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - Four field duplicate sample pairs were included with this SDG. See Table 4.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3398**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes - Ferrous iron analysis is typically performed in the field and has a method recommended holding time of 15 minutes. All ferrous iron results have been qualified as "HF" to denote that samples were analyzed outside of the method recommended holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone and tetrachloroethene were detected in trip blank TB02-SU13 Low levels of acetone and carbon disulfide were detected in trip blank TB03-SU13 Low levels of acetone and styrene were detected in the method blank with file ID MBLK7753.D Low levels of acetone were detected in the method blank with file ID ZBLK9810.D
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for method blank and trip blank contamination. Rinsate blanks qualified multiple analytes in multiple samples.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3398**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – Poor performance was noted for several VOCs in duplicate samples MW-600-SU13, MW-601-SU13, and MW-604-SU13 and their native pairs; however the VOCs were detected below the reporting limit; therefore, no qualification of sample results has been performed.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes
Any compounds present in method and field blanks? See Table 3	No
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3398**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment **Note: This is a chemical analysis method using phosphorescence detection.**	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	Yes
Do field duplicate results show good precision? See Table 4	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3398**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for chloromethane and bromomethane is outside of the upper QC limit for the CC with file ID MCCV7749.D. Samples were results were non-detect; therefore, no qualification of sample results has been performed. The %D for dichlorodifluoromethane and isopropylbenzene is outside of the upper QC limit for the CC with file ID ZCCV9754.D. Samples were results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3398**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration are outside of QC limits.
Minor Concerns
VOC results qualified based on trip blank and method blank contamination. Total U: Uranium detected in equipment rinsate blank but no sample results for this SDG were U-qualified

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3398
Date Completed: 11/26/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3398

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
W-22-95-SU13	160-3398-1	331896001	Groundwater	8/14/2013	
PW-07-07-SU13	160-3398-2	N/A	Groundwater	8/14/2013	
PW-06-07-SU13	160-3398-3	N/A	Groundwater	8/14/2013	
MW-604-SU13	160-3398-4	331896002	Groundwater	8/14/2013	Field Duplicate
W-11-70-SU13	160-3398-5	331896003	Groundwater	8/14/2013	
W-06-79-SU13	160-3398-6	331896004	Groundwater	8/14/2013	
W-05-78-SU13	160-3398-7	331896005	Groundwater	8/14/2013	Field Duplicate
MW-605-SU13	160-3398-8	331896006	Groundwater	8/14/2013	Field Duplicate
MW-19D-SU13	160-3398-9	331896007	Groundwater	8/14/2013	
MW-26D-SU13	160-3398-10	331896008	Groundwater	8/14/2013	
MW-26S-SU13	160-3398-11	331896009	Groundwater	8/14/2013	Field Duplicate
MW-19S-SU13	160-3398-12	331896010	Groundwater	8/14/2013	
W-32-110-SU13	160-3398-13	331896011	Groundwater	8/15/2013	
PW-02-07-SU13	160-3398-14	331896012	Groundwater	8/15/2013	
PW-02-05-SU13	160-3398-15	331896013	Groundwater	8/15/2013	
MW-41S-SU13	160-3398-16	331896014	Groundwater	8/15/2013	
MW-601-SU13	160-3398-17	331896015	Groundwater	8/15/2013	Field Duplicate
MW-22S-SU13	160-3398-19	331896016	Groundwater	8/15/2013	Field Duplicate
PW-02-06-SU13	160-3398-20	331896017	Groundwater	8/15/2013	
W-01-75-SU13	160-3398-21	331896018	Groundwater	8/15/2013	Field Duplicate
MW-600-SU13	160-3398-22	331896019	Groundwater	8/15/2013	Field Duplicate
MW-24DD-SU13	160-3398-23	331896020	Groundwater	8/15/2013	
MW-24S-SU13	160-3398-24	331896021	Groundwater	8/15/2013	
W-23-110-SU13	160-3398-25	N/A	Groundwater	8/15/2013	
TB02-SU13	160-3398-26	N/A	Trip Blank	8/15/2013	Trip Blank
TB03-SU13	160-3398-27	N/A	Trip Blank	8/15/2013	Trip Blank
MW-43S-SU13	160-3398-28	331896022	Groundwater	8/15/2013	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3398

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	27
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	27
Groundwater	SW846 6010B	Nickel	25
Groundwater	ASTM D5174	KPA, Total U, Liquid	22
Groundwater	SM 3500 FE D	Iron, Ferrous and Feric	3
Groundwater	A-01-R	Isotopic Uranium	5
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	2
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	2

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3398

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
W-22-95-SU13	160-3398-1	Acetone	0.619	2.0		2.0	UJ	Qualify	1
		Chloromethane	<2.0	0.17	J	0.17	UJ	Qualify	3
PW-07-07-SU13	160-3398-2	Acetone	0.619	3.3		3.3	J	Qualify	2
PW-07-06-SU13	160-3398-3	Acetone	0.619	3.6		3.6	J	Qualify	2
MW-604-SU13	160-3398-4	Acetone	0.619	3.5		3.5	J	Qualify	2
W-11-70-SU13	160-3398-5	Acetone	0.619	3.8		3.8	J	Qualify	2
		Chloromethane	<2.0	0.15	J	0.15	UJ	Qualify	3
W-06-79-SU13	160-3398-6	Acetone	0.619	3.6		3.6	J	Qualify	2
		Chloromethane	<2.0	0.15	J	0.15	UJ	Qualify	3
		Tetrachloroethene	<1.0	0.39	J	0.39	UJ	Qualify	3
W-05-78-SU13	160-3398-7	Acetone	0.619	2.5		2.5	UJ	Qualify	1
MW-605-SU13	160-3398-8	Acetone	0.619	2.4		2.4	J	Qualify	1
		Tetrachloroethene	<1.0	0.28	J	0.28	UJ	Qualify	3
MW-19D-SU13	160-3398-9	Acetone	0.619	3.3		3.3	J	Qualify	2
		Tetrachloroethene	<1.0	0.77	J	0.77	UJ	Qualify	3
MW-26D-SU13	160-3398-10	Acetone	0.619	3.4		3.4	J	Qualify	2
		Tetrachloroethene	<1.0	0.75	J	0.75	UJ	Qualify	3
MW-26S-SU13	160-3398-11	Acetone	0.619	2.3		2.3	J	Qualify	1
		Tetrachloroethene	<1.0	0.24	J	0.24	UJ	Qualify	3
MW-19S-SU13	160-3398-12	Acetone	0.619	2.7		2.7	J	Qualify	1
		Tetrachloroethene	<1.0	0.52	J	0.52	UJ	Qualify	3
W-32-110-SU13	160-3398-13	Acetone	0.619	2.9		2.9	J	Qualify	1
		Tetrachloroethene	<1.0	1.7		1.7	J	Qualify	4
		Chloromethane	<2.0	0.20	J	0.20	UJ	Qualify	3
PW-02-07-SU13	160-3398-14	Acetone	0.619	2.5		2.5	UJ	Qualify	1
PW-02-05-SU13	160-3398-15	Acetone	0.619	3.6		3.6	J	Qualify	2
		Tetrachloroethene	<1.0	0.23	J	0.23	UJ	Qualify	3
MW-41S-SU13	160-3398-16	Acetone	0.619	4.7		4.7	UJ	Qualify	2
MW-601-SU13	160-3398-17	Acetone	0.619	4.3		4.3	J	Qualify	2
MW-22S-SU13	160-3398-19	Acetone	0.619	2.6		2.6	J	Qualify	2
PW-02-06-SU13	160-3398-20	Acetone	1.44	2.2		2.2	UJ	Qualify	1
		Tetrachloroethene	<1.0	0.29	J	0.29	UJ	Qualify	3
W-01-75-SU13	160-3398-21	Acetone	1.44	3.6		3.6	UJ	Qualify	1
		Chloromethane	<2.0	0.26		0.26	UJ	Qualify	3
		Toluene	<1.0	0.25	J	0.25	UJ	Qualify	3
MW-600-SU13	160-3398-22	Acetone	1.44	2.4		2.4	UJ	Qualify	1
MW-24DD-SU13	160-3398-23	Acetone	1.44	1.6		1.6	UJ	Qualify	1
		Tetrachloroethene	<1.0	1.4		1.4	J	Qualify	4
MW-24S-SU13	160-3398-24	Acetone	1.44	1.7		1.7	UJ	Qualify	1
W-23-110-SU13	160-3398-25	Acetone	<2.0	2.3		2.3	UJ	Qualify	3
		cis-1,2-Dichloroethene	<1.0	0.29	J	0.29	UJ	Qualify	3
MW-43S-SU13	160-3398-28	Acetone	1.44	1.6		1.6	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in the associated method blank
3 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3398

Primary Sample ID: W-01-75-SU13 Lab ID: 160-3398-21
Duplicate Sample ID: MW-600-SU13 Lab ID: 160-3398-22

Method	Analyte	W-01-75-SU13	MW-600-SU13	RPD	Rating	Qualifier
SW8260	1,1-Dichloroethene	-	0.28	--	Poor	J / UJ
SW8260	1,1-Dichloroethane	0.33	0.36	8.7	Good	None
SW8260	1,2,4-Trichlorobenzene	-	0.16	--	Poor	J / UJ
SW8260	1,2-Dichlorobenzene	110	100	9.5	Good	None
SW8260	1,4-Dichlorobenzene	4.0	-	--	Poor	J / UJ
SW8260	Acetone	3.6	2.4	40.0	Poor	None
SW8260	Chlorobenzene	3.3	3.2	3.1	Good	None
SW8260	Chloroform	0.12	-	--	Poor	J / UJ
SW8260	Chloromethane	0.26	-	--	Poor	J / UJ
SW8260	cis-1,2-Dichloroethene	36	40	10.5	Good	None
SW8260	Ethylbenzene	2.9	3.2	9.8	Good	None
SW8260	m&p-Xylene	20	23	14.0	Good	None
SW8260	o-Xylene	59	59	0.0	Good	None
SW8260	Tetrachloroethene	140	140	0.0	Good	None
SW8260	Toluene	0.25	0.24	4.1	Good	None
SW8260	trans-1,2-Dichloroethene	0.22	0.27	20.4	Good	None
SW8260	Trichloroethene	250	240	4.1	Good	None
SW8260	Vinyl chloride	0.77	0.69	11.0	Good	None

Primary Sample ID: MW-22S-SU13 Lab ID: 160-3398-19
Duplicate Sample ID: MW-601-SU13 Lab ID: 160-3398-17

Method	Analyte	MW-22S-SU13	MW-601-SU13	RPD	Rating	Qualifier
SW8260	1,2-Dichlorobenzene	-	0.11	--	Poor	J / UJ
SW8260	Acetone	2.6	4.3	49.3	Poor	J / UJ
SW8260	Chloromethane	0.40	0.33	19.2	Good	None
SW8260	cis-1,2-Dichloroethene	6.2	5.9	5.0	Good	None
SW8260	Tetrachloroethene	5600	4900	13.3	Good	None
SW8260	Trichloroethene	30	29	3.4	Good	None
ASTM D5174	Total U (ug/L)	22.7	25.3	10.8	Good	None
SW6010B	Nickel	-	13	--	Poor	J / UJ

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3398

Primary Sample ID: W-05-78-SU13 Lab ID: 160-3398-7
Duplicate Sample ID: MW-604-SU13 Lab ID: 160-3398-4

Method	Analyte	W-05-78-SU13	MW-604-SU13	RPD	Rating	Qualifier
SW8260	Acetone	2.5	3.4	30.5	Good	None
SW8260	Carbon disulfide	0.25	-	--	Poor	J / UJ
SW8260	Chloromethane	-	0.14	--	Poor	J / UJ
SW8260	Tetrachloroethene	6.2	6.0	3.3	Good	None
SW8260	Trichloroethene	17	16	6.1	Good	None

Primary Sample ID: MW-26S-SU13 Lab ID: 160-3398-11
Duplicate Sample ID: MW-605-SU13 Lab ID: 160-3398-8

Method	Analyte	MW-26S-SU13	MW-605-SU13	RPD	Rating	Qualifier
SW8260	1,1,1-Trichloroethane	0.32	0.34	6.1	Good	None
SW8260	1,1-Dichloroethene	0.36	0.37	2.7	Good	None
SW8260	1,1-Dichloroethane	0.65	0.64	1.6	Good	None
SW8260	Acetone	2.3	2.4	4.3	Good	None
SW8260	Chloromethane	0.22	0.18	20.0	Good	None
SW8260	Tetrachloroethene	0.24	0.28	15.4	Good	None
SW8260	Trichloroethene	0.32	0.26	20.7	Good	None
ASTM D5174	Total U (ug/L)	6.7	6.3	6.0	Good	None
SW6010B	Nickel	330	340	3.0	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3414**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No - Sample 160-3414-1 was incorrectly logged in as W-31-95-SU14. The correct field sample ID is W-31-95-SU13 as per the COC and has been corrected in the GEL EDD and the DUSR. The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - One field duplicate sample pair and one equipment rinsate blank were included with this SDG. See Table 4
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3414**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone and 1,2-dichlorobenzene were detected in trip blank TB04-SU13 Low levels of acetone and trichloroethene were detected in trip blank TB05-SU13 Acetone and low levels of chloromethane, cis-1,2-dichloroethene, tetrachloroethene, and toluene were detected in rinse blank RB-01-SU13 Low levels of acetone were detected in the method blank with file ID MBLK7859.D Low levels of acetone were detected in the method blank with file ID ZBLK9810.D Low levels of acetone were detected in the method blank with file ID ZBLK0052.D
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for method blank, rinse blank, and trip blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of toluene-d8 was reported in sample 160-3414-3 (W-16-148-SU13). The sample was reanalyzed and the surrogate was within QC limits.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3414**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No - High recovery of cyclohexane was reported in the MS prepared with 160-3414-1 (W-31-95-SU13). The RPD values of 2-butanone, acetone, and methyl acetate are outside of QC limits.
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No - Bromomethane and chloromethane are outside of the upper QC limit for the LCS with file ID MLCS7856.D.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – Poor performance was noted for several VOCs in duplicate samples MW-606-SU13 and MW-611-SU13 and their native pairs; however the VOCs were detected below the reporting limit; therefore, no qualification of sample results has been performed.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes
Any compounds present in method and field blanks? See Table 3	Yes - Total U: Uranium was detected in equipment rinsate blank sample RB-01-SU13 (160-3414-18); GEL ID 331916014 at 0.297 µg/L concentration. Two associated sample results (W-16-148-SU13 [160-3414-3] and W-17-130-SU13 [160-3414-9]) were U-qualified for rinsate blank contamination.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3414**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	Yes
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	No. Isotopic Uranium: U-232 tracer yields for two samples were below criteria. The sample results were qualified with J as estimated.
Do field duplicate results show good precision? See Table 4	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3414**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for chloromethane, vinyl chloride, and bromomethane is outside of the upper QC limit for the CC with file ID MCCV7855.D. Sample results were non-detect; therefore, no qualification of sample results has been performed. The %D for dichlorodifluoromethane and isopropylbenzene is outside of the upper QC limit for the CC with file ID ZCCV9754.D. Sample results were non-detect; therefore, no qualification of sample results has been performed. The %D for 1,2,3-trichlorobenzene is outside of the upper QC limit for the CC with file ID ZCCV9934.D. Sample results were non-detect; therefore, no qualification of samples results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3414**
Date Completed: 11/26/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration were outside of QC limits for VOCs.
Minor Concerns
VOC results qualified based on trip blank, rinse blank, and method blank contamination. Total U: Uranium detected in equipment rinsate blank causing two sample results to be U-qualified. Isotopic U: Tracer yields below criteria causing results for two samples to be J-qualified.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3414
Date Completed: 11/26/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3414

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
W-31-95-SU13	160-3414-1	331916001	Groundwater	8/15/2013	MS/MSD
W-25-150-SU13	160-3414-2	N/A	Groundwater	8/15/2013	
W-16-148-SU13	160-3414-3	331916002	Groundwater	8/15/2013	
MW-20I-SU13	160-3414-4	331916003	Groundwater	8/15/2013	
MW-20D-SU13	160-3414-5	331916004	Groundwater	8/15/2013	
MW-20S-SU13	160-3414-6	331916005	Groundwater	8/15/2013	
W-10-71-SU13	160-3414-7	331916006	Groundwater	8/15/2013	
MW-30S-SU13	160-3414-8	331916007	Groundwater	8/15/2013	
W-17-130-SU13	160-3414-9	331916008	Groundwater	8/15/2013	
MW-18I-SU13	160-3414-10	331916009	Groundwater	8/16/2013	
MW-606-SU13	160-3414-11	331916010	Groundwater	8/16/2013	Field Duplicate
MW-44S-SU13	160-3414-12	331916011	Groundwater	8/16/2013	Field Duplicate
MW-18S-SU13	160-3414-13	331916012	Groundwater	8/16/2013	
MW-42I-SU13	160-3414-14	331916013	Groundwater	8/16/2013	
W-19-110-SU13	160-3414-15	N/A	Groundwater	8/16/2013	
W-20-120-SU13	160-3414-16	N/A	Groundwater	8/16/2013	
W-19-150-SU13	160-3414-17	N/A	Groundwater	8/16/2013	
RB-01-SU13	160-3414-18	331916014	Groundwater	8/16/2013	Rinse Blank
MW-39S-SU13	160-3414-19	331916015	Groundwater	8/16/2013	
PW-07-05-SU13	160-3414-20	N/A	Groundwater	8/16/2013	Field Duplicate
MW-611-SU13	160-3414-21	N/A	Groundwater	8/16/2013	Field Duplicate
W-20-160-SU13	160-3414-22	N/A	Groundwater	8/16/2013	
TB04-SU13	160-3414-23	N/A	Trip Blank	8/16/2013	Trip Blank
TB05-SU13	160-3414-24	N/A	Trip Blank	8/16/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3414

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	24
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	24
Groundwater	SW846 6010B	Nickel	22
Groundwater	ASTM D5174	KPA, Total U, Liquid	15
Groundwater	A-01-R	Isotopic Uranium	5
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	2
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	2

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3414

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
W-31-95-SU13	160-3414-1	Acetone	<2.0	2.4	J	2.4	UJ	Qualify	2, 3
		Chloromethane	<2.0	0.23	J	0.23	UJ	Qualify	3
		Tetrachloroethene	<1.0	0.33	J	0.33	UJ	Qualify	3
		2-Butanone	<5.0	0.52	U	0.52	UJ	Qualify	2
		Methyl acetate	<25	0.37	UJ	0.37	UJ	Qualify	2
W-25-150-SU13	160-3414-2	1,2-Dichlorobenzene	<1.0	0.63	J	0.63	UJ	Qualify	3
		Acetone	<2.0	3.7		3.7	UJ	Qualify	3
W-16-148-SU13	160-3414-3	Acetone	1.44	2.2		2.2	UJ	Qualify	1
		1,2-Dichlorobenzene	<1.0	0.11	J	0.11	UJ	Qualify	3
		Total Uranium	0.297	0.0867		0.0867	UJ	Qualify	3
MW-20I-SU13	160-3414-4	Acetone	1.44	1.7	J	1.7	UJ	Qualify	1
		Chloromethane	<2.0	0.18	J	0.18	UJ	Qualify	3
		Tetrachloroethene	<1.0	0.33	J	0.33	UJ	Qualify	3
MW-20D-SU13	160-3414-5	Tetrachloroethene	<1.0	0.70	J	0.70	UJ	Qualify	3
MW-20S-SU13	160-3414-6	U-233/234	N/A	3660		3660	J	Qualify	4
		U-235/236	N/A	184		184	J	Qualify	4
		U-238	N/A	3730		3730	J	Qualify	4
W-10-71-SU13	160-3414-7	Acetone	<2.0	2.3		2.3	UJ	Qualify	3
W-17-130-SU13	160-3414-9	Acetone	1.44	1.2	J	1.2	UJ	Qualify	1
		Total Uranium	0.297	0.241		0.241	UJ	Qualify	3
MW-18S-SU13	160-3414-13	Acetone	1.44	5.7		5.7	UJ	Qualify	1
		U-233/234	N/A	2660		2660	J	Qualify	4
		U-235/236	N/A	137		137	J	Qualify	4
		U-238	N/A	2720		2720	J	Qualify	4
MW-42I-SU13	160-3414-14	Acetone	1.44	2.1		2.1	UJ	Qualify	1
W-19-110-SU13	160-3414-15	Acetone	1.44	5.8	J	5.8	UJ	Qualify	1
W-20-120-SU13	160-3414-16	Acetone	1.44	3.1	B	3.1	UJ	Qualify	1
W-19-150-SU13	160-3414-17	Acetone	1.44	6.8	B	6.8	UJ	Qualify	1
MW-39S-SU13	160-3414-19	Acetone	0.380	7.6	JD	7.6	UJ	Qualify	1
PW-07-05-SU13	160-3414-20	Acetone	0.380	1.7	JD	1.7	UJ	Qualify	1
W-20-160-SU13	160-3414-22	Acetone	0.697	3.1		3.1	UJ	Qualify	3
TB04-SU13	160-3414-23	Acetone	0.380	0.42	J	0.42	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The relative percent difference (RPD) between the matrix spike and the matrix spike duplicate is outside of QC limits.
3 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.
4 - The reported result has been qualified as estimated. The tracer recovery is outside QC limits.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3414

Primary Sample ID: MW-44S-SU13 Lab ID: 160-3414-12
Duplicate Sample ID: MW-606-SU13 Lab ID: 160-3414-11

Method	Analyte	MW-44S-SU13	MW-606-SU13	RPD	Rating	Qualifier
SW8260	Acetone	2.1	3.1	38.5	Good	None
SW8260	Carbon disulfide	0.21	-	--	Poor	J / UJ
SW8260	Chloromethane	-	0.23	--	Poor	J / UJ
SW8260	Tetrachloroethene	35	33	5.9	Good	None
ASTM D5174	Total U (ug/L)	19.9	18.80	5.7	Good	None
A-01-R	U-233/234 (pCi/L)	5.93	6.14	3.5	Good	None
A-01-R	U-235/236 (pCi/L)	0.347	0.338	2.6	Good	None
A-01-R	U-238 (pCi/L)	7.23	5.30	30.8	Good	None
SW6010B	Nickel	1100	1000	9.5	Good	None

Primary Sample ID: PW-07-05-SU13 Lab ID: 160-3414-20
Duplicate Sample ID: MW-611-SU13 Lab ID: 160-3414-21

Method	Analyte	PW-07-05-SU13	MW-611-SU13	RPD	Rating	Qualifier
SW8260	1,1,1-Trichloroethane	0.14	0.15	6.9	Good	None
SW8260	Acetone	1.7	3.4	66.7	Poor	J / UJ
SW8260	Chloromethane	0.34	0.70	69.2	Poor	J / UJ
SW8260	cis-1,2-Dichloroethene	-	0.12	--	Poor	J / UJ
SW8260	Methyl tert-butyl ether	4.3	4.4	2.3	Good	None
SW8260	Tetrachloroethene	0.67	0.69	2.9	Good	None
SW8260	Trichloroethene	2.5	2.6	3.9	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3429**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No - Sample MW-29S-SU13 (160-3429-21) was logged for total U analysis on the COC for TA; however, it was not sent to GEL until more than a month after the rest of the samples were sent. The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - One field duplicate sample pair was included with this SDG.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3429**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes - Ferrous iron analysis is typically performed in the field and has a method recommended holding time of 15 minutes. All ferrous iron results have been qualified as "HF" to denote that samples were analyzed outside of the method recommended holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone and methylene chloride were detected in trip blank TB06 Low levels of acetone and methylene chloride were detected in trip blank TB07 Low levels of acetone were detected in the method blank with file ID ZBLK9988.D
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for method blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of 1,2-dichloroethane-d4 was reported in sample 160-3429-19 (MW-51I-SU13). No target analytes associated with the surrogate compound were detected; therefore, no qualification of sample results has been performed.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No - The RPD of 1,2,3-trichlorobenzene is outside of QC limits for the MS/MSD prepared with project sample 160-3429-8 (MW-15S-SU13).

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3429**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – Poor performance was noted for several VOCs in duplicate samples MW-607-SU13 and MW-612-SU13 and their native pairs; however the VOCs were detected below the reporting limit; therefore, no qualification of sample results has been performed.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes
Any compounds present in method and field blanks? See Table 3	No
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3429**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	N/A
Do field duplicate results show good precision? See Table 4	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3429**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	No - Chlorobenzene-d5 is outside of the upper QC limit for 160-3429-7, -9, -11, -14, and -16. No target analytes associated with this internal standard were detected; therefore, no qualification of samples results has been performed. 1,4-dichlorobenzene-d4 is outside of the lower QC limit for 160-3429-2, -3, -4, -5, -6, -7, -9, -11, -12, -13, -14, and -16. No target analytes associated with this internal standard were detected; therefore, no qualification of sample results has been performed.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for 1,2,3-trichlorobenzene is outside of the upper QC limit for the CC with file ID MCCV9934.D. Sample results were non-detect; therefore, no qualification of sample results has been performed. The %D for vinyl chloride and acetone is outside of the upper QC limit for the CC with file ID ZCCV9984.D. Sample results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3429**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration were outside of QC limits for VOCs. Internal standards were outside of QC limits for several samples.
Minor Concerns
VOC results qualified based on trip blank, rinse blank, and method blank contamination. Total U: One sample was sent to GEL from TestAmerica more than a month later than the rest of the samples.

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3429
Date Completed: 11/27/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/2013	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3429

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
MW-50I-SU13	160-3429-1	332053001	Groundwater	8/19/2013	
MW-612-SU13	160-3429-2	N/A	Groundwater	8/19/2013	Field Duplicate
W-26-270-SU13	160-3429-3	N/A	Groundwater	8/19/2013	Field Duplicate
MW-14D-SU13	160-3429-4	332053002	Groundwater	8/19/2013	
MW-14S-SU13	160-3429-5	332053003	Groundwater	8/19/2013	
MW-14DD-SU13	160-3429-6	332053004	Groundwater	8/19/2013	
MW-49S-SU13	160-3429-7	332053005	Groundwater	8/19/2013	
MW-15S-SU13	160-3429-8	332053006	Groundwater	8/19/2013	MS/MSD
MW-13S-SU13	160-3429-9	332053007	Groundwater	8/19/2013	
W-24-260-SU13	160-3429-10	N/A	Groundwater	8/19/2013	MS/MSD
W-25-188-SU13	160-3429-11	N/A	Groundwater	8/19/2013	
MW-15DD-SU13	160-3429-12	332053008	Groundwater	8/19/2013	Field Duplicate
MW-607-SU13	160-3429-13	332053009	Groundwater	8/19/2013	Field Duplicate
MW-15D-SU13	160-3429-14	332053010	Groundwater	8/19/2013	
W-27-240-SU13	160-3429-15	N/A	Groundwater	8/19/2013	
W-30-285-SU13	160-3429-16	N/A	Groundwater	8/19/2013	
W-27-285-SU13	160-3429-17	N/A	Groundwater	8/19/2013	
W-37-325-SU13	160-3429-18	N/A	Groundwater	8/19/2013	
MW-51I-SU13	160-3429-19	332053011	Groundwater	8/19/2013	
W-37-385-SU13	160-3429-20	N/A	Groundwater	8/19/2013	
MW-29S-SU13	160-3429-21	335014001	Groundwater	8/19/2013	
TB-06	160-3429-22	N/A	Trip Blank	8/19/2013	Trip Blank
TB-07	160-3429-23	N/A	Trip Blank	8/19/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3429

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	21
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	21
Groundwater	SW846 6010B	Nickel	21
Groundwater	ASTM D5174	KPA, Total U, Liquid	12
Groundwater	SM 3500 FE D	Iron, Ferrous and Feric	5
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	2
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	2

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3429

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-15S-SU13	160-3429-8	1,2,3-Trichlorobenzene	<2.0	0.087	U	0.087	UJ	Qualify	3
W-24-260-SU13	160-3429-10	Acetone	0.998	3.0		3.0	UJ	Qualify	1
W-25-188-SU13	160-3429-11	Acetone	0.998	1.9	J	1.9	J	Qualify	1
W-30-285-SU13	160-3429-16	Acetone	0.998	2.7		2.7	UJ	Qualify	1
W-37-325-SU13	160-3429-18	Acetone	0.998	5.3		5.3	J	Qualify	2
MW-51I-SU13	160-3429-19	Acetone	0.998	1.4	J	1.4	UJ	Qualify	1
W-37-385-SU13	160-3429-20	Acetone	0.998	3.2		3.2	UJ	Qualify	1
MW-29S-SU3	160-3429-21	Acetone	0.998	1.5	J	1.5	UJ	Qualify	1
TB-06	160-3429-22	Acetone	0.998	1.9	J	1.9	UJ	Qualify	1
TB-07	160-3429-23	Acetone	0.998	1.8	J	1.8	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in the associated method blank
3 - The reported result has been qualified as estimated. The relative percent difference (RPD) between the matrix spike and the matrix spike duplicate is outside of QC limits.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3429

Primary Sample ID: MW-15DD-SU13 Lab ID: 160-3429-12
Duplicate Sample ID: MW-607-SU13 Lab ID: 160-3429-13

Method	Analyte	MW-15DD-SU13	MW-607-SU13	RPD	Rating	Qualifier
SW8260	1,1,1-Trichloroethane	0.14	0.12	15.4	Good	None
SW8260	1,1-Dichloroethane	0.39	0.32	19.7	Good	None
SW8260	1,2-Dichlorobenzene	0.46	0.38	19.0	Good	None
SW8260	Acetone	4.3	2.6	49.3	Poor	J / UJ

Primary Sample ID: W-26-270-SU13 Lab ID: 160-3429-3
Duplicate Sample ID: MW-612-SU13 Lab ID: 160-3429-2

Method	Analyte	W-26-270-SU13	MW-612-SU13	RPD	Rating	Qualifier
SW8260	Acetone	3.4	-	--	Poor	J / UJ
SW8260	cis-1,2-Dichloroethene	0.10	0.13	26.1	Good	None
SW8260	Methyl tert-butyl ether	0.15	0.13	14.3	Good	None
SW8260	Tetrachloroethene	10	9.80	2.0	Good	None
SW8260	Trichloroethene	0.30	0.28	6.9	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3441**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - One field duplicate sample pair was included with this SDG
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3441**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes - Ferrous iron analysis is typically performed in the field and has a method recommended holding time of 15 minutes. All ferrous iron results have been qualified as "HF" to denote that samples were analyzed outside of the method recommended holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone and methylene chloride were detected in trip blank TB09
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for rinse blank and trip blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs*. *Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3441**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – Poor performance of acetone was noted in duplicate sample MW-608-SU13 and its native pair; however, acetone was detected below the reporting limit and therefore, no qualification of sample results has been performed.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes
Any compounds present in method and field blanks? See Table 3	No
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3441**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment **Note: This is a chemical analysis method using phosphorescence detection.**	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	Yes
Do field duplicate results show good precision? See Table 4	No - Total U: The results for the field duplicate sample pair were qualified with J.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	No - 1,4-dichlorobenzene-d4 is outside of the lower QC limit for 160-3441-1, -2, -6, and -14. No target analytes associated with this internal standard were detected; therefore, no qualification of samples results has been performed.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3441**
Date Completed: 11/27/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/2013	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for dichlorodifluoromethane, chloromethane, and vinyl chloride is outside of the upper QC limit for the CC with file ID ZCCV9899.D. Sample results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration were outside of QC limits for VOCs. Internal standards were outside of QC limits for several samples.
Minor Concerns
VOC results qualified based on trip blank and rinse blank contamination. Total U: Poor precision for field duplicate sample pair causing those results to be J-qualified.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3441
Date Completed: 11/27/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/2013	Data Validation Review: J. Nelson

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3441

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
MW-P110-440-SU13	160-3441-1	N/A	Groundwater	8/20/2013	
S-1-450-SU13	160-3441-2	N/A	Groundwater	8/20/2013	
MW-17S-SU13	160-3441-3	332213001	Groundwater	8/20/2013	Field Duplicate
MW-608-SU13	160-3441-4	332213002	Groundwater	8/20/2013	Field Duplicate
W-36-448-SU13	160-3441-5	N/A	Groundwater	8/20/2013	
W-36-390-SU13	160-3441-6	N/A	Groundwater	8/20/2013	
S-1-325-SU13	160-3441-7	N/A	Groundwater	8/20/2013	
MW-25S-SU13	160-3441-8	332213003	Groundwater	8/20/2013	
MW-55S-SU13	160-3441-9	332213004	Groundwater	8/20/2013	
MW-34D-SU13	160-3441-10	332213005	Groundwater	8/20/2013	
MW-33D-SU13	160-3441-11	332213006	Groundwater	8/20/2013	
MW-52S-SU13	160-3441-12	332213007	Groundwater	8/20/2013	
TB08	160-3441-13	N/A	Trip Blank	8/20/2013	Trip Blank
TB09	160-3441-14	N/A	Trip Blank	8/20/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3441

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	12
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	12
Groundwater	SW846 6010B	Nickel	12
Groundwater	ASTM D5174	KPA, Total U, Liquid	7
Groundwater	SM 3500 FE D	Iron, Ferrous and Feric	3
Groundwater	A-01-R	Isotopic Uranium	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	2
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	2

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3441

Matrix: **Groundwater**
Units: **ug/L; pCi/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-17S-SU13	160-3441-3	Acetone	<2.0	1.6	J	1.6	UJ	Qualify	1
		Total Uranium	NA	0.32		0.32	J	Qualify	3
MW-608-SU13	160-3441-4	Acetone	<2.0	0.36	J	0.36	UJ	Qualify	1
		Total Uranium	NA	0.0652		0.0652	J	Qualify	3
W-36-448-SU13	160-3441-5	Acetone	<2.0	0.86	J	0.86	UJ	Qualify	1
S-1-325-SU13	160-3441-7	Acetone	<2.0	1.8	J	1.8	UJ	Qualify	1
MW-34D-SU13	160-3441-10	Acetone	<2.0	3.7		3.7	J	Qualify	2
MW-33D-SU13	160-3441-11	Acetone	<2.0	0.57	J	0.57	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in in the associated trip or rinse blank.
3 - The reported result has been qualified as estimated. The RPD between the field duplicate sample pair is outside of QC limits.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3441

Primary Sample ID: MW-17S-SU13 Lab ID: 160-3441-3
Duplicate Sample ID: MW-608-SU13 Lab ID: 160-3441-4

Method	Analyte	MW-17S-SU13	MW-608-SU13	RPD	Rating	Qualifier
SW8260	Acetone	1.6	0.36	126.5	Poor	J / UJ
SW8260	Tetrachloroethene	1.4	1.3	7.4	Good	None
SW8260	Trichloroethene	0.59	0.40	38.4	Good	None
ASTM D5174	Total U (ug/L)	0.318	0.065	131.9	Poor	J / UJ

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3464**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes - The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - One field duplicate sample pair was included with this SDG. See Table 4.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3464**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes - Ferrous iron analysis is typically performed in the field and has a method recommended holding time of 15 minutes. All ferrous iron results have been qualified as "HF" to denote that samples were analyzed outside of the method recommended holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone were detected in trip blanks TB10-SU13 and SB11-SU13. Low levels of acetone were detected in the method blank with file ID ZBLK9988.D. Low levels of acetone were detected in the method blank with file ID ZBLK0020.D.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for method blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No - Methyl acetate is outside of the upper QC limit for the MS prepared with project sample 160-3464-1 (MW-212-580-SU13). No target analytes associated with the surrogate compound were detected; therefore, no qualification of sample results has been performed.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3464**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – Poor performance of 1,1-dichloroethene was noted in duplicate sample MW-609-SU13 and its native pair; however,1,1-dichloroethene was detected below the reporting limit and therefore, no qualification of sample results has been performed.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes
Any compounds present in method and field blanks? See Table 3	No
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3464**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment **Note: This is a chemical analysis method using phosphorescence detection.**	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	Yes
Do field duplicate results show good precision? See Table 4	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3464**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for vinyl chloride is outside of the upper QC limit for the CC with file ID ZCCV9984.D. Sample results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration were outside of QC limits for VOCs. Surrogate recovery is outside of QC limits for one project sample.
Minor Concerns
VOC results qualified based on method blank, trip blank, and rinse blank contamination.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3464
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3464
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3464

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
MW-212-580-SU13	160-3464-1	N/A	Groundwater	8/20/2013	MS/MSD
RB-02-SU13	160-3464-2	N/A	Groundwater	8/20/2013	Rinse Blank
MW-52D-SU13	160-3464-3	332114001	Groundwater	8/20/2013	
W-8-71-SU13	160-3464-4	332114002	Groundwater	8/20/2013	
MW-34S-SU13	160-3464-5	332114003	Groundwater	8/20/2013	
MW-33S-SU13	160-3464-6	332114004	Groundwater	8/20/2013	
MW-P114-170R-SU13	160-3464-7	N/A	Groundwater	8/21/2013	
MW-P114-290-SU13	160-3464-8	N/A	Groundwater	8/21/2013	
W-10-120-SU13	160-3464-9	332114005	Groundwater	8/21/2013	MS/MSD
MW-28I-SU13	160-3464-10	332114006	Groundwater	8/21/2013	Field Duplicate
MW-609-SU13	160-3464-11	332114007	Groundwater	8/21/2013	Field Duplicate
MW-28S-SU13	160-3464-12	332114008	Groundwater	8/21/2013	
MW-28D-SU13	160-3464-13	332114009	Groundwater	8/21/2013	
MW-3-SU13	160-3464-14	332114010	Groundwater	8/21/2013	
MW-602-SU13	160-3464-15	N/A	Groundwater	8/21/2013	Field Duplicate
MW-18-150-SU13	160-3464-16	N/A	Groundwater	8/21/2013	Field Duplicate
MW-34-285-SU13	160-3464-17	N/A	Groundwater	8/21/2013	
TB10-SU13	160-3464-18	N/A	Trip Blank	8/21/2013	
TB11-SU13	160-3464-19	N/A	Trip Blank	8/21/2013	

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3464

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	12
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	12
Groundwater	SW846 6010B	Nickel	12
Groundwater	ASTM D5174	KPA, Total U, Liquid	10
Groundwater	SM 3500 FE D	Iron, Ferrous and Feric	3
Groundwater	A-01-R	Isotopic Uranium	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	2
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	2

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3464

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-212-580-SU13	160-3464-1	Acetone	0.871	2.8		2.8	UJ	Qualify	1
RB-02-SU13	160-3464-2	Acetone	0.998	4.9		4.9	UJ	Qualify	1
MW-52D-SU13	160-3464-3	Acetone	0.998	3.3		3.3	UJ	Qualify	1
W-8-71-SU13	160-3464-4	Acetone	0.998	9.9		9.90	J	Qualify	2
MW-34S-SU13	160-3464-5	Acetone	0.998	2.8		2.8	UJ	Qualify	1
MW-P114-170R-SU13	160-3464-7	Acetone	0.871	1.2	J	1.2	UJ	Qualify	1
MW-P114-290-SU13	160-3464-8	Acetone	0.871	1.6	J	1.6	UJ	Qualify	1
W-10-120-SU13	160-3464-9	Acetone	0.871	1.6	J	1.6	UJ	Qualify	1
MW-28I-SU13	160-3464-10	Acetone	0.871	0.94	J	0.94	UJ	Qualify	1
MW-609-SU13	160-3464-11	Acetone	0.871	1.3	J	1.3	UJ	Qualify	1
MW-28S-SU13	160-3464-12	Acetone	0.871	1.3	J	1.3	UJ	Qualify	1
MW-28D-SU13	160-3464-13	Acetone	0.871	1.1	J	1.1	UJ	Qualify	1
MW-3-SU13	160-3464-14	Acetone	0.871	1.3	J	1.3	UJ	Qualify	1
MW-602-SU13	160-3464-15	Acetone	0.871	3.3		3.3	UJ	Qualify	1
MW-18-150-SU13	160-3464-16	Acetone	0.871	4.1		4.1	UJ	Qualify	1
MW-34-285-SU13	160-3464-17	Acetone	0.871	1.2	J	1.2	UJ	Qualify	1
TB10-SU13	160-3464-18	Acetone	0.871	0.85	J	0.85	UJ	Qualify	1
TB11-SU13	160-3464-19	Acetone	0.871	0.91	J	0.91	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3464

Primary Sample ID: MW-18-150-SU13 Lab ID: 160-3464-16
Duplicate Sample ID: MW-602-SU13 Lab ID: 160-3464-15

Method	Analyte	MW-18-150-SU13	MW-602-SU13	RPD	Rating	Qualifier
SW8260	1,1-Dichloroethene	4.0	4.1	2.5	Good	None
SW8260	1,1-Dichloroethane	0.28	0.31	10.2	Good	None
SW8260	Acetone	4.1	3.3	21.6	Good	None
SW8260	Methyl tert-butyl ether	0.71	0.72	1.4	Good	None
SW8260	trans-1,2-Dichloroethene	2.3	2.5	8.3	Good	None
SW8260	Vinyl chloride	38	39	2.6	Good	None
SW8260	cis-1,2-Dichloroethene	290	280	3.5	Good	None
SW8260	Tetrachloroethene	210	210	0.0	Good	None
SW8260	Trichloroethene	80	78	2.5	Good	None
SW6010B	Nickel	120	110	8.7	Good	None

Primary Sample ID: W-28I-SU13 Lab ID: 160-3464-10
Duplicate Sample ID: MW-609-SU13 Lab ID: 160-3464-11

Method	Analyte	W-28I-SU13	MW-609-SU13	RPD	Rating	Qualifier
SW8260	1,1,1-Trichloroethane	0.11	0.12	8.7	Good	None
SW8260	1,1-Dichloroethene	0.11	-	--	Poor	J / UJ
SW8260	1,1-Dichloroethane	0.14	0.14	0.0	Good	None
SW8260	Acetone	0.94	1.3	32.1	Good	None
SW8260	Chloroform	6.9	6.9	0.0	Good	None
SW8260	Methyl tert-butyl ether	1.6	1.7	6.1	Good	None
SW8260	Tetrachloroethene	0.5	0.4	6.7	Good	None
ASTM D5174	Total U (ug/L)	2.13	2.00	6.3	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3532**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes - The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - One field duplicate sample pair was included with this SDG. See Table 4.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3532**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone were detected in trip blanks TB12-SU13 and TB13-SU13. Low levels of acetone were detected in the method blank with file ID ZBLK0052.D. Low levels of acetone were detected in the method blank with file ID ZBLK0186.D. Low levels of acetone were detected in the method blank with file ID ZBLK0253.D.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for method blank, rinse blank, and trip blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No - High recovery of 1,2-dichloroethane-d4 was reported in samples 160-3532-10 (MW-210-470-SU13) and -11 (MW-210-280-SU13). Samples were reanalyzed and surrogate recoveries are within QC limits. No qualification of samples results has been performed.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3532**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	No – Poor performance of acetone was noted in duplicate sample MW-613-SU13 and its native pair; however, acetone was qualified below the reporting limit and therefore, no qualification of sample results has been performed.

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes
Any compounds present in method and field blanks? See Table 3	No
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3532**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	N/A
Do field duplicate results show good precision? See Table 4	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3532**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for styrene is outside of the upper QC limit for the CC with file ID ZCCV0048.D. Sample results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration were outside of QC limits for VOCs. Several surrogate recoveries are outside of QC limits.
Minor Concerns
VOC results qualified based on method blank, trip blank, and rinse blank contamination.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3532
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3532
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3532

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
MW-202-220-SU13	160-3532-1	N/A	Groundwater	8/22/2013	
MW-202-380-SU13	160-3532-2	N/A	Groundwater	8/22/2013	
MW-9-SU13	160-3532-3	332428001	Groundwater	8/23/2013	
MW-31I-SU13	160-3532-4	332428002	Groundwater	8/23/2013	
MW-210-380-SU13	160-3532-5	N/A	Groundwater	8/23/2013	
MW-10-SU13	160-3532-6	332428003	Groundwater	8/23/2013	MS/MSD
MW-207-170-SU13	160-3532-7	332428004	Groundwater	8/23/2013	
MW-613-SU13	160-3532-8	332428005	Groundwater	8/23/2013	Field Duplicate
MW-207-250-SU13	160-3532-9	332428006	Groundwater	8/23/2013	
MW-210-470-SU13	160-3532-10	N/A	Groundwater	8/23/2013	
MW-210-280-SU13	160-3532-11	N/A	Groundwater	8/23/2013	
MW-207-320-SU13	160-3532-12	332428007	Groundwater	8/23/2013	Field Duplicate
PW-06-05-SU13	160-3532-13	N/A	Groundwater	8/24/2013	
PW-06-07-SU13	160-3532-14	N/A	Groundwater	8/24/2013	
PW-06-06-SU13	160-3532-15	N/A	Groundwater	8/24/2013	
MW-31DSU13	160-3532-16	332428008	Groundwater	8/26/2013	
MW-209-380-SU13	160-3532-17	N/A	Groundwater	8/26/2013	
MW-209-530-SU13	160-3532-18	N/A	Groundwater	8/26/2013	MS/MSD
TB12-SU13	160-3532-19	N/A	Trip Blank	8/26/2013	Trip Blank
TB13-SU13	160-3532-20	N/A	Trip Blank	8/26/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3532

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	18
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	18
Groundwater	SW846 6010B	Nickel	18
Groundwater	ASTM D5174	KPA, Total U, Liquid	8
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	2
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	2

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3532

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-202-220-SU13	160-3532-1	Acetone	0.814	2.2		2.2	UJ	Qualify	1
MW-202-380-SU13	160-3532-2	Acetone	0.814	5.7		5.7	J	Qualify	2
MW-9-SU13	160-3532-3	Acetone	0.814	2.7	J	2.7	UJ	Qualify	1
MW-31I-SU13	160-3532-4	Acetone	0.814	2.8		2.80	UJ	Qualify	1
MW-210-380-SU13	160-3532-5	Acetone	0.814	4.4		4.4	UJ	Qualify	2
MW-10-SU13	160-3532-6	Acetone	0.814	6.0	J	6.0	UJ	Qualify	3
MW-207-170-SU13	160-3532-7	Acetone	0.814	3.5		3.5	UJ	Qualify	1
MW-613-SU13	160-3532-8	Acetone	0.814	3.3		3.3	UJ	Qualify	1
MW-207-250-SU13	160-3532-9	Acetone	0.814	3.5		3.5	UJ	Qualify	1
MW-210-470-SU13	160-3532-10	Acetone	1.07	7.0		7.0	J	Qualify	2
MW-210-280-SU13	160-3532-11	Acetone	1.07	4.0		4.0	UJ	Qualify	1
MW-207-320-SU13	160-3532-12	Acetone	0.814	5.7		5.7	J	Qualify	2
PW-06-05-SU13	160-3532-13	Acetone	0.814	3.1		3.1	UJ	Qualify	1
PW-06-07-SU13	160-3532-14	Acetone	0.697	3.1		3.1	UJ	Qualify	1
PW-06-06-SU13	160-3532-15	Acetone	0.697	2.9		2.9	UJ	Qualify	1
MW-31D-SU13	160-3532-16	Acetone	0.697	3.5		3.5	UJ	Qualify	1
MW-209-530-SU13	160-3532-18	Acetone	0.697	5.7		5.7	J	Qualify	2
TB12-SU13	160-3532-19	Acetone	0.697	1.20	J	1.20	UJ	Qualify	1
TB13-SU13	160-3532-20	Acetone	0.697	1.10	J	1.10	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in the associated method blank
3 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3532

Primary Sample ID: MW-207-320-SU13 Lab ID: 160-3532-12
Duplicate Sample ID: MW-613-SU13 Lab ID: 160-3532-8

Method	Analyte	MW-207-320-SU13	MW-613-SU13	RPD	Rating	Qualifier
SW8260	Acetone	5.7	3.3	53.3	Poor	J / UJ
SW8260	Methyl tert-butyl ether	0.15	0.13	14.3	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3543**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes - Sample MW-205-285-SU13 was logged by TestAmerica on the COC to GEL as MW-20-285-SU13 and the incorrect sample ID was used in the data package and the EDD. The sample ID has been corrected in the DUSR and EDD. The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - No field duplicates were included with this SDG.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3543**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone were detected in trip blank TB14-SU13. Low levels of acetone, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were detected in the method blank with file ID ZBLK0218.D. Low levels of acetone were detected in the method blank with file ID ZBLK0186.D. Low levels of acetone were detected in the method blank with file ID ZBLK0342.D.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for method blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3543**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes.
Any compounds present in method and field blanks? See Table 3	No
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3543**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment **Note: This is a chemical analysis method using phosphorescence detection.**	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	N/A
Do field duplicate results show good precision? See Table 4	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3543**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for carbon tetrachloride, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene is outside of the upper QC limit for the CC with file ID ZCCV0214.D. Sample results were non-detect; therefore, no qualification of sample results has been performed. The %D for methyl acetate, 2-butanone, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene is outside of the upper QC limit for the CC with file ID ZCCV0336.D. Sample results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration were outside of QC limits for VOCs.
Minor Concerns
VOC results qualified based on method blank, trip blank, and rinse blank contamination. Total U: Sample ID transcription error on COC to GEL and in GEL data package.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3543
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3543
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3543

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
MW-27S-SU13	160-3543-1	332598001	Groundwater	8/26/2013	
MW-20-285-SU13	160-3543-2	332598002	Groundwater	8/26/2013	
MW-614-SU13	160-3543-3	N/A	Groundwater	8/26/2013	Field Duplicate
MW-206-320-SU13	160-3543-4	332598003	Groundwater	8/26/2013	
MW-27D-SU13	160-3543-5	332598004	Groundwater	8/26/2013	
MW-205-470-SU13	160-3543-6	332598005	Groundwater	8/26/2013	
MW-23I-SU13	160-3543-7	332598006	Groundwater	8/26/2013	
MW-27DD-SU13	160-3543-8	332598007	Groundwater	8/26/2013	
MW-206-470-SU13	160-3543-9	332598008	Groundwater	8/26/2013	
MW-208-350-SU13	160-3543-10	N/A	Groundwater	8/26/2013	
MW-208-540-SU13	160-3543-11	N/A	Groundwater	8/26/2013	Field Duplicate
MW-211-190-SU13	160-3543-12	N/A	Groundwater	8/27/2013	
MW-211-250-SU13	160-3543-13	N/A	Groundwater	8/27/2013	
MW-211-455-SU13	160-3543-14	N/A	Groundwater	8/27/2013	
MW-203-440-SU13	160-3543-15	332598009	Groundwater	8/27/2013	
MW-203-360-SU13	160-3543-16	332598010	Groundwater	8/27/2013	
MW-13D-SU13	160-3543-17	332598011	Groundwater	8/27/2013	
MW-23S-SU13	160-3543-18	332598012	Groundwater	8/27/2013	
MW-203-160-SU13	160-3543-19	332598013	Groundwater	8/27/2013	
MW-23D-SU13	160-3543-20	332598014	Groundwater	8/27/2013	
TB14-SU13	160-3543-21	N/A	Trip Blank	8/27/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3543

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	20
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	20
Groundwater	SW846 6010B	Nickel	20
Groundwater	ASTM D5174	KPA, Total U, Liquid	14
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3543

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-27S-SU13	160-3543-1	Acetone	0.814	1.3	J	1.3	UJ	Qualify	1
MW-614-SU13	160-3543-3	Acetone	0.786	2.6		2.6	UJ	Qualify	1
MW-206-320-SU13	160-3543-4	Acetone	0.786	4.2	J	4.20	UJ	Qualify	2
MW-27D-SU13	160-3543-5	Acetone	0.786	1.4	J	1.4	UJ	Qualify	1
MW-27DD-SU13	160-3543-8	Acetone	0.786	2.0		2.0	UJ	Qualify	1
MW-208-350-SU13	160-3543-10	Acetone	0.786	2.7		2.7	UJ	Qualify	1
MW-208-540-SU13	160-3543-11	Acetone	0.786	2.1		2.1	UJ	Qualify	1
MW-211-190-SU13	160-3543-12	Acetone	0.786	1.7	J	1.7	UJ	Qualify	1
MW-211-455-SU13	160-3543-14	Acetone	0.786	2.4		2.4	UJ	Qualify	1
MW-203-440-SU13	160-3543-15	Acetone	0.786	1.5	J	1.5	UJ	Qualify	1
MW-203-360-SU13	160-3543-16	Acetone	0.786	3.1		3.1	J	Qualify	2
MW-23S-SU13	160-3543-18	Acetone	0.736	0.98	J	0.98	UJ	Qualify	1
MW-203-160-SU13	160-3543-19	Acetone	0.736	1.2	J	1.2	UJ	Qualify	1
MW-23D-SU13	160-3543-20	Acetone	0.736	0.98	J	0.98	UJ	Qualify	1
TB14-SU13	160-3543-21	Acetone	0.736	1.3	J	1.3	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in the associated method blank

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3543

Primary Sample ID: MW-208-540-SU13 Lab ID: 160-3543-11
Duplicate Sample ID: MW-614-SU13 Lab ID: 160-3543-3

Method	Analyte	MW-208-540-SU13	MW-614-SU13	RPD	Rating	Qualifier
SW8260	Acetone	2.1	2.6	21.3	Good	None
SW8260	Tetrachloroethene	2.6	2.6	0.0	Good	None
SW8260	Toluene	0.36	0.31	14.9	Good	None
SW8260	Trichloroethene	0.54	0.42	25.0	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3563**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes - Sample W-12-120-SU13 was logged by TestAmerica on the COC to GEL as MW-12-120-SU13; sample W-02-70-SU13 was logged by TestAmerica on the COC to GEL as MW-2-70-SU13; and sample MW-204-470-SU13 was logged by TestAmerica on the COC to GEL as MW-P204-470-SU13. The incorrect sample IDs were used in the data package and the EDD. The sample IDs have been corrected in the DUSR and EDD. The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - No field duplicates were included with this SDG.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3563**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	Yes - Ferrous iron analysis is typically performed in the field and has a method recommended holding time of 15 minutes. All ferrous iron results have been qualified as "HF" to denote that samples were analyzed outside of the method recommended holding time.
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone were detected in trip blank TB15-SU13. Low levels of acetone were detected in the method blank with file ID ZBLK0342.D.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for method blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3563**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No - High recovery of 1,2,3-trichlorobenzene was reported in the LCS and LCSD with filed ID ZLCS30367.D. Associated sample results were non-detect; therefore, no qualification of sample results has been performed
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	N/A

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes
Any compounds present in method and field blanks? See Table 3	No
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3563**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment **Note: This is a chemical analysis method using phosphorescence detection.**	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	N/A
Do field duplicate results show good precision? See Table 4	No
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3563**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for dichlorodifluoromethane, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene is outside of the upper QC limit for the CC with file ID ZCCV0366.D. Sample results were non-detect; therefore, no qualification of sample results has been performed. The %D for methyl acetate, 2-butanone, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene is outside of the upper QC limit for the CC with file ID ZCCV0336.D. Sample results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration were outside of QC limits for VOCs. Several LCS recoveries are outside of QC limits.
Minor Concerns
VOC results qualified based on method blank, trip blank, and rinse blank contamination. Total U: Sample ID transcription errors on COC to GEL and in GEL data package.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3563
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3563
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3563

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
MW-P110-355-SU13	160-3563-1	N/A	Groundwater	8/27/2013	
MW-P204-470-SU13	160-3563-2	332656001	Groundwater	8/27/2013	
MW-25D-SU13	160-3563-3	332656002	Groundwater	8/27/2013	
MW-25I-SU13	160-3563-4	332656003	Groundwater	8/27/2013	
MW-204-320-SU13	160-3563-5	332656004	Groundwater	8/27/2013	
MW-30I-SU13	160-3563-6	332656005	Groundwater	8/27/2013	
MW-30D-SU13	160-3563-7	332656006	Groundwater	8/28/2013	
MW-213-570-SU13	160-3563-8	N/A	Groundwater	8/28/2013	
MW-12-120-SU13	160-3563-9	332656007	Groundwater	8/28/2013	
MW-214-570-SU13	160-3563-10	332656008	Groundwater	8/28/2013	
MW-2-70-SU13	160-3563-11	332656009	Groundwater	8/28/2013	
MW-202-495-SU13	160-3563-12	N/A	Groundwater	8/28/2013	
MW-4-SU13	160-3563-13	332656010	Groundwater	8/28/2013	
TB15-SU13	160-3563-14	N/A	Trip Blank	8/28/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3563

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	13
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	13
Groundwater	SW846 6010B	Nickel	13
Groundwater	ASTM D5174	KPA, Total U, Liquid	10
Groundwater	SM 3500 FE D	Iron, Ferrous and Feric	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3563

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-P110-355-SU13	160-3563-1	Acetone	0.736	2.3	J	2.3	UJ	Qualify	1
MW-P204-470-SU13	160-3563-2	Acetone	0.736	5.2		5.2	J	Qualify	2
MW-25D-SU13	160-3563-3	Acetone	0.736	0.85	J	0.85	UJ	Qualify	1
MW-25I-SU13	160-3563-4	Acetone	0.736	0.92	J	0.92	UJ	Qualify	1
MW-30I-SU13	160-3563-6	Acetone	0.736	1.2	J	1.2	UJ	Qualify	1
MW-30D-SU13	160-3563-7	Acetone	0.736	1.3	J	1.3	UJ	Qualify	1
MW-213-570-SU13	160-3563-8	Acetone	0.736	0.94	J	0.94	UJ	Qualify	1
MW-12-120-SU13	160-3563-9	Acetone	0.736	1.2	J	1.2	UJ	Qualify	1
TB15-SU13	160-3563-14	Acetone	0.736	0.99	J	0.99	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been qualified as estimated. The amount detected in the sample is greater than 5x but less than 10x the amount detected in the associated method blank

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3575**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes - The total uranium analysis was subcontracted to GEL Laboratories and both laboratory sample IDs are referenced for those data.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes
Frequency of Field QC Samples Correct?	Yes - One field duplicate was included with this SDG.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes
All forms and raw data complete?	Yes
Case narrative present and complete?	Yes
Target analyte list and reporting limits match QAPP?	Yes

Initials – completed above JN/JZC

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3575**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method, trip and field blanks? See Table 3	Yes – Low levels of acetone were detected in trip blank TB15-SU13. Low levels of acetone were detected in the method blank with file ID ZBLK0342.D.
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes – Several samples were qualified for method blank, rinse blank, and trip blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	N/A
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	N/A
LCS within QC criteria? See Table 3 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No - High recovery of 1,2,3-trichlorobenzene was reported in the LCS and LCSD with filed ID ZLCS30367.D. Associated sample results were non-detect; therefore, no qualification of sample results has been performed

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3575**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Chemical Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes – Samples were reanalyzed due to analytical issues, only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 4	Yes

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Were all samples run under acceptable calibration?	Yes
Any compounds present in method and field blanks? See Table 3	No
Were any analytes flagged for blank contamination? See Table 3 *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No
LCS within QC criteria (75-125% recovery)? See Table 3 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3575**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review Total U Analysis - Approval by Data Validation Chemist - See Attachment Note: This is a chemical analysis method using phosphorescence detection.	
Description	**Notes and Qualifiers**
Tracer yields within QC criteria for Alpha Spec (30-110% recovery)? See Table 3	Yes
Do field duplicate results show good precision? See Table 4	No.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes - Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	**LAB SDG ID: 160-3575**
Date Completed: 12/2/13	**Data Validation Chemist: J. Z. Christopher**
Date Performed: 12/5/13	**Data Validation Review: J. Nelson**

Compliance Review by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No - The %D for dichlorodifluoromethane, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene is outside of the upper QC limit for the CC with file ID ZCCV0366.D. Sample results were non-detect; therefore, no qualification of sample results has been performed. The %D for methyl acetate, 2-butanone, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene is outside of the upper QC limit for the CC with file ID ZCCV0336.D. Sample results were non-detect; therefore, no qualification of sample results has been performed.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	Yes
GC/MS	For TICs are there any system related compounds that should not be reported?	NA
ICP	ICS recoveries within 80-120%?	Yes
ICP	ICV recoveries within 90-110%?	Yes
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes
ICP	CRI recoveries within 20% of expected value?	Yes
ICP	ICB/CCB detections <2X MDL?	Yes
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes

Summary of Potential Impacts on Data Usability
Major Concerns
Several compounds in the continuing calibration were outside of QC limits for VOCs. Several LCS recoveries are outside of QC limits.
Minor Concerns
VOC results qualified based on method blank, trip blank, and rinse blank contamination.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3575
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater Characterization – Summer 2013
Laboratory: TestAmerica	LAB SDG ID: 160-3575
Date Completed: 12/2/13	Data Validation Chemist: J. Z. Christopher
Date Performed: 12/5/13	Data Validation Review: J. Nelson

Tables

Table 1
Sample Summary
Sylvania Corning FUSRAP
SDG: 160-3575

Sample ID	TA Lab ID	GEL Lab ID	Matrix	Date Sampled	Lab QC
MW-610-SU13	160-3575-1	332707001	Groundwater	8/28/2013	Field Duplicate
MW-201-220-SU13	160-3575-2	332707002	Groundwater	8/28/2013	
MW-8-SU13	160-3575-3	332707003	Groundwater	8/28/2013	Field Duplicate
MW-12-SU13	160-3575-4	332707004	Groundwater	8/28/2013	
MW-11-SU13	160-3575-5	332707005	Groundwater	8/28/2013	
MW-32D-SU13	160-3575-6	332707006	Groundwater	8/28/2013	
RB03-SU13	160-3575-7	N/A	Groundwater	8/28/2013	Rinse Blank
TB15-SU13	160-3575-8	N/A	Trip Blank	8/27/2013	Trip Blank

Table 2
Summary of Analytical Methods
Sylvania Corning FUSRAP
SDG: 160-3575

Matrix	Method Number	Summary	Number of Samples
Groundwater	SW846 8260B	Volatile Organics by GC/MS	7
Groundwater	SW846 8260B SIM	Volatile Organics by GC/MS	7
Groundwater	SW846 6010B	Nickel	7
Groundwater	ASTM D5174	KPA, Total U, Liquid	6
Groundwater	A-01-R	Isotopic Uranium	1
Trip Blank	SW846 8260B	Volatile Organics by GC/MS	1
Trip Blank	SW846 8260B SIM	Volatile Organics by GC/MS	1

Table 3
Summary of Qualified Target Analytes
Sylvania Corning FUSRAP
SDG: 160-3575

Matrix: **Groundwater**
Units: **ug/L**

Sample ID	Lab ID	Analyte	Method Blank Conc.	Lab Reported Conc.		QA Reported Conc.		QA Decision	Footnote
MW-610-SU13	160-3575-1	Acetone	0.736	1.3	J	1.3	UJ	Qualify	1
MW-8-SU13	160-3575-3	Acetone	<2.0	1.1	J	1.1	UJ	Qualify	2
MW-11-SU13	160-3575-5	Acetone	<2.0	2.0	J	2.0	UJ	Qualify	2
TB15-SU13	160-3575-8	Acetone	0.736	1.2	J	1.2	UJ	Qualify	1

Notes:
1 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated method blank.
2 - The reported result has been negated. The amount detected in the sample is less than 5x the amount detected in the associated trip or rinsate blank.

Table 4
Summary of Field Duplicate Results
Sylvania Corning FUSRAP
SDG: 160-3575

Primary Sample ID: MW-8-SU13 Lab ID: 160-3575-1
Duplicate Sample ID: MW-610-SU13 Lab ID: 160-3575-3

Method	Analyte	MW-8-SU13	MW-610-SU13	RPD	Rating	Qualifier
SW8260	Acetone	1.1	1.3	16.7	Good	None
SW8260	Tetrachloroethene	0.21	0.26	21.3	Good	None
SW6010B	Nickel	820	790	3.7	Good	None

B Analytical Data

Provided on attached CD.

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C Sample Collection Documentation

Field Adjustment and Audit Forms provided on attached CD.

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FINAL
Quality Control Summary Report Vertical Profile, Monitoring Well, and Drain Investigation Sampling Events for the Sylvania Corning FUSRAP Site

August 2016

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
Kansas City District
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Prepared by:

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Certificate of Compliance

On behalf of The Louis Berger Group, Inc. (LBG), the undersigned certify that the document listed below was developed in conformance with LBG's Quality Control Plan, and further, that the work was performed in accordance with acceptable standards of engineering and scientific practice.

Quality Control Summary Report
Vertical Profile and 2013 - 2016 Sampling Events
for the Sylvania Corning FUSRAP Site
Hicksville, County of Nassau,
New York

August 2016

Contract Numbers: W912DQ-11-D-3009, Task Order No. 0012

Prepared for:

U.S. Army Corps of Engineers
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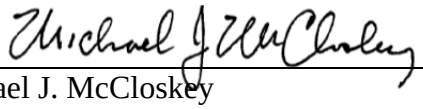

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List of Abbreviations and Acronyms

CCB	continuing calibration blank
CCV	continuing calibration verification
CRI	contract required quantitation limit check standard
CSIA	Compound Specific Isotope Analysis
%D	percent difference (between calibration and verification)
DQOs	data quality objectives
DRM	Data Review Memorandum
DUSR	Data Usability Summary Report
E & E	Ecology and Environment, Inc.
EDB	ethylene dibromide
EDD	electronic data deliverable
EPA	Environmental Protection Agency
FUSRAP	Formerly Utilized Sites Remedial Action Program
ICB	initial calibration blank
ICV	initial calibration verification
IDL	instrument detection limit
IDW	investigation derived waste
KPA	kinetic phosphorescence analysis
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MDC	minimum detectable concentration
MEK	methyl ethyl ketone
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MIBK	methyl isobutyl ketone
MS/MSD	matrix spike/matrix spike duplicate

List of Abbreviations and Acronyms (cont.)

µg/kg	micrograms per kilogram
µg/L	micrograms per liter
pCi/g	picocuries per gram
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PDS	post-digestion spike
PQL	practical quantitation limit
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
QC	quality control
QCP	Quality Control Plan
QCSR	Quality Control Summary Report
RER	reported error ratio
RI	Remedial Investigation
RPD	relative percent difference
SDG	sample delivery group
TAL	Target Analyte List
TCE	trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
USACE	United States Army Corps of Engineers
USACE KC	United States Army Corps of Engineers Kansas City District
VOC	volatile organic compound
WP	Work Plan

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Introduction

The Louis Berger Group, Inc. (LBG), and their subcontractor, Ecology and Environment (E & E), have been contracted by the United States Army Corps of Engineers (USACE), under Contract Numbers W912DQ-08-D-0017, Task Order No. 0019 and W912DQ-11-D-3009, Task Order No. 0012, to perform an Off-Site Groundwater Characterization and Feasibility Study (FS) at the Sylvania Corning Formerly Utilized Sites Remedial Action Program (FUSRAP) Site (Sylvania Site or the Site) located in Hicksville, Nassau County, New York.

The study objectives are to:

- Characterize the nature and extent of off-site groundwater contamination originating from the Sylvania Site.
- Determine if groundwater contaminants from the Sylvania Site are reaching and moving beyond the municipal water supply wells at the Hicksville Water District Plant 5 and Bowling Green facilities.
- Collect sufficient data to select remedial alternatives and prepare a FS for remediation of the Site.

This quality control summary report (QCSR) presents the results of the sampling and analytical program and provides an opportunity to review the completeness and quality of the data collected.

The purpose of this QCSR is to:

- Summarize sample collection, handling, and analytical procedures for the sampling investigation conducted at each site (see Section 1);
- Identify any deviations from the proposed sampling and analysis procedures (see Sections 1 and 2);
- Present the analytical results for the field samples collected (see Section 3);
- Report on any inspections or audits performed and any findings that that may impact the project data (see Section 4); and
- Discuss the results of the data quality evaluation associated with the sampling events (see Sections 2 and 5).

- Discuss the precision, accuracy, completeness, and comparability of the data (see Section 6).

Evaluation of any contaminants detected will be provided in the RI Report. The RI Report also will contain maps of sample locations and summary tables of positive results.

Supporting information is included in appendices to the QCSR. The appendices are located on the attached DVD and include:

- Appendix A – Data Review Memoranda (DRM) and Data Usability Summary Report (DUSR) – The DRM or DUSR prepared for each sample delivery group (SDG) in PDF format; verification of CSIA Data; section of Evaluation Memorandum Sylvania-Corning FUSRAP Site Compound Specific Isotope Analysis (CSIA).
- Appendix B – Analytical Data – All laboratory reports on compact disk in PDF format, which include case narratives and quality control (QC) sample results.
- Appendix C – Sample Collection Documentation – Documentation of field audits performed by LBG.

1 Data Collection

Environmental samples were collected as part of the field characterization in accordance with the final Work Plan (WP), Health and Safety Plan, and Quality Assurance Project Plan (QAPP), Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site (LBG 2011a), as amended by the Work Plan Amendment Memorandum (LBG 2013), Work Plan Amendment #2 (LBG 2014), and Work Plan Amendment #3 (LBG 2015). Methodologies used for field notebooks; sample labeling, packaging, and custody; equipment decontamination; containerization of investigation-derived waste (IDW); and site surveying were performed in accordance with the WP, QAPP, and documents referenced therein. All field QC activities were carried out in accordance with the final Quality Control Plan (QCP) (LBG 2011b). Field data collection activities for each phase are summarized below. Audits were performed for each phase as described in Section 4.

Quality assurance/quality control (QA/QC) samples were collected on a site-wide basis according to the criteria established in the QAPP. The field QA/QC sample requirements are as follows:

- Field QC duplicates collected at a frequency of 10% of the number of field samples collected;
- Rinsates collected at a frequency of 10% of the number of field samples collected if non-dedicated equipment was used;
- Matrix spike/matrix spike duplicate (MS/MSDs) for laboratory QC collected at a frequency of 5% of the samples collected; and
- Trip blanks sent one per shipment for each cooler in which water samples for volatile organic compound (VOC) analysis were shipped. Trip blanks were analyzed for all VOC methods designated for the samples.

Any minor variances in field methodologies that occurred during the characterization are noted on the daily activity summary reports or in the field logbook. Deviations from the WP were noted on field adjustment forms. Copies of these reports and forms are provided in Appendix C. The following sections summarize the deviations and fieldwork activities for each phase of fieldwork.

1.1 Off-Site Groundwater Characterization Data Collection – Phase IVb and IVc

This section of the QCSR summarizes the sampling results for Off-Site Groundwater Characterization – Phase IV, which included vertical profile groundwater screening and sampling (borings MW-215 through MW-225; MW-58 and MW-59), monitoring well installation (MW-215 through MW-225; MW-58-75 and MW-59-75), well development, and monitoring well sampling events (Winter 2015, Spring 2015 and Spring 2016). The investigation activities were conducted between December 2013 and April 2016.

1.1.1 Drilling and Vertical Profile Sampling

The drilling and vertical profile sampling procedures were performed in accordance with the final Work Plan (LBG 2011a), Work Plan Amendment #2 (LBG 2014), and Work Plan Amendment #3 (LBG 2015). Summaries of exceptions to the WP and amendments are described below:

- The WP stated that the last five samples collected from the planned end of each boring were to be submitted for quick turnaround analysis (12 hour). In some cases, six samples were submitted for quick turnaround analysis to ensure that an entire data set was available so that monitoring well screen placement decisions could be made as quickly as possible after the last sample had been collected.
- Drill water samples were collected per newly mobilized drill rig in addition to a monthly sample to identify any potential cross contamination from drilling equipment. The drill water source (public water supply) did not change over the course of the investigations.
- Boreholes were cleared using post-hole diggers and hand augers as opposed to air knife techniques described in the WP. Since access to all locations was not available at the onset of the investigation, this method was most efficient.
- In cases where a groundwater profile sample could not be collected because of geologic restrictions or equipment failures, a second sample attempt was made as close to that depth as reasonably possible. This was not always within the 10 foot interval stated in the work plan.

1.1.2 Monitoring Well Development

The monitoring well development procedures were performed in accordance with the final Work Plan (LBG 2011a,). Summaries of the exceptions are described below:

- The WP states that a picture of the development water in a clear glass jar should be taken after the completion of development from each monitoring well. This step was inadvertently overlooked in many cases. However, turbidity readings were collected at each location and all had turbidities less than 50 NTUs and were clear at the completion of development. No staining was noted from any of the newly installed monitoring wells.

- The work plan states that a minimum of three times the drill water lost to the formation during drilling in the interval 15-feet above and below the center point of the chosen screen interval. The minimum volume of water removed during development was three times the volume of water lost in a 20-foot interval centered on the well screen depth. This maintained consistency with previous well development practices completed at the site.

Monitoring well MW-216-510 did not produce water well enough to purge the drill water that was lost to the formation. It was presumed that the drill water must have been lost to the formation in more transmissive layers that the well does not draw from. Therefore, the drill water lost to the formation during drilling of the borehole at this interval was not included in the total minimum amount required for removal.

1.1.3 Monitoring Well Installation

The monitoring well sampling procedures were performed in accordance with the final Work Plan. Summaries of the exceptions to this are described below:

- The WP states that if a boring was drilled more than three feet past the well screen depth, the boring should be backfilled with clean sand. In order to protect against a potential hydraulic connection with higher conductivity sands placed below the well screen than the surrounding formation, a 2-foot fine sand seal (Moorie #00 or equivalent) was used at the top of the backfilled material.
- In some instances, bentonite chips were used as backfill at determined depths in order to preserve the integrity of massive clay layers observed beyond the intended well screen depth and prevent unintended hydraulic connectivity.

1.1.4 Groundwater Sampling

The groundwater sampling procedures were performed in accordance with the final Work Plan (LBG 2011a), Work Plan Amendment (LBG 2013), Work Plan Amendment #2 (LBG 2014), and Work Plan Amendment #3 (LBG 2015). Summaries of the exceptions to this are described below:

- Multiport monitoring well PW-5 was scheduled for sampling. However, water levels within the sample ports were nearly dry and depths to water were not indicative of aquifer conditions. The USACE team decided this well was not appropriate to sample as it did not appear to be operating properly.
- General Instruments (GI) monitoring well W-18-150 was not planned for sampling as it had been known to have an obstruction in the well that did not allow GTEOSI or GI to sample the wells. The USACE team was able to install a well wizard pump with drop tubing to collect a sample from the well screen with low flow techniques.
- Monitoring well W-10-120 had an obstruction in the well and no sampling equipment could be installed to reach the well screen to allow for low flow sampling. Therefore, this well was sampled after a minimum of three well

volumes were removed and groundwater quality parameters had stabilized to ensure that all stagnant water with the well column had been purged prior to sampling.

- The U. S. Environmental Protection Agency (EPA) Region 2 low flow sampling techniques do not require any minimum purge volume. Given the depth of the monitoring wells and amount of sample tubing required to reach the monitoring well screen depth (up to 570 feet BGS), the volumes of "stagnant" water contained within sampling devices can be several gallons. Given the purge rates of low flow sampling (less than 500 mL/min) it is conceivable that sample parameters could show stabilization and the well could be sampled prior to evacuating all "stagnant" water contained within the pumping device. This could provide a sample that is not representative of aquifer conditions. After review of USACE Kansas City District (USACE KC) low flow techniques, the USACE team decided to require that a minimum of two volumes of water contained within the pumping device be removed prior to determining stabilization of parameters for sampling to ensure representative samples are collected.
- The multiport Anchor Chemical wells have seven small ports in an approximate two-inch well. When a pump is installed to purge the well, there is not room to install a water level meter to monitor the water level conditions during purging as required if using low flow sampling techniques. Therefore, this well was sampled after a minimum of three well volumes were removed and groundwater quality parameters had stabilized to ensure that all stagnant water with the well column had been purged prior to sampling.

1.2 Concrete, Asphalt Waste, Surface Soil, and DR-Z Sludge Sampling

The sampling procedures were performed in accordance with the Work Plan Amendment (LBG 2013).

1.3 CSIA Sampling

The sampling procedures were performed in accordance with the final Work Plan and Work Plan Amendment (LBG 2013).

1.4 Building 70 Waste Drain Investigation Sampling

The sampling procedures were performed in accordance with the Work Plan Amendment (LBG 2013).

1.5 Septic Tank Sampling

The sampling procedures were performed in accordance with the Work Plan Amendment (LBG 2013).

1.6 Sample Handling and Sample Custody

Field samples were collected, preserved, and transported to the appropriate laboratory according to the procedures described in the WP. There were no devia-

tions from the WP with regards to sample handling or custody except for the following:

- The WP states that groundwater profile samples should be packaged and shipped for same day delivery. Although the majority of groundwater profile samples were delivered to the laboratory on the same day as collection, generally, samples collected after a 4 p.m. courier pick up were held on ice for delivery the following day. For aliquots requiring total uranium analysis, this was not possible as the laboratory contracted for the analysis is located in Charleston, SC. As a result of the long hold times allowable with this analysis, aliquots were collected and stored until the boring was complete before being shipped to the laboratory.
- The WP states that stainless steel containers were to be used to temporarily store aliquots for radiological analysis prior to field filtering groundwater profile samples. Stainless steel containers are not a requirement of the total uranium analytical SOP ASTM D5174 Kinetic Phosphorescence Analysis (KPA) as had been the requirement of previously used radiological analytical procedures at this site. High density polyethylene containers were used prior to filtering.
- The WP states that all samples were to be stored on ice at temperatures between 2 and 4 degrees Celsius. The total uranium analysis SOP does not require icing of samples; therefore, those samples were not placed or stored on ice.
- In Table 3.2-2 of the WP, the analytical method EPA 200.8 is referred to as the selected method for total uranium analysis. It was decided by the USACE team to use ASTM D5174 (KPA) after the submission of the Final Work Plan.
- The QAPP states that all samples were to be collected into pre-preserved containers or preserved immediately after collection. During previous field investigations at this site, it was found that the turbid samples collected during groundwater profiling only reacted with acids used to preserve the samples causing the sample to bubble. This is problematic during collection of samples for VOCs because it is difficult to collect a zero headspace sample during a reaction. For samples collected for nickel analysis, filtration of the sample to reduce turbidity was performed at the laboratory. The samples were preserved after filtration. Samples collected for total uranium analysis were collected into unpreserved containers and field filtered into pre-preserved containers at the end of each day.

1.7 Equipment Calibration and Maintenance

Calibration procedures for the field and laboratory instruments are presented in LBG's QAPP. There were no deviations from the QAPP with regard to equipment calibration and maintenance.

1.8 Laboratory Analysis

Samples were shipped to approved laboratories for analysis. Analytical methods in support of the Off-Site Groundwater Characterization activities are referenced in the QAPP. American Analytical Laboratories (AAL) of Farmingdale, New York, provided VOC analyses for all vertical profile samples except from samples collected from borings MW-58 and MW-59 which were performed by Test America of Earth City, Missouri (Test America) and analyzed for , provided VOCs, mercury, and Target Analyte List (TAL) metals.

GEL Laboratories of Charleston, South Carolina provided total uranium analysis of vertical profile samples and monitoring well samples using the KPA method.

Test America performed analysis of nearly all monitoring well sample and soils/solids analyses including VOCs, metals mercury, and isotopic analysis by alpha spectroscopy (thorium and uranium).

Test America subcontracted the CSIA tetrachloroethylene (PCE) and trichloroethylene (TCE) analyses to ZymaX Forensic Isotope of Escondido, California, and the CSIA PCE analyses to Microseeps, Inc. of Pittsburgh, Pennsylvania. Table 1-1 lists all of the analyses performed and the number of samples collected for methods for the investigation. Any deviations were evaluated as part of the data review process and are described in Section 2.

Table 1-1 Summary of Analytical Methods and Samples, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Groundwater – Vertical Profile	ASTM D 5174	Method ASTM D 5174 – Total Uranium by KPA	18
	6010B	Method 6010B – Total Metals (TAL metals list)	10
	7470A	Method 7470A – Total Mercury	10
	8260B	Method 8260B – Volatile Organic Compounds by GC/MS	10
	8260C	Method 8260C – Volatile Organic Compounds by GC/MS	195
Groundwater – Monitoring Wells	A-01-R	Method A-01-R – Isotopic Analysis by Alpha Spectroscopy (Th and U)	9
	ASTM D 5174	Method ASTM D 5174 – Total Uranium by KPA	114
	SW6010	Method 6010 – Total Metals (Nickel only)	113
	SW7470	Method 7470 – Total Mercury	2
	SW8260B	Method 8260B – Volatile Organic Compounds by GC/MS	180

Table 1-1 Summary of Analytical Methods and Samples, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Concrete, Asphalt Waste and DR-Z Sludge	A-01-R	Method A-01-R – Isotopic Analysis by Alpha Spectroscopy (Th and U)	6
	Ga-01-R	Method Ga-01-R – Gamma Spectroscopy	6
	SW6010	Method 6010 – Total Metals	6
	SW7471	Method 7471 – Total Mercury	6
	SW8081A	Method 8081A – Organochlorine Pesticides by Gas Chromatography	6
	SW8082	Method 8082 – Polychlorinated Biphenyls (PCBs) by Gas Chromatography	5
	SW8151A	Method 8151A – Chlorinated Herbicides by Gas Chromatography	6
	SW8260B	Method 8260B – Volatile Organic Compounds by GC/MS	6
	SW8270D	Method 8270D – Semivolatile Organic Compounds by GC/MS	6
	SW9012	Method 9012 -- Total and Amenable Cyanide	6
	SW9034	Method 9034 – Acid-Soluble and Acid-Insoluble Sulfides	6
	SW9045D	Method 9045D – Soil and Waste pH	6
	SW9095B	Method 9095B – Paint Filter Liquids	5
CSIA Samples	SW8260	Method 8260 – Volatile Organic Compounds by GC/MS	17
	CSIA – PCE/TCE – C/Cl/H	CSIA – PCE/TCE – C/Cl/H General Sub Contract Method	9
	CSIA – PCE Only (Chlorine and Carbon)	CSIA – PCE Only (Chlorine and Carbon) General Sub Contract Method	14
Building 70 Waste Drain Investigation (Soils/Sludge)	A-01-R	Method A-01-R – Isotopic Analysis by Alpha Spectroscopy (Th and U)	19
	ASTM D 5174	Method ASTM D 5174 -- Total Uranium by KPA	1
	GA-01-R	Method Ga-01-R – Gamma Spectroscopy	18
	SW6010	Method 6010 – Total Metals	19
	SW6020A	Method 6020A -- Inductively Coupled Plasma - Mass Spectrometry	19
	SW7470	Method 7470 – Total Mercury	1
	SW7471	Method 7471 – Total Mercury	18
	SW8260B	Method 8260B – Volatile Organic Compounds by GC/MS	19
	SW9315	Method 9315 – Alpha-emitting Radium Isotopes	1
	SW9320	Method 9320 – Radium-228	1

Table 1-1 Summary of Analytical Methods and Samples, Sylvania Corning FUSRAP Site

Sample Matrix	Lab Method ID	Lab Method Description	Number of Samples Analyzed
Septic Tank Samples (Soils/Sludge)	A-01-R	Method A-01-R – Isotopic Analysis by Alpha Spectroscopy (Th and U)	21
	GA-01-R	Method Ga-01-R – Gamma Spectroscopy	19
	SW6010B	Method 6010B – Total Metals	21
	SW6020A	Method 6020A -- Inductively Coupled Plasma - Mass Spectrometry	7
	SW7471	Method 7471 – Total Mercury	21
	SW8260B	Method 8260B – Volatile Organic Compounds by GC/MS	21

2 Data Analysis and Validation

Data quality evaluations focus on deviations from expected QC activities, problems encountered, and the acceptability of the methodologies used. Sample integrity is based on information provided on the cooler receipt form, chain-of-custody documents, statements in the laboratory case narratives, and field notebooks. Laboratory activities were conducted in accordance with the QAPP. The target compounds, practical quantitation limits (PQLs), and QC limits for the project were reviewed in accordance with the QAPP. Field duplicate and blank data were used to evaluate the accuracy and precision of the analytical results and field sample collection methods. The final validated data was stored in an Environmental Quality Information Systems (EQuIS) format database.

LBG/E & E performed data review and validation of samples in accordance with the QAPP. The data review tasks completed for this project include:

- **Completeness.** LBG/E & E performed a completeness check on all EDDs and compared the data to the hard copy deliverable to verify the data were reported consistently.
- **Compliance.** LBG/E & E reviewed the laboratory reports and submitted electronic data deliverables (EDDs), checked the hard copy reports and case narratives, and verified that the submitted EDD data matched the hard copy data packages. E & E reviewed calibration information and compound identification results in the raw data package and entered the qualifiers.
- **Reporting.** E & E assigned data qualifiers and flagged all reportable data with review from LBG. Results of the data review are summarized in the DRM and DUSR in Appendix A. The DRM and DUSR contain a summary of the data that was qualified, and tables of the QC samples that did not meet applicable limits.
- **Data Management.** E & E developed a project-specific database with all validated data stored in EQuIS format. E & E developed reporting tables through the use of the EQuIS database. E & E generated summary tables of final qualified data in Excel spreadsheets as shown in Section 3.

QC samples were collected to assess the quality of the field sampling activities as described in Section 1. The evaluation of these samples was based on completeness of data, positive results of equipment and trip blank analysis, and relative percent differences (RPDs) of field duplicate results. E & E evaluated field dupli-

cates. Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DRM or DUSR. The field duplicate QC criteria are 40% for aqueous samples, and 70% for soil samples. The RPD ratings are listed as "Good" if the RPD is less than field duplicate QC criteria, and "Poor" if the RPD exceeded the field duplicate QC criteria. Data were qualified "J" as estimated based on the data reviewers overall evaluation of field precision and accuracy. The qualification of data because of field duplicates is discussed at the end of each DRM or DUSR.

Field blanks were evaluated for each phase of sampling as described below. Field blanks were evaluated manually based on the associated samples and matrices and shipments.

The appropriate qualifiers were added to the data to indicate potential concerns with data usability. These qualifiers were transferred to the data presented on tables in Section 3. The following qualifiers were added:

J – This qualifier indicates an estimated value because the associated QC data indicated a potential laboratory or matrix problem or interference. In addition, "J" flags assigned by the laboratory to chemical data indicate the results are below the PQL but above the instrument detection limit (IDL) or method detection limit (MDL).

R – The positive results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified. Negative radiochemical results with absolute values greater than their 2-sigma uncertainty were rejected in accordance with the USACE KC guidance document.

U – The result is considered non-detect. The laboratory assigned this flag to analytes not present at detectable concentrations (above the IDL or MDL). The data validator assigned this flag when an analyte was considered non-detect as a result of blank contamination. If the result is above the PQL, the PQL is considered elevated.

UJ – The non-detect value is considered estimated.

UR – The non-detect results were rejected because of serious deficiencies in the ability to analyze the sample. The presence or absence of the analyte cannot be verified.

The following sections summarize the data evaluation for each phase of fieldwork.

2.1 Vertical Profile Data Analysis and Review

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one

calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DRM was generated for each monitoring well drilled (multiple SDGs within each); a copy of the DRM is included in Appendix A. The results were checked for completeness and are included in Appendix B. An index of the samples and associated SDGs is provided in the beginning of Appendix A for cross reference. Tables 1 and 2 of the DRM summarize the samples and methods included for each SDG. Sample results were qualified as noted in the DRMs.

2.1.1 Field Data Quality Evaluation

Table 2.1-1 provides a summary of the field QC samples and the associated field samples. Table 2.1-2 provides summaries of the sample collection frequency for the field QC samples by method.

Table 2.1-1 Field QC Associations for Vertical Profile Sampling, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID/ Associated Samples	QC Type	SDG
DW-01C-FA14	MW-215 Samples	DW	160-9721-1
DW-01-FA14	MW-215 Samples	DW	160-8389-1
DW-02-FA14	MW-216 Samples	DW	160-9721-1
DW-03-FA14	MW-219 Samples	DW	160-8983-1
DW-04-FA14	MW-218 Samples	DW	160-9526-1
DW-05-FA14	MW-220 Samples	DW	160-9648-1
DW-221	All MW-221 Samples	DW	160-16256-1
DW-222	All MW-222 Samples	DW	160-16486-1
DW-223	All MW-223 Samples	DW	160-15676-1
DW-224	All MW-224 Samples	DW	160-16256-1
DW-225	All MW-225 Samples	DW	160-16566-1
DH-01	MW-215 Samples	FB	160-8470-1
DH-01C	MW-215 Samples	FB	160-8477-1
FH-01	MW-215 Samples	FB	160-9721-1
FH-01C	MW-215 Samples	FB	160-9722-1
FH-01C2	MW-215 Samples	FB	160-8477-1
FH-02	MW-215 Samples	FB	160-9721-1
FH-02C	MW-215 Samples	FB	160-8470-1
HH-01	MW-215 Samples	FB	160-8477-1
RT-01	MW-215 Samples	FB	160-8470-1
RT-01C	MW-215 Samples	FB	160-8477-1
TP-01	MW-215 Samples	FB	160-8470-1
TP-01C	MW-215 Samples	FB	160-8477-1
TT-01	MW-215 Samples	FB	160-8470-1
TT-01C	MW-215 Samples	FB	160-8477-1
MW-215-VP900	MW-215-VP20	FD	160-8269-1
MW-215-VP901	MW-215-VP40	FD	160-8362-1
MW-215-VP902	MW-215-VP55	FD	160-8411-1
MW-216-VP903	MW-216-VP48	FD	160-8473-1
MW-217-VP904	MW-217-VP31	FD	160-8626-1
MW-217-VP905	MW-217-VP48	FD	160-8745-1

Table 2.1-1 Field QC Associations for Vertical Profile Sampling, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID/ Associated Samples	QC Type	SDG
MW-218-VP500	MW-218-VP14	FD	160-8698-1
MW-219-VP500	MW-219-VP50	FD	160-8995-1
MW-219-VP501	MW-219-VP52	FD	160-9061-1
MW-220-VP907	MW-220-VP04	FD	160-9526-1
MW-220-VP908	MW-220-VP14	FD	160-9562-1
MW-221-VP900	MW-221-VP20	FD	160-16253-1
MW-221-VP901	MW-221-VP26	FD	160-16263-1
MW-222-VP900	MW-222-VP07	FD	160-16446-1
MW-222-VP901	MW-222-VP23	FD	160-16466-1
MW-223-VP900	MW-223-VP26	FD	160-15664-1
MW-223-VP901	MW-223-VP38	FD	160-15703-1
MW-224-VP900	MW-224-VP08	FD	160-16190-1
MW-224-VP901	MW-224-VP22	FD	160-16194-1
MW-225-VP900	MW-225-VP05	FD	160-16520-1
MW-225-VP901	MW-225-VP15	FD	160-16566-1
MW-58-VP500	MW-58-VP04	FD	160-8643-1
MW-59-VP906	MW-59-VP06	FD	160-9245-1
RB-01-FA14	MW-215 Samples	RB	160-8389-1
RB-02-FA14	MW-216 Samples	RB	160-8476-1
RB-03-FA14	MW-217 Samples	RB	160-8596-1
RB-04-FA14	MW-58S Samples	RB	160-8652-1
RB-05-FA14	MW-218 Samples	RB	160-8698-1
RB-06-FA14	MW-219 Samples	RB	160-9249-1
RB-07-FA14	MW-220 Samples	RB	160-9562-1
RB-MW221	All MW-221 Samples	RB	160-16317-1
RB-MW222	All MW-222 Samples	RB	160-16486-1
RB-MW223	All MW-223 Samples	RB	160-15704-1
RB-MW224	All MW-224 Samples	RB	160-16190-1
RB-MW225	All MW-225 Samples	RB	160-16566-1

Key:
FB = Field Blank.
FD = Field Duplicate.
DW = Drill Water.
RB = Rinsate Blank.

Table 2.1-2 Field QC Samples by Method for Vertical Profile Sampling, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks	Number of Rinsate Blanks	Number of Drillwater Samples
ASTM D5174	Water	18	3	17%	NA	0	3	0
SW6010B	Water	10	2	20%	NA	0	2	0
SW7470A	Water	10	2	20%	NA	0	2	0
SW8260B	Water	10	2	20%	0	0	2	0
SW8260C	Water	195	20	10%	0	14	9	11

Key:
NA = Not Applicable

2.1.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DRM. Field duplicate results are summarized on Table 7 of the DRM. Sampling or sample handling procedures are not considered of concern because of the minimal handling by field personnel.

Field duplicate samples overall showed good precision for the analytical methods being tested. Slight variations in sample concentrations were noted in several field duplicate and parent samples causing results to be qualified "J" as estimated. No data usability concerns are present due to the analysis of field duplicate samples.

2.1.1.2 Field Blanks

Field blanks were collected when all samples were collected with disposable or dedicated equipment.

No contamination of the field blank samples was detected. These samples were driven to the laboratory by site personnel or via courier service. Trip blanks were not submitted to the laboratory due to the close proximity of the laboratory to the site.

2.1.1.3 Rinsate Blanks

A rinsate blank was collected for samples collected with reusable non-dedicated equipment.

Several rinsate blanks had VOCs and metals detections. Total uranium was detected above the reporting limit in one rinsate blank. Associated sample results were qualified as noted on the DRMs.

2.1.1.4 Drill Water Samples

A sample of drill water was collected during well drilling and consisted of the water used for well construction. The water used during drilling was analyzed for VOCs.

Acetone, methylene chloride, bromoform, dibromochloromethane, and toluene were common detections in the drill water. Acetone and methylene chloride are likely lab related contamination and were detected in laboratory method blanks, which caused the drill water results to be qualified with "U" as non-detects at the reporting limit. Bromoform and dibromochloromethane are common trihalomethanes formed from the chlorination of public drinking water.

Tert-butyl methyl ether was detected in drill water sample DW-222 below the PQL. Bromoform was detected in two groundwater samples: MW-217-VP39 and MW-220-VP40. It is possible that the drill water leaked into the drill stem and diluted the groundwater sample in these instances. The samples collected above and below the sample MW-220-VP40 have detections of benzene, PCE, and toluene that are not present in the sample itself. However, the results for MW-217-VP39 are similar to the samples taken above and below it with all the analyte results being non-detect. Tert-butyl methyl ether and toluene were detected in several samples.

TCE was detected in a drill water sample at low concentrations (less than 20 parts per billion) at the onset of the vertical profile sampling event in September 2014 at boring MW-215. This was the first vertical profile boring being conducted during this event. This initiated a work stoppage and investigation into the source of the contamination. The source of the TCE contaminant was found to be in the driller's rig transfer hosing. The transfer hosing was changed out for a new ones and drill water resampled, which confirmed the source of the TCE had been removed from the system. The Sylvania Corning FUSRAP – Drill Water TCE Summary memorandum dated October 7, 2014 (revised January 12, 2015), details the investigation. Samples of the contaminated drill water also contained trace levels of trihalomethanes as is common in public supply water treated with chlorine. Trihalomethanes were generally not present in groundwater samples collected from this boring indicating that drill water had not impacted vertical profile samples. Therefore, it was concluded that the TCE contaminated drill water did not impact the usability of that data. Monitoring well sample results collected from this location since, confirm that vertical profile samples were representative of groundwater conditions.

2.1.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that met all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DRM in Appendix A and summarized in a separate section for each analytical method described below.

2.1.2.1 Vertical Profile Groundwater Samples – Chemical Analysis

Method 8260

Methylene chloride and acetone were detected in several of the method blanks. These analytes are common laboratory contaminants. Most of the associated sample results were qualified "U" as not detected at the reporting limit. 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene were detected in one method blank. The sample results were qualified for method blank contamination as noted on the DRMs. Associated sample results were qualified "U" at the reporting limit if less than five times the blank value (ten times the blank value for common laboratory contaminants).

Surrogate spike recoveries were generally within laboratory defined QC guidelines with a few exceptions that generally did not cause qualification of sample results.

Several analytes were outside of acceptance criteria in the laboratory control samples (LCS). For LCS recoveries that were high and the analyte was not detected in the associated samples, no qualification of the data was made. For recoveries that failed either high or low and the analyte was detected in the samples, the sample results were qualified "J" as estimated. If the recovery of the LCS was below acceptance criteria and the analyte was not detected in the samples, the sample results were qualified "UJ" as estimated non-detect.

Matrix spike samples and duplicates were analyzed for the vertical profile samples by Method SW8260C. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. The result in the parent sample was qualified "J" as estimated for spike recoveries that were outside of acceptance criteria. If the spike was recovered low and the result was non-detect in the parent sample, then the result was qualified "UJ" as estimated non-detect. No qualification of the data was made when the native sample concentration was greater than four times the spiking concentration, or if the spike recovery was high and the sample result was non-detect. Several analytes were recovered low in MS and/or MSD for sample MW-220-VP28. All of the recoveries were low, indicating a laboratory spiking error rather than an instrument or matrix issue. The spiking error also caused several analytes to exhibit poor precision between the MS and MSD. No qualification of the data was made. For sample MW-222-VP36, the MS recovery for chloroethane was within acceptance limits and the MSD recovery was 0%; therefore, the RPD also was outside acceptance limits (it appears that the sample was not spiked for this compound) and the chloroethane result for sample MW-222-VP36 was qualified with "UJ" as estimated non-detect. Several other MS/MSD pairs had recoveries and/or RPDs that were outside of laboratory acceptance criteria.

Several samples were diluted due to analytes exceeding the calibration curve or due to the nature of the matrix. In some cases, only the analyte that exceeded was reported at the dilution with no impact to the remaining analyte results; in other

cases, all of the analytes were reported at the dilution; therefore, elevated reporting limits were provided, which may have impacted comparability.

PCE exhibited a percent difference between calibration and verification (% D) above laboratory limits for batch 1412008. Since PCE is a compound of concern, it was reanalyzed with confirmatory results; therefore, the original results were reported.

Method 6010

Arsenic, calcium, selenium and zinc were detected in method blanks for Method SW6010B. Sample results were qualified for method blank contamination as noted on the DRMs. Associated sample results were qualified "U" at the reporting limit if less than five times the blank value.

Several MS/MSD pairs had recoveries and/or RPDs that were outside of laboratory acceptance criteria.

Several samples were diluted due to analytes exceeding the calibration curve or due to the nature of the matrix. In some cases only the analyte that exceeded was reported at the dilution with no impact to the remaining analyte results; in other cases, all of the analytes were reported at the dilution; therefore, elevated reporting limits were provided.

2.1.2.2 Vertical Profile Groundwater Samples – Radiological Analysis

Method ASTM D5174

For total uranium analysis, several samples required dilution and reanalysis to eliminate quenching due to the sample matrix. Several samples were spiked and reanalyzed to confirm original results or determine whether quenching occurred. The reported results are considered valid and usable without qualification.

2.2 Monitoring Well Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DUSR was generated for each SDG reported and a copy of the DUSR is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. Tables 1 and 2 of the DUSR summarize the samples and methods included for each SDG. Sample results were qualified as noted in the DUSRs.

Sample Delivery Groups for Monitoring Well Sampling	Laboratory
160102301	TestAmerica St. Louis/General Engineering Laboratories
160102551	TestAmerica St. Louis/General Engineering Laboratories
160109501	TestAmerica St. Louis/General Engineering Laboratories
160109891	TestAmerica St. Louis/General Engineering Laboratories
160109901	TestAmerica St. Louis/General Engineering Laboratories
160110131	TestAmerica St. Louis/General Engineering Laboratories
160110361	TestAmerica St. Louis/General Engineering Laboratories
160110681	TestAmerica St. Louis/General Engineering Laboratories
160110821	TestAmerica St. Louis/General Engineering Laboratories
160110981	TestAmerica St. Louis/General Engineering Laboratories
160111161	TestAmerica St. Louis/General Engineering Laboratories
160111611	TestAmerica St. Louis/General Engineering Laboratories
160116821	TestAmerica St. Louis/General Engineering Laboratories
160117281	TestAmerica St. Louis/General Engineering Laboratories
160169441	TestAmerica St. Louis/General Engineering Laboratories
160169671	TestAmerica St. Louis/General Engineering Laboratories

2.2.1 Field Data Quality Evaluation

Table 2.2-1 provides a summary of the field QC samples and the associated field samples. Table 2.2-2 provides a summary of the sample collection frequency for the field QC samples by method.

Table 2.2-1 Field QC Associations for Monitoring Well Sampling, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-400-SP16	MW-59-75-SP16	FD	160169441
MW-401-SP16	MW-225-330-SP16	FD	160169441
MW-607-WI15	MW-58-75-WI15	FD	160102301
MW-900-SP15	MW-26D-SP15	FD	160109501
MW-901-SP15	MW-16D-SP15	FD	160109501
MW-902-SP15	MW-203-440-SP15	FD	160109501
MW-903-SP15	MW-49S-SP15	FD	160109501
MW-904-SP15	MW-219-560-SP15	FD	160109891
MW-905-SP15	MW-55S-SP15	FD	160109901
MW-906-SP15	MW-207-170-SP15	FD	160110131
MW-907-SP15	MW-33D-SP15	FD	160110131
MW-908-SP15	MW-12-SP15	FD	160110361
MW-909-SP15	W-37-385-SP15	FD	160110681
MW-910-SP15	W-18-150-SP15	FD	160110681
MW-911-SP15	W-06-79-SP15	FD	160110681
MW-912-SP15	PW-2-6-SP15	FD	160110821
MW-913-SP15	MW-201-220-SP15	FD	160110821
MW-914-SP15	W-36-448-SP15	FD	160110981

Table 2.2-1 Field QC Associations for Monitoring Well Sampling, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
MW-915-SP15	MW-210-380-SP15	FD	160111161
RB01-SP15	RB01-SP15	RB	160110681
RB01-SP16	RB01-SP16	RB	160169441
RB02-SP15	RB02-SP15	RB	160110821
RB03-SP15	RB03-SP15	RB	160111611
TRIP BLANK 01	TRIP BLANK 01	TB	160109501
TRIP BLANK 02	TRIP BLANK 02	TB	160109501
TRIP BLANK 03	TRIP BLANK 03	TB	160109501
TRIP BLANK 04	TRIP BLANK 04	TB	160109901
TRIP BLANK 05	TRIP BLANK 05	TB	160109901
TRIP BLANK 06	TRIP BLANK 06	TB	160109891
TRIP BLANK 07	TRIP BLANK 07	TB	160110131
TRIP BLANK 08	TRIP BLANK 08	TB	160110361
TRIP BLANK 09	TRIP BLANK 09	TB	160110681
TRIP BLANK 10	TRIP BLANK 10	TB	160110821
TRIP BLANK 11	TRIP BLANK 11	TB	160110981
TRIP BLANK 12	TRIP BLANK 12	TB	160111161
TRIP BLANK 13	TRIP BLANK 13	TB	160111611
TRIP BLANK 14	TRIP BLANK 14	TB	160116821
TRIP BLANK 15	TRIP BLANK 15	TB	160117281
TRIPBLANK-SP16	TRIPBLANK-SP16	TB	160169441

Key:
RB = Rinsate Blank.
TB = Trip Blank.
FD = Field Duplicate.

Table 2.2-2 Field QC Samples by Method for Monitoring Well Sampling, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Rinsate Blanks
A-01-R	Groundwater	9	3	33%	NA	
D5174	Groundwater	114	13	11%	NA	2
SW6010	Groundwater	113	13	12%	NA	2
SW7470	Groundwater	2	0	0%	NA	0
SW8260B	Groundwater	180	19	11%	16	4

Key:
NA = Not applicable.

2.2.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DUSR. Field duplicate results are summarized on Table 7 of the DUSR. Overall, field duplicate precision was good. Acetone results were qualified with "J" as estimated for the field duplicate sample pair for sample MW-225-330-SP16 due to poor precision.

2.2.1.2 Rinsate Blanks

Rinsate samples were collected at a rate of one every 45 groundwater samples. The bulk of the groundwater sampling equipment was dedicated pumps and tubing.

2-utanone and acetone were detected in rinsate blanks RB01-SP15, RB02-SP15, RB03-SP15, and RB-01 (Spring 2016). 2-hexanone, were detected in RB03-SP15 and chloroform was detected in rinsate blank RB-01 (Spring 2016).

2.2.1.3 Trip Blanks

Trip blank samples were collected at a rate of one every 11 groundwater samples (one for every cooler shipped with VOC samples).

Acetone was detected in all the trip blanks except Trip blank-SP16. 2-butanone (methyl ethyl ketone [MEK]) was detected in Trip Blanks 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 12, and 13. Carbon disulfide was detected in Trip Blank 08. 2-hexanone and toluene were detected in Trip Blanks 12 and 13. Acetone and 2-butanone are common laboratory contaminants.

2.2.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DUSR in Appendix A and summarized in a separate section for each analytical method below.

Tables 3 through 7 in the DUSR provide a list of sample results qualified and the reason for data qualification.

2.2.2.1 Groundwater Samples – Chemical Analysis

Method 8260

Results for 2-butanone, and acetone were ”U” qualified as non-detect in several samples due to positive detections in Trip Blanks 01, 02, and 03. If the sample result was less than the PQL, the MDL was elevated to the sample result; however, if the sample result was greater than the PQL, then the PQL was elevated to the sample result. The sample results for acetone were ”U” qualified as non-detect due to trip blank contamination in samples MW-215-395-SP15, MW-216-510-SP15, MW-202-495-SP15, MW-208-350-SP15, MW-208-540-SP15, MW-26S-SP15, MW-905-SP15, MW-207-170-SP15, W-25-150-SP15, MW-910-SP15, W-14-150-SP15, W-31-95-SP15, PW-02-06-SP15, MW-209-380-SP15, MW-205-285-SP15, MW-210-380-SP15, MW-915-SP15, PW-06-06-SP15, MW-211-455-SP15, MW-213-570-SP15, and MW-211-190-SP15, MW-204-470-SP15, S-1-325-SP15, RB01-SP15. RB02-SP15, and RB03-SP15. The sample results for 2-butanone were ”U” qualified as non-detect due to trip blank contamination in samples MW-52D-SP15, MW-205-285-SP15, RB01-SP15, RB02-SP15, and

RB03-SP15. The sample result for carbon disulfide was ”U” qualified as non-detect due to trip blank contamination in sample W-25-150-SP15. The sample results for 2-hexanone were ”U” qualified as non-detect due to trip blank contamination in samples MW-205-285-SP15 and RB03-SP15. The sample result for chloroform was ”U” qualified as non-detect due to rinsate blank contamination in sample MWP-110-440-SP16.

Recoveries for surrogate spike compounds 4-bromofluorobenzene and/or toluene-d8 were above control limits for several samples. Detected analyte results for samples MW-59S-SP15, MW-215-395-SP15, MW-58S-SP15, MW-904-SP15, MW-217-490-SP15, MW-14D-SP15, MW-18S-SP15, MW-20I-SP15, MW-20S-SP15, MW-25S-SP15, MW-41S-SP15, MW-202-380-SP15, W-24-260-SP15, and MW-P114-290-SP15 were qualified with “J” as estimated. Recovery for surrogate compound dibromofluoromethane was above acceptance criteria in the dilution analysis of MW-12-SP15 and in samples MW-3-SP15 and MW-205-470-SP15; PCE and/or TCE were detected in the samples and qualified “J” as estimated.

LCS recoveries of cyclohexane, methylcyclohexane, 1,1,2,2-tetrachloroethane, and methyl acetate were above acceptance criteria in several LCSs and laboratory control sample duplicates (LCSDs). The results for the associated samples were non-detect for the analytes; therefore, no qualification of the data was made.

Recovery for 1,2-dibromoethane (ethylene dibromide [EDB]) was above the control limits for the MS for sample MW-49S-SP15; however, the MSD and RPD were within acceptance criteria and EDB was not detected in the parent sample; therefore, no qualifiers were added. Cyclohexane was recovered above the control limits in the MS/MSDs of MW-20S-SP15, MW-08-71-SP15 W-10-120-SP15. The associated LCS/LCSDs were also non-compliant and cyclohexane is a poor performer per EPA SOP USEPA-540-R-08-01. The results were non-detect in the parent samples; therefore, no qualification of the data was made. Cyclohexane, methylcyclohexane, and acetone were recovered above the control limits in the MS/MSD of MW-205-285-SP15. The analytes are poor performers and were not detected in the parent sample. No qualification of the data was made. 1,1,2,2-tetrachloroethane was recovered above the control limits in the MS/MSDs of MW-55S-SP15, W-26-270-SP15, MW-912-SP15, W-08-71-SP15, W-10-120-SP15, MW-205-285-SP15, MW-212-580-SP15, PW-07-06-SP15, and MW-15D-SP15. The LCS/LCSDs for the analyte was also non-compliant and the sample results for the analyte were already “UJ” qualified for continuing calibration verification (CCV) standard failures. Styrene was recovered below the control limits in the MS/MSD of W-10-120-SP15. The analyte was not detected in the samples, and the parent sample results was qualified “UJ” as estimated non-detect.

2-Butanone exhibited poor precision between the MS and MSD in sample MW-912-SP15. 2-Butanone is a poor performer and the individual recoveries were acceptable; therefore, the data were not qualified.

Sample results for bromoform, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene were "UR" qualified as rejected non-detect due to internal standard failures in samples MW-206-470-SP15, MW-210-280-SP15, MW-10-SP15, MW-11-SP15, PW-06-07-SP15, MW-210-280-SP15, and MW-210-380-SP15. These wells were not resampled because the analytes and samples were not considered critical to the site investigation. Sample results are available from four other sampling events for the same wells.

For several analytical batches the following poor performing analytes exhibited relative response factor (RRF) values less than the laboratory minimum criterion of 0.1000 in the CCV: acetone, methyl acetate, 2-butanone, 4-methyl-2-pentanone (methyl isobutyl ketone [MIBK]), 2-hexanone, and 1,2-dibromo-3-chloropropane. The RRF values were ≥0.0100; the allowance for poor performing analytes per EPA Region 2 SOP HW-33, Rev 3. The %RSD was acceptable and the associated results were non-detect for the analytes. No qualification of the data was made. The following poor performing analytes exhibited RRF values less than the laboratory minimum criterion of 0.1000 in the CCV associated with batches 246272 and 246258: acetone, methyl acetate, 2- butanone, 4-methyl- 2- pentanone and 2-hexanone. A low level CCV was analyzed at the reporting limit (1 µg/L) and the affected analytes were detected for both batches. Target analytes detected above the reporting limit were qualified with "J" as estimated and analytes below the reporting limit were qualified with "UJ" as estimated non-detect.

The RRF for 1,1,2,2-tetrachloroethane was less than the laboratory minimum of 0.300 in several of the initial calibration verifications (ICVs) and CCVs; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.

For several CCVs, the following analytes exceeded the control limit of 20% D: bromomethane, chloroethane, 2-butanone, dichlorodifluoromethane, 1,1,2,2-tetrachloroethane, trichlorofluoromethane, carbon tetrachloride, and styrene. No qualification of the data was made for the non-detect results. Carbon tetrachloride was detected in sample MW-219-560-WI15, which was reanalyzed under an acceptable CCV and only the carbon tetrachloride was reported form the re-analysis without qualification. The associated styrene results were qualified "UJ" as estimated non-detect. 1,1,2,2-tetrachloroethane was not detected in the associated samples; therefore, the sample results were qualified "UJ" as estimated non-detect.

1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene exhibited percent difference between the calibration and verification standard results (%D) above the control limit of 25% in several CCVs. EPA SOP USEPA-540-R-08-01 allows %D up to 25%. The analyte was not detected in any of the samples; therefore, the associated sample results were qualified "UJ" as estimated non-detect.

1,1,2,2-tetrachloroethane and dichlorodifluoromethane exhibited %D for several ICVs that exceeds the EPA SOP USEPA-540-R-08-01 acceptance criteria of 40% for a poor performer. The associated sample results were non-detect; therefore, they were qualified "UJ" as estimated non-detect. In many instances, the associated sample results were already qualified "UJ" due to CCV failures.

Samples MW-219-560-WI15, MW-220-325-WI15, MW-58-75-WI15, MW-607-WI15, MW-219-560-SP15, MW-220-325-SP15, MW-58S-SP15, MW-904-SP15, and MW-P114-170R-SP15 were diluted due to elevated levels of PCE and/or TCE. Only the target analytes were reported from the dilution and there was no impact on data usability.

The following samples were diluted due to target analytes exceeding the calibration curve: MW-43S-SP15, MW-208-350, MW-202-380-SP15, MW-33D-SP15, MW-52D-SP15, W-20-160-SP15, MW-53S-SP15, MW-907-SP15, MW-207-170-SP15, MW-906-SP15, W-19-150-SP15, MW-33S-SP15, MW-44S-SP15, W-23-110-SP15, W-14-130-SP15, MW-908-SP15, MW-12-SP15, W-18-150-SP15, W-37-385-SP15, MW-909-SP15, MW-910-SP15, W-01-75-SP15, W-16-148-SP15, W-37-325-SP15, MW-4-SP15, MW-9-SP15, W-12-120-SP15, W-27-285-SP15, PW-02-07-SP15, W-32-110-SP15, MW-10-SP15, MW-11-SP15, PW-06-07-SP15, MW-205-285-SP15, MW-210-280-SP15, MW-915-SP15, and MW-210-380-SP15 as well as several samples from SP16. Only the target analytes were reported from the dilution and there was no impact on data usability.

MW-219-560-WI15 and MW-220-325-WI15, MW-219-560-SP15, MW-220-325-SP15, and MW-904-SP15 MW-202-380-SP15 MW-53S-SP15, MW-907-SP15, MW-207-170-SP15, MW-906-SP15, W-19-150-SP15, and MW-33S-SP15 W-14-130-SP15, MW-908-SP15, and MW-12-SP15 W-16-148-SP15 and W-37-325-SP15 W-10-120-SP15, W-36-390-SP15, W-36-448-SP15, MW-209-380-SP15, and MW-914-SP15 MW-10-SP15 MW-204-320-SP15 MW-P110-355-SP15 and MW-P110-440-SP15 were initially analyzed at dilutions prior to being further diluted due to target analytes exceeding the calibration curve. Elevated reporting limits are provided for non-detect analytes; data comparability may be impacted.

Samples MW-203-160-SP15, MW-203-360-SP15, MW-22S-SP15, MW-24S-SP15, MW-28S-SP15, MW-29S-SP15, and MW-39S-SP15 were diluted due to high concentrations of analytes. Elevated reporting limits are provided as applicable. Only one result is reported per analyte per sample; data comparability may be impacted.

Method 8260B SIM

Internal standard area responses were outside of control limits for several samples. 1,4-Dioxane-d8 was recovered low in sample MW-216-510-WI15. The laboratory reanalyzed the sample and the failure was reproduced, which indicates matrix effects. The sample result was qualified "J" as estimated.

Method 6010B

Iron, lead, manganese, nickel, sodium, and thallium were recovered above control limits in the MS/MSD of MW-211-455-SP15. The results for those analytes were "J" qualified as estimated if detected in the parent sample. No qualification was made for analytes that were non-detect.

Samples MW-59S-SP15 and MW-58S-SP15, MW-211-455-SP15, and MW-211-455-SP15-F were diluted due to the nature of the matrix. Elevated reporting limits are provided, which may impact data comparability.

Calcium was recovered above control limits in serial dilution of sample MW-211-455-SP15. The calcium results were qualified "J" as estimated in MW-211-455-SP15 and MW-211-455-SP15-F.

2.2.2.2 Groundwater Samples – Radiological Analysis

Method A-01-R (Isotopic Thorium and Uranium)

No analytical or quality issues were noted.

Method ASTM D 5174

Several samples were reanalyzed with a dilution and/or post-spike to check for quenching; only one result is reported per sample. Several samples with low uranium concentrations were reprepped and reanalyzed due to method blank contamination in the initial batch. No qualifiers were required.

Uranium was detected in a method blank above the PQL; however, the associated sample results were all greater than ten times the blank concentration; therefore, no results were qualified.

MS/MSD recoveries were above acceptance criteria for sample MW-20S-SP15; however, the sample concentration was more than five times the spike amount; therefore, no qualifiers were required.

Several samples were reanalyzed due to LCS noncompliance; only one result was reported per sample and no qualifiers were required.

Sample W-02-70-SP15 matrix was orange in color and caused interference during analysis. The sample was wet-ashed, treated in a muffle furnace, diluted 10X, and treated with a post-spike due to matrix effects and quenching, resulting in an elevated detection limit; the result was qualified with "UJ" as not detected above the minimum detectable concentration (MDC), which is considered estimated or uncertain.

2.3 Concrete, Asphalt Waste, Surface Soil, and DR-Z Sludge Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one

calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. Sample results were qualified as noted on the DUSRs.

Sample Delivery Group for Concrete, Asphalt Waste, Surface Soil, and DR-Z Sludge Sampling	Laboratory
160102301	TestAmerica St. Louis

2.3.1 Field Data Quality Evaluation

Table 2.3-1 provides a summary of the field QC samples and the associated field samples. Table 2.3-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.3-1 Field QC Associations for Concrete, Asphalt Waste and DR-Z Sludge, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
None	None	N/A	N/A

Table 2.3-2 Field QC Samples by Method for Concrete, Asphalt Waste and DR-Z Sludge, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
A-01-R	Sludge	1	0	0%	NA	0
GA-01-R	Sludge	1	0	0%	NA	0
SW6010	Sludge	1	0	0%	NA	0
SW7471	Sludge	1	0	0%	NA	0
SW8081A	Sludge	1	0	0%	NA	0
SW8151A	Sludge	1	0	0%	NA	0
SW8260B	Sludge	1	0	0%	0	0
SW8270D	Sludge	1	0	0%	NA	0
SW9012	Sludge	1	0	0%	NA	0
SW9034	Sludge	1	0	0%	NA	0
SW9045D	Sludge	1	0	0%	NA	0
A-01-R	Surface Soil	2	0	0%	NA	0
GA-01-R	Surface Soil	2	0	0%	NA	0
SW6010	Surface Soil	2	0	0%	NA	0
SW7471	Surface Soil	2	0	0%	NA	0
SW8081A	Surface Soil	2	0	0%	NA	0
SW8082	Surface Soil	2	0	0%	NA	0
SW8151A	Surface Soil	2	0	0%	NA	0
SW8260B	Surface Soil	2	0	0%	0	0
SW8270D	Surface Soil	2	0	0%	NA	0

Table 2.3-2 Field QC Samples by Method for Concrete, Asphalt Waste and DR-Z Sludge, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
SW9012	Surface Soil	2	0	0%	NA	0
SW9034	Surface Soil	2	0	0%	NA	0
SW9045D	Surface Soil	2	0	0%	NA	0
SW9095B	Surface Soil	2	0	0%	NA	0
A-01-R	Asphalt	1	0	0%	NA	0
GA-01-R	Asphalt	1	0	0%	NA	0
SW6010	Asphalt	1	0	0%	NA	0
SW7471	Asphalt	1	0	0%	NA	0
SW8081A	Asphalt	1	0	0%	NA	0
SW8082	Asphalt	1	0	0%	NA	0
SW8151A	Asphalt	1	0	0%	NA	0
SW8260B	Asphalt	1	0	0%	0	0
SW8270D	Asphalt	1	0	0%	NA	0
SW9012	Asphalt	1	0	0%	NA	0
SW9034	Asphalt	1	0	0%	NA	0
SW9045D	Asphalt	1	0	0%	NA	0
SW9095B	Asphalt	1	0	0%	NA	0
A-01-R	Concrete	2	0	0%	NA	0
GA-01-R	Concrete	2	0	0%	NA	0
SW6010	Concrete	2	0	0%	NA	0
SW7471	Concrete	2	0	0%	NA	0
SW8081A	Concrete	2	0	0%	NA	0
SW8082	Concrete	2	0	0%	NA	0
SW8151A	Concrete	2	0	0%	NA	0
SW8260B	Concrete	2	0	0%	0	0
SW8270D	Concrete	2	0	0%	NA	0
SW9012	Concrete	2	0	0%	NA	0
SW9034	Concrete	2	0	0%	NA	0
SW9045D	Concrete	2	0	0%	NA	0
SW9095B	Concrete	2	0	0%	NA	0

Key:
NA = Not applicable.

2.3.1.1 Field Duplicates

There were no field duplicate samples collected for this work.

2.3.1.2 Trip Blanks

There were no trip blank samples collected for this work.

2.3.1.3 Field Blanks

There were no field blank samples collected for this work.

2.3.2 Laboratory Data Quality Evaluation

These data were not validated because they were requested as quick-turn analyses and the end use of the data was for waste characterization. These results are considered usable for this purpose as reported. The data evaluation discussed below is taken form the laboratory case narrative for this work.

2.3.2.1 Concrete, Asphalt Waste and DR-Z Sludge Samples – Chemical Analysis

Sample DR-Z SLUDGE WC (160-12304-6) was received at the laboratory with limited sample volume. An analytical priority list was provided to the laboratory; therefore, PCBs and paint filter analyses were not performed. Reduced sample aliquots were used for the remaining analyses requested.

Method SW6010

The following samples were diluted to bring the concentration of target analytes within the calibration range: CONCRETE OUTSIDE WC, ASPHALT OUTSIDE WC, AREA 1/5 SS WC, AREA 2/3 SS WC, CONCRETE INSIDE WC, and DR-Z SLUDGE WC. Elevated reporting limits are provided.

Method 7471

The following sample was diluted to bring the concentration of target analytes within the calibration range: DR-Z SLUDGE WC. Elevated reporting limits (RLs) are provided.

Due to the high concentration of Mercury, the MS/MSD of sample DR-Z SLUDGE WC could not be evaluated for accuracy and precision. The associated LCS met acceptance criteria.

Method 8081

No analytical or quality issues were noted.

Method 8082

There was insufficient sample remaining to perform PCBs analysis on sample DR-Z SLUDGE WC.

The LCS surrogate recovery for the following samples was outside acceptance limits (high biased) on the primary column due to matrix interference. The recovery is within acceptance limits on the other column, indicating that the extraction process was in control. The associated samples were non-detect for target analytes; therefore, the sample data have been reported.

The CCV recoveries for surrogate compound decachlorobiphenyl, PCB-1254 on the primary and confirmation column and PCB-1260 on the confirmation column were outside the QC limits. The surrogate recoveries in the associated samples are within acceptance criteria, and the sample results are non-detect; therefore the sample data have been reported.

Method 8151

The CCV recovery for 2,4-D was outside the QC limits on the confirmation column. The associated sample results were non-detect for target analytes, and did not require confirmation; therefore the sample data have been reported.

The continuing CCV recovered above the upper control limit for 2,4-D on the confirmation column. The samples associated with this CCV were non-detects for the affected analytes and do not require confirmation; therefore, the data have been reported.

Method 8260 (Toxicity Characteristic Leaching Procedure [TCLP])

The following compounds did not meet the minimum relative response factor limits in the CCV: isopropyl alcohol, acetone, methyl acetate, n-butanol, 2-pentanone, 2-hexanone and 2-butanone. A low-level CCV was analyzed at the reporting limit and the affected analytes were detected. Target analytes recovering above the reporting limit were qualified and reported.

The following compounds did not meet the minimum relative response factor limits in the CCV: ethanol, isopropyl alcohol, acetone, methyl acetate, n-butanol, 2-hexanone and 2-butanone. A low-level CCV was analyzed at the reporting limit (5 µg/L) and the affected analytes were detected. Target analytes recovering above the reporting limit were qualified and reported.

The CCV recovered above the upper control limit for carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270 (TCLP)

The LCS and LCSD recovered outside upper control limits for pyridine. This analyte was biased high in the LCS/LCSD and was not detected in the associated sample; therefore, the data have been reported.

Method 9012

The following sample had an LCS recovery that failed low: DR-Z SLUDGE WC. Due to the status of method 7.3.3 being unapproved, the acceptance criteria for the method are considered to be advisory limits. Sample DR-Z SLUDGE WC was prepped and analyzed only once, but as there was insufficient sample remaining for re-prep and analysis, the data are being reported. The lab is investigating the cause of the recent lower recoveries.

Method 9034

No analytical or quality issues were noted.

Method 9045

The following samples have results greater than the upper calibration standard of 10 SU: CONCRETE OUTSIDE WC and CONCRETE INSIDE WC. Results were reported.

Method 9095
No analytical or quality issues were noted.

2.3.2.2 Concrete, Asphalt Waste and DR-Z Sludge Samples – Radiological Analysis

Method A-01-R (Isotopic Thorium and Uranium)
No analytical or quality issues were noted.

Method Ga-01-R (Radium-226, No Ingrowth)
Sample DR-Z SLUDGE WC was analyzed for radium 226 (No ingrowth) in accordance with Ga-01-R. Insufficient sample was available to fill the client requested tuna can geometry. A 25mL solid geometry was used instead.

Radium-226 by gamma spectroscopy is typically determined by inference from daughters (e.g., bismuth-214) after sealing the sample in an appropriate counting geometry/container and waiting 21 days to allow the radium-226 decay chain through radon-222 to reach secular equilibrium. Such an approach is considered to be the most reliable and representative means for establishing the true radium-226 concentration in the sample. The method requested by the client to report radium-226, using its own 186 keV gamma-ray emission, is subject to interference and potential bias due to the 185.7 keV uranium-235 gamma ray. Experience also indicates gamma spectroscopy software does not consistently assign accurate peak areas to radium-226 (186 keV), with the problem compounded by slight drift of the instrumentation. The laboratory considers radium-226 reported based upon the 186 keV gamma-ray emission to be best used by the client in a qualitative fashion.

The MDC was greater than the requested limit of 1 pCi/g for radium-226. Radium-226 was requested to be reported with no ingrowth for this batch; therefore, the samples were reported from the only usable gamma energy line, 185.99 keV. This energy line has a low efficiency, which causes an elevated MDC. Using the 185.99 keV line to report radium-226 can cause potential high bias in the results due to potential interference from the uranium-235 energy line of 185.72 keV. The sample result is reported; however, it should be considered to have a high bias.

Method Ga-01-R (Radium-226, 21 Day Ingrowth)
Cesium-137 and cobalt-60 exceeded the RPD limit for the duplicate of sample CONCRETE OUTSIDE WC.

2.4 CSIA Data Analysis and Validation
The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. An Evaluation Memorandum was generated for both

SDGs reported and the extracted section titled "Verification of CSIA Data" is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. "Verification of CSIA Data" summarizes and evaluates the samples and methods included for both SDGs.

Sample Delivery Groups for CSIA Sampling	Laboratory
16051951	TestAmerica St. Louis/Microseeps
16052541	TestAmerica St. Louis/Microseeps

2.4.1 Field Data Quality Evaluation

VOC precision and sensitivity were assessed by reviewing field quality control samples: such as VOC trip blank, VOC rinse blank for soils, and field duplicates. The conclusion of the data verification is that the isotopic and VOC concentration data are not impacted by field sampling and handling.

2.4.1.1 Field Duplicates

See "Verification of CSIA Data" in Appendix A. The field duplicate samples collected from 2009 to 2013 were compared to the parent samples to assess the sampling and laboratory precision (refer to Figure 1a and to Figure 1b). Field duplicates for TCE, PCE, and Total VOC provided reproducible results within 15 percent; note the regression lines in Figures 1A and 1B (Parent and Field Duplicate Samples Comparison) had slopes greater than 0.88 (with regression coefficients (R2) greater than 0.97, indicating comparability). The field duplicates for the isotopic data were also compared to parent samples; however, comparison was limited to three matched pairs. Figure 2 shows PCE isotopic carbon signature (δC13) and the isotopic chlorine signature (δCl37) between parents and duplicate samples relative to the 1:1 line. Similarly, Figure 3 shows TCE isotopic ratio of δC13 and δCl37 between the parent and duplicate samples. Duplicate samples showed a percent difference less than 16 percent (refer to Table 1 for values).

2.4.1.2 Field Blanks

See "Verification of CSIA Data" in Appendix A. The VOC trip blank and VOC rinse blank collected in August 2013 had non-detected concentrations for PCE and TCE.

2.4.2 Laboratory Data Quality Evaluation

These data were verified and not validated. These results are considered usable for this purpose as reported. The data evaluation discussed below is taken form "Verification of CSIA Data" in Appendix A.

2.4.2.1 CSIA Samples – Chemical Analysis

Method 8260

See "Verification of CSIA Data" in Appendix A. In addition to analyzing the isotopic ratio in the groundwater samples, Microseeps reported the TCE and PCE concentrations. These VOC data from Microseeps supplement the 2013 routine groundwater monitoring samples that were analyzed by Test America. As an independent check on accuracy, the TCE and PCE concentrations from samples analyzed by Microseeps and TestAmerica were compared; the TCE and PCE concentrations from both laboratories are comparable. A review of the laboratory data packages confirms that the laboratory followed standard operating procedures and that the laboratory performance criteria were met.

2.4.2.2 CSIA Samples – Isotope Analysis

For the isotope results, the laboratory blank samples reported non-detected concentrations for the PCE and TCE isotopic ratios.

Method CSIA- PCE/TCE C/Cl/H

A review of the laboratory data packages confirms that the laboratory followed standard operating procedures and that the laboratory performance criteria were met.

Method CSIA- PCE only (Chlorine and Carbon)

A review of the laboratory data packages confirms that the laboratory followed standard operating procedures and that the laboratory performance criteria were met.

2.5 Building 70 Waste Drain Investigation Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DUSR was generated for each SDG reported and a copy of the DUSR is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. Tables 1 and 2 of the DUSR summarize the samples and methods included for each SDG. Sample results were qualified as noted on the DUSRs.

Sample Delivery Groups for Building 70 Waste Drain Investigation Sampling	Laboratory
16092021	TestAmerica St. Louis
16092451	TestAmerica St. Louis
16092491	TestAmerica St. Louis
160107501	TestAmerica St. Louis
160107741	TestAmerica St. Louis
160122321	TestAmerica St. Louis

2.5.1 Field Data Quality Evaluation

Table 2.5-1 provides a summary of the field QC samples and the associated field samples. Table 2.5-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.5-1 Field QC Associations for Building 70 Waste Drain Investigation Samples, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
DRY-E-B1-300	DRY-E-B1-23-Z3	FD	160107741
DRYH-G-Z501	DRYH-G-Z6	FD	16092021
DRYH-H-L300	DRYH-H-L1	FD	160107501
DRYH-H-L300	DRYH-H-L1	FD	160107501
D1-RB1	D1-RB1	RB	160107501
DI-RB1	DI-RB1	RB	160107501
RB-06	RB-06	RB	16092491
DI-TB1	DI-TB1	TB	160107501
DI-TB2	DI-TB2	TB	160107741
DI-TB3	DI-TB3	TB	160107741

Key:
RB = Rinsate Blank.
TB = Trip Blank.
FD = Field Duplicate.

Table 2.5-2 Field QC Samples by Method for Building 70 Waste Drain Investigation Samples, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Rinsate Blanks
A-01-R	Sludge	1	0	0%	NA	0
Ga-01-R	Sludge	1	0	0%	NA	0
SW6010	Sludge	1	0	0%	NA	0
SW6020A	Sludge	1	0	0%	NA	0
SW7471	Sludge	1	0	0%	NA	0
SW8260B	Sludge	1	0	0%	NA	0
A-01-R	Soil	17	2	12%	NA	0
Ga-01-R	Soil	17	2	12%	NA	0
SW6010	Soil	17	2	12%	NA	0
SW6020A	Soil	17	2	12%	NA	0
SW7471	Soil	17	2	12%	NA	0
SW8260B	Soil	17	2	12%	NA	0
A-01-R	Water	0	0	0%	NA	1
D5174	Water	0	0	0%	NA	1
SW6010	Water	0	0	0%	NA	1
SW6020A	Water	0	0	0%	NA	1
SW7470	Water	0	0	0%	NA	1
SW8260B	Water	0	0	0%	NA	1

Table 2.5-2 Field QC Samples by Method for Building 70 Waste Drain Investigation Samples, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Rinsate Blanks
SW9315	Water	0	0	0%	NA	1
SW9320	Water	0	0	0%	NA	1
D5174	Water	0	0	0%	NA	1
SW6010	Water	0	0	0%	NA	1
SW7470	Water	0	0	0%	NA	1
SW8260B	Water	0	0	0%	3	1
A-01-R	Stormwater	1	1	100%	NA	0
D5174	Stormwater	1	1	100%	NA	0
SW6010	Stormwater	1	1	100%	NA	0
SW6020A	Stormwater	1	1	100%	NA	0
SW7470	Stormwater	1	1	100%	NA	0
SW8260B	Stormwater	1	1	100%	NA	0
SW9315	Stormwater	1	1	100%	NA	0
SW9320	Stormwater	1	1	100%	NA	0

Key:
NA = Not applicable.

2.5.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DUSR. Field duplicate results are summarized on Table 7 of the DUSR. Overall, field duplicate precision was good. RPD acceptance criteria were exceeded for potassium-40 and iron for the field duplicate sample pair for DRYH-G-Z6; those results were qualified ”J” as estimated. The sample results for aluminum and copper exhibited poor precision in the field duplicate of DRY-E-B1-23-Z3. The results were qualified ”J” as estimated. The precision for the uranium-238 results for the field duplicate sample pair for DRY H-H-L1 was outside acceptance criteria; the results were qualified with “J” as estimated for detected results or “UJ” as estimated non-detect.

2.5.1.2 Trip Blanks

Trip blanks were collected at a rate of one every 6 samples (one for every cooler shipped with VOC samples). A trip blank was not provided in the coolers with samples for VOCs analysis for SDGs 16092021, 16092451, or 16092491. Chloroform was detected in trip blanks, DI-TB1 and DI-TB2 and 2-butanone (MEK) and acetone were detected in trip blank 060215 by Method 8260.

2.5.1.3 Rinsate Blanks

Rinsate samples were collected at a rate of one every 18 samples. 2-Hexanone, acetone, methyl ethyl ketone (2-butanone), and methylene chloride were detected in rinsate blank RB-06 and 2-butanone and acetone were detected in the rinsate blank DI-RB1 by Method 8260. Iron, lead, selenium, vanadium, and zinc were detected in rinsate blank RB-06 and iron and manganese were detected in rinsate blank DI-RB1 by Method 6010B.

2.5.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DUSR in Appendix A and summarized in a separate section for each analytical method below.

Tables 3 through 7 in the DUSR provide a list of sample results qualified and the reason for data qualification.

2.5.2.1 Building 70 Waste Drain Investigation Samples – Chemical Analysis

Method 8260

1,2,4-trichlorobenzene, 1,2,3-trichlorobenzene, 1,2-dichloroethane, ethylbenzene, 1,3-dichlorobenzene, 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene were detected in method blanks.

Acetone results were "U" qualified in several samples due to positive detection in TRIP BLANK 060215.

Several sample results were "U" qualified due to rinsate blank contamination in RB-06 and acetone and 2-butanone were "U" qualified in several samples due to positive detections for the analytes in the rinsate blank DI-RB1.

Due to matrix interferences, surrogate recoveries for 1,2-dichloroethane-d4, toluene-d8, 4-bromofluorobenzene and/or dibromofluoromethane were below control limits for the following samples: DRYH-G-WEST-2, DRYH-G-EAST, DRYH-G-NORTH, DRYH-G-Z4, and DR-BB-PIPE-SLUDGE. The results were qualified "J" as estimated for detected results or "UJ" as estimated non-detect.

Surrogate recoveries for 1,2-Dichloroethane-d4 and/or toluene-d8 and/or 4-bromofluorobenzene were above control limits in several samples. The results for detected compounds in the samples were qualified "J" as estimated. No qualification was made on non-detect results, the method blank, or the MS/MSD samples.

The internal standards DCB, 1,4-dichlorobenzene-d4, and chlorobenzene-d5 exhibited area counts less than the low limit in several samples. The sample results for DRY-F-WEST-2 were already qualified "J" as estimated for detected results or "UJ" as estimated non-detect for surrogate failures; the failures are likely due to the nature of the matrix. The detected results for samples DRYH-H-SG1, DRYH-H-SG2, DRYH-H-SG3 (reanalysis), DRYH-H-SG1, DRYH-H-SG2, DRYH-I-SG1, and DRY-H-J-SG3 were qualified "J" as estimated and the non-detect results were qualified "UR" as rejected.

Sample DRYH-H-B1-21-Z23 exhibited internal standard recoveries outside of control limits. The sample was reanalyzed within hold time with acceptable results. The re-analysis results are reported.

The following samples were run at medium level due to high concentrations of target analytes and sample matrix issues: DRYH-G-Z4, DRYH-G-EAST, DRYH-G-NORTH, DRYH-G-WEST-1, DRYH-I-SG1, and DR-BB-SLUDGE. Elevated reporting limits were provided. This may impact data comparability.

Acetone, 2-butanone, 4-methyl-2-pentanone (MIBK), 2-hexanone, 1,2-dibromo-3-chloropropane, methyl acetate, and 1,1,2,2,-tetrachloroethane exhibited relative response factors (RRF) less than the laboratory minimum in several analytical batches. The analytes are poor performers and per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.

Dichlorodifluoromethane exhibited a %D above laboratory control limits in several initial calibration verification (ICV) standards. The analyte is a poor performing compound per EPA SOP USEPA-540-R-08-01 and allowed up to 40% D. Styrene exhibited a %D above laboratory control limits in several ICVs. Per EPA SOP USEPA-540-R-08-01 analytes are allowed up to 25% D. No qualification of the data was made.

1,2,4-trichlorobenzene exhibited a %D above laboratory control limits in several CCVs. Per EPA SOP USEPA-540-R-08-01 analytes are allowed up to 25% D. No qualification of the data was made. Methyl acetate exhibited a %D above laboratory control limits in several CCVs. Per EPA SOP USEPA-540-R-08-01 analytes are allowed up to 40% D. No qualification of the data was made.

The laboratory did not log in sample DRYH-G-Z8 for VOCs analysis; therefore, VOC results are not available. This sample was at the bottom of a boring and the six samples collected above it did not indicate migration of VOCs through the subsurface at this location. Given the minor impact to data interpretation, the effort to recollect the sample was not considered necessary.

Insufficient sample volume was available to perform MS/MSD analyses with several analytical batches; however, LCS/LCSDs were analyzed instead, which is acceptable.

1,2-Dibromoethane was recovered high and methylcyclohexane was recovered low in the MS/MSD of sample DRYH-H-L1; no qualification was made for 1,2-dibromoethane and methylcyclohexane was already “UJ” qualified due to LCS failure.

26 analytes failed recovery in the MS/MSD of DRYH-I-SG1; however, the sample results were already qualified for internal standard and surrogate failures.

The following analytes failed recovery low in LCS/LCSDs associated with sample analytical batches: chloroethane, chloromethane, cyclohexane, dichlorodifluoromethane, methylcyclohexane, trichlorofluoromethane, and vinyl chloride. All of the analytes except vinyl chloride are poor performing compounds per EPA SOP USEPA-540-R-08-01 in a multi-parameter spike. The associated sample results were qualified "J" as estimated for detected results or "UJ" as estimated non-detect.

Method 6010

Many of the sample digestates were oily with a high viscosity, which resulted in the laboratory performing dilutions on them prior to analysis.

Parent sample results were qualified with "J" as estimated for detected results or "UJ" as estimated non-detect due to MS/MSD failures.

Thallium results for sample DRYH-G-WEST-1 were rejected due to 0% recoveries in the MS/MSD and low post-digestion spike (PDS) recovery.

Several metals (arsenic, copper, lead, nickel, selenium, silver, zinc, and calcium) were detected in the method blanks associated with the samples. Beryllium, vanadium, copper, cadmium, lead, selenium, silver, and arsenic were detected in several of the initial calibration blanks (ICBs) and/or continuing calibration blanks (CCB). Arsenic results for the associated samples were "U" qualified as non-detect due to method blank contamination. Several samples were "U" qualified as non-detect for cadmium, copper, lead, and vanadium due to detections in the CCB. Beryllium was non-detect in the associated samples; therefore, no qualification of the data was required. Associated sample results for nickel, calcium and zinc were greater than five times the laboratory blank detection; therefore, no qualification of the data was required. Two samples were "U" qualified for selenium detection in the CCB. Five samples were "U" qualified for silver detections in the ICB or CCB. Two samples were "U" qualified for lead detection in the RB. One sample was "U" qualified for selenium detection in the RB. Seven samples were "U" qualified for vanadium detection in the RB, and five samples were "U" qualified for zinc in the RB.

Chromium, copper, and lead were recovered high in the contract required quantitation limit check standards (CRI). The associated sample results were non-detect or were bracketed by a CCV at the same concentration and the same source as the CRI, which were within acceptance criteria; therefore, the data was not qualified.

The post-digestion spike (PDS) recovered high for chromium in sample DRYH-H-L1. The individual recoveries were acceptable in the MS/MSD; therefore, no qualification of the data was made. A PDS recovered high for chromium and lead; the parent sample results were qualified with "J" as estimated.

Several metals failed recovery in the MS/MSD of DRYH-I-SG1, and in several cases, the PDS also failed recovery. The recoveries were generally higher in the

MSD than the MS, which resulted in several analytes exhibiting poor precision. The results are likely related to matrix effects. The results exhibiting failures were qualified "J" as estimated. No qualification was made on results where the native concentration was greater than four times the spiking concentration.

The MS/MSD recoveries for sample DRYH-J-SG1 for aluminum, copper, iron, and zinc were outside acceptance criteria. The parent sample results for aluminum, copper, and zinc were qualified with "J" as estimated. The parent sample result for iron required no qualification because the sample concentration exceeded the spike concentration more than four times.

MS recovery for potassium was outside acceptance criteria; however, the MSD and RPD as well as the LCS were acceptable; therefore, no qualifiers were added.

Method 6020A

Uranium-238 was detected in a method blank.

Several samples were diluted due to the sample matrix; elevated reporting limits were provided.

The MS/MSD recoveries for uranium-236 in sample DRYH-G-WEST-1 were below acceptance criteria. The results were qualified "J" as estimated with a low bias. The MS/MSD recoveries for sample DRYH-J-SG1 for uranium-234, uranium-235, and uranium-238 and for sample DRYH-I-SG1 for uranium-238 were outside acceptance criteria. No qualifiers were required because the sample concentration exceeded the spike concentration by more than four times. The MSD recovery for uranium-234 was high; however, the parent sample result was non-detect; therefore, no qualification of the data was made.

The samples were diluted prior to analysis due to the nature of the matrix or high target analyte concentrations. The following samples had non-detect values and are reported with elevated reporting limits: DRYH-G-WEST-2, DRYH-G-Z3, DRYH-G-Z5, DRYH-G-Z501, DRYH-G-Z6, DRYH-G-Z7.

Method 7471B

The following samples were re-extracted and analyzed outside of hold time for mercury analysis by Method 7471B. The laboratory noted a software malfunction resulting in the loss of initial data results: DRYH-G-Z3, DRYH-G-Z4, DRYH-G-Z5, DRYH-G-Z501, DRYH-G-Z6, DRYH-G-Z7, DRYH-G-EAST, DRYH-G-NORTH, DRYH-G-WEST-1, DRYH-G-WEST-2. The positive detections were qualified "J-" as estimated with a low bias. The non-detect results were qualified "UR" as rejected non-detect. Because mercury is not a likely site contaminant and there would be a minor impact on data interpretation, the effort to recollect the sample was not considered necessary.

The MS recovery for mercury was outside the acceptance criteria; however, the MSD and RPD as well as the LCS were acceptable; therefore, no qualifiers were added.

2.5.2.2 Building 70 Waste Drain Investigation Samples – Radiological Analysis

Method ASTM D-5174
Samples DRY H-H-L1, DRY H-H-L300, and D1-RB1 (reprepped due to MS/LCS failure in first batch) were treated with a post spike to test for quenching. The post-spike verified the initial results, so the initial results were reported.

Method A-01-R (Isotopic Thorium and Uranium)
Thorium-230 and thorium-228 were detected in the method blanks. "J" qualifiers were added to the thorium-230 results for samples DI-RB1, DRYH-H-L1, and DRYH-H-L300 for method blank contamination.

For sample DRYH-I-SG1, MS/MSD recoveries for uranium-233/234 were above acceptance criteria. A matrix effect is suspected; therefore, the parent sample result was qualified with "J" as estimated.

Method Ga-01-R (Gamma Spectroscopy)
No analytical or quality issues were noted.

Method 9315 (Radium-226 by Gas Flow Proportional Counting [GFPC])
No analytical or quality issues were noted.

Method 9320 (Ra-228 by GFPC)
No analytical or quality issues were noted.

2.6 Septic Tank Data Analysis and Validation

The samples were grouped by the laboratories into SDGs of various numbers of samples. An SDG is defined as a batch of up to 20 samples collected during one calendar week. Samples shipped on Friday will normally conclude an SDG. The SDGs are listed below. A DUSR was generated for each SDG reported and a copy of the DUSR is included in Appendix A. The results were checked for completeness and are included in Appendix B. Summary tables of the samples and associated SDG are provided in the beginning of each appendix for cross reference. Tables 1 and 2 of the DUSR summarize the samples and methods included for each SDG. Sample results were qualified as noted on the DUSRs.

Sample Delivery Groups for Septic Tank Sampling	Laboratory
16086841	TestAmerica St. Louis
16086431	TestAmerica St. Louis/General Engineering Laboratories
16053001	TestAmerica St. Louis

Sample Delivery Groups for Septic Tank Sampling	Laboratory
16048891	TestAmerica St. Louis
16048892	TestAmerica St. Louis
16048894	TestAmerica St. Louis
16048895	TestAmerica St. Louis

2.6.1 Field Data Quality Evaluation

Table 2.6-1 provides a summary of the field QC samples and the associated field samples. Table 2.6-2 provides summarizes the sample collection frequency for the field QC samples by method.

Table 2.6-1 Field QC Associations for Septic Tank Samples, Sylvania Corning FUSRAP Site

Field QC Sample ID	Client Sample ID	QC Type	SDG
STB-01-500	STB-01-Z5	FD	16086431
STB-02-500	STB-03-Z2	FD	16086841
STS-801-FA13	STS-01-FA13	FD	16048895
TB01-FA13	TB01-FA13	TB	16048892
TB04	TB04	TB	16053001

Key:
TB = Trip Blank.
FD = Field Duplicate.

Table 2.6-2 Field QC Samples by Method for Septic Tank Samples, Sylvania Corning FUSRAP Site

Analytical Method	Matrix	Number of Primary Samples	Number of Field Duplicates	Frequency	Number of Trip Blanks	Number of Field Blanks
A-01-R	Soil/Sludge	21	2	10%	NA	0
GA-01-R	Soil/Sludge	19	2	10%	NA	0
SW6010B	Soil/Sludge	21	2	10%	NA	0
SW6020A	Sludge	7	0	10%	NA	0
SW7471	Soil/Sludge	21	2	10%	NA	0
SW8260B	Soil/Sludge	21	2	10%	1	0

Key:
NA = Not applicable.

2.6.1.1 Field Duplicates

Field duplicates were submitted blind to the laboratory, but the corresponding sample identifications are listed in the DUSR. Field duplicate results are summarized on Table 7 of the DUSR. Overall, field duplicate precision was good.

The field duplicate precision was outside acceptance criteria for several thorium and uranium isotopes analyzed by Method A-01-R and for potassium-40 and radium-228 analyzed by Method Ga-01-R; therefore, the results for the field dupli-

cate sample pairs STB-02-Z8 and STB-01-Z5 were qualified with "J" as estimated for detected results or "UJ" as estimated non-detect.

PCE, chromium, and iron results in the field duplicate sample pair for sample STS-01-FA13 were qualified "J" as estimated due to poor precision.

2.6.1.2 Trip Blanks

Trip blanks were collected at a rate of one for every shipment containing VOCs. A trip blank was not provided in the coolers with samples for VOCs analysis for SDGs 16086841 or 16086431. 2-Butanone (MEK) and acetone were detected in trip blank TB04.

2.6.1.3 Rinsate Blanks

Rinsate samples were collected at a rate of one per 20 groundwater samples. The bulk of the sampling equipment was dedicated.

2.6.2 Laboratory Data Quality Evaluation

Data associated with laboratory and field QC samples that meet all acceptance limits were not qualified and are considered usable as reported. Data associated with laboratory and field QC samples that exceeded some of the acceptance limits or had other analytical problems are qualified as described in the DUSR in Appendix A and summarized in a separate section for each analytical method below.

Tables 3 through 7 in the DUSR provide a list of sample results qualified and the reason for data qualification.

2.6.2.1 Septic Tank Samples – Chemical Analysis

Method 8260

Acetone, PCE, and 1,2,3-trichlorobenzene were detected in method blanks. The result for acetone in trip blank TB-01-FA13 was "U" qualified as non-detect due to method blank detections.

Acetone results were "U" qualified in samples STS-B01-Z1 and STS-B01-Z2, and 2-butanone was "U" qualified in STS-B01-Z1 due to positive detections in the trip blank.

Due to matrix interferences, two or more surrogate recoveries were below control limits for samples STB-02-Z1, STS-02-FA13, and STS-03-FA13; the sample results were qualified "J" as estimated for detected results or "UJ" as estimated non-detect.

Acetone, methyl acetate, 1,4-dioxane, and 2-butanone exhibited relative response factors (RRF) less than the laboratory minimum in various analytical batches. The analytes are poor performers and per EPA SOP USEPA-540-R-08-01, a RRF >0.010 (>0.0050 for 1,4-dioxane) is acceptable. No qualification of the data was made.

The internal standard recoveries were below control limits in samples STB-02-Z1, STS-B01-Z1, and STS-B01-Z2. The sample results were already qualified "J" as estimated for detected results or "UJ" as estimated non-detect for surrogate failures.

Dichlorodifluoromethane, 1,4-dioxane, chloromethane, trans-1,3-dichloropropene, trichlorofluoromethane, and 4-methyl-2-pentanone exhibited %D greater than control limits in several CCV/ICV. The analytes are poor performing compounds in a multi-parameter spike and EPA SOP HW-33 Rev3 allows up to 40% D for poor performers (up to 50% D for 1,4-dioxane). The associated sample results were non-detect and no qualification of data was made.

Several samples were analyzed at medium level due to target concentrations exceeding the calibration curve, resulting in elevated reporting limits, which may impact data comparability. Toluene was reported at elevated detection limits in sample STS-B01-Z2.

Method 6010

Several sample digestates were diluted due to high concentrations of target compounds, interfering analytes, and because they were noted to have a yellow color. Each sample reports several analytes at elevated reporting limits, which may affect comparability.

Several metals (selenium, calcium, iron, zinc) were detected in the method blanks associated with the samples.

Beryllium, cadmium, copper, lead, manganese, and vanadium were detected in the ICB and CCB. The following data were qualified: associated vanadium sample results were qualified with "U" as non-detect due to contamination in the CCB, two (2) samples were "U" qualified for zinc detection in the method blank, eighteen (18) samples were "U" qualified for lead detections in the ICB or CCB, and seven (7) samples were "U" qualified for copper detections in the CCB.

Potassium and sodium were recovered high in an LCS and CCV. The analytes were not detected in the associated samples. No qualification of the data was made.

Aluminum was qualified with "J" as estimated in the parent samples due to high recovery in the MS and MSD of samples STB-01-Z8 and STB-02-Z8. Several analytes were outside of acceptance criteria in the MS/MSD of STS-B01-Z1. The results were qualified "J" as estimated for detected results or "UJ" as estimated for non-detect results. Aluminum, barium, chromium, manganese, lead, nickel, and silver were "J" qualified in the parent sample STS-01-FA13 due to MS/MSD recoveries outside control limits.

Thallium was recovered high in a CRI. The analyte was not detected in the samples; therefore, no qualification of the data was made.

Method 7471B

MS/MSD recoveries were outside control limits for sample STS-01-FA13; the native sample concentration was greater than four times the spiking concentration and no qualification of the data was required.

2.6.2.2 Septic Tank Samples – Radiological Analysis

Method A-01-R (Isotopic Thorium and Uranium)

Thorium-228 and thorium-230 were detected above the MDC and 2-sigma uncertainty and below one-half the PQL in method blanks for thorium analysis by alpha spectroscopy. The normalized absolute difference test was applied per the USACE guidance for thorium-228 and thorium-230, and the sample results were qualified with "J" as estimated, as required.

Method Ga-01-R (Gamma Spectroscopy)

Radium-226 was detected in a method blank above the MDC or 2-sigma uncertainty and below the PQL. Associated sample results were qualified with "J" as estimated.

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3 Data Summaries

Tables summarizing the complete results for the site samples are provided in this section. Field duplicate results are presented along with the field samples. Table 7 in the DRMs (see Appendix A) reports the RPDs for the field duplicates.

Complete analytical results are provided in Appendix B.

The following sections provide data tables for each phase of fieldwork.

3.1 Vertical Profile Data Summaries

Tables 3.1-1 through 3.1-3 include the analytical results for Vertical Profile investigations conducted from September 2014 through March 2016.

3.2 Monitoring Well Data Summaries

Tables 3.2-1 through 3.2-3 include the analytical results for Monitoring Well sampling conducted in 2015 and 2016.

3.3 DR-Z Sludge Data Summary

Table 3.3-1 includes the analytical results for DR-Z sludge sampling conducted in 2015.

3.4 CSIA Data Summary

Table 3.4-1 includes the analytical results for CSIA sampling conducted in 2013.

3.5 Building 70 Waste Drain Investigation Data Summaries

Tables 3.5-1 through 3.5-3 include the analytical results for Building 70 Waste Drain sampling conducted in 2014.

3.6 Septic Tank Data Summaries

Tables 3.6-1 and 3.6-2 include complete analytical results for Septic Tank sampling conducted in 2013 and 2014.

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Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-58	MW-58	MW-58	MW-58	MW-58	MW-58	MW-59	MW-59	MW-59	MW-59	MW-59	MW-59	MW-215	MW-215
Sample Name:	MW-58-VP03	MW-58-VP04	MW-58-VP04-FD	MW-58-VP05	MW-58-VP06	MW-58-VP07	MW-59-VP02	MW-59-VP03	MW-59-VP04	MW-59-VP05	MW-59-VP06	MW-59-VP06-FD	MW-215-VP17	MW-215-VP20
Depth:	69 - 69 ft	76 - 76 ft	76 - 76 ft	86 - 86 ft	96 - 96 ft	110 - 110 ft	68 - 68 ft	75 - 75 ft	85 - 85 ft	95 - 95 ft	110 - 110 ft	110 - 110 ft	210 - 210 ft	240 - 240 ft
Date:	09/30/14	10/01/14	10/01/14	10/01/14	10/01/14	10/02/14	11/05/14	11/05/14	11/05/14	11/05/14	11/05/14	11/05/14	09/05/14	09/08/14
Analyte														
Volatile Organics by Method SW8260 (µg/L)														
1,1,1-Trichloroethane	**19**	**0.67 J**	**0.64 J**	0.069 U	0.069 U	0.069 U	**0.36 J**	**0.42 J**	**4.7**	0.069 U	0.069 U	0.069 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	**0.31 J**	0.15 U	0.15 U	0.15 U	0.50 U	0.50 U
1,1-Dichloroethane	**9.0**	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	**3.0**	0.068 U	0.068 U	0.068 U	0.50 U	**0.70 J**
1,1-Dichloroethene	**0.20 J**	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	**2.1**	0.083 U	0.083 U	0.083 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.50 U	0.50 U
1,2-Dichloroethane	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.50 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	**3.3 J**	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	**7.2**	1.2 U	1.2 U	1.2 U	0.50 U	0.50 U
2-Hexanone	**7.2**	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	**5.9**	**5.2**	2.2 U	1.6 U	0.22 U	0.29 U	1.3 U	1.3 U
Acetone	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.89 U	1.1 U	0.34 U	0.49 U	0.51 U	0.34 U	1.3 U	4.0 U
Benzene	**0.14 J**	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.50 U	0.50 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.50 U	0.50 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.50 U	0.50 U
Bromoform	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.50 U	0.50 U
Bromomethane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.50 U
Carbon Disulfide	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.50 U	0.50 U
Carbon Tetrachloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.50 U	0.50 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.50 U	0.50 U
Chloroethane	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.50 U	0.50 U
Chloroform	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.50 U
Chloromethane	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	**34**	**0.29 J**	**0.28 J**	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	**6.2**	0.087 U	0.087 U	0.087 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.50 U	0.50 U
Cyclohexane	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.50 U	0.50 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.50 U	0.50 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.50 U	0.50 U
m,p-Xylene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.50 U	0.50 U
Methyl Acetate	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.59 U	0.52 U	0.52 U	0.63 U	0.52 U	**1.6 J**	1.3 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	1.3 U	1.3 U
Methylcyclohexane	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.50 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.75 U	0.28 U	0.36 U	0.38 U	0.33 U	0.31 U	0.50 U	0.50 U
O-Xylene (1,2-Dimethylbenzene)	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.50 U	0.50 U
Styrene	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.50 U	0.50 U
Tert-Butyl Methyl Ether	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	**170**	**20**	**18**	**0.93 J**	**0.29 J**	0.18 U	**3.4**	**3.2**	**100**	**3.5**	**1.4**	**1.3**	0.50 U	0.50 U
Toluene	**0.17 J**	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 UJ	0.072 U	**0.52 J**	0.50 U
Trans-1,2-Dichloroethene	**0.16 J**	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	**0.087 J**	0.083 U	0.083 U	0.083 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.30 U	0.30 U
Trichloroethylene (TCE)	**4.7**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	**0.30 J**	**0.34 J**	**20**	0.25 U	0.25 U	0.25 U	0.50 U	**4.6 J**
Trichlorofluoromethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.50 U	0.50 U
Vinyl Chloride	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.50 U	0.50 U

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Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215
Sample Name:	MW-215-VP20-FD	MW-215-VP22	MW-215-VP24	MW-215-VP26	MW-215-VP28	MW-215-VP32	MW-215-VP35	MW-215-VP36	MW-215-VP38	MW-215-VP40	MW-215-VP40-FD	MW-215-VP42	MW-215-VP47	MW-215-VP50
Depth:	240 - 240 ft	270 - 270 ft	290 - 290 ft	310 - 310 ft	330 - 330 ft	370 - 370 ft	390 - 390 ft	410 - 410 ft	420 - 420 ft	450 - 450 ft	450 - 450 ft	470 - 470 ft	520 - 520 ft	540 - 540 ft
Date:	09/08/14	09/08/14	09/08/14	09/09/14	09/09/14	09/10/14	09/10/14	09/10/14	09/11/14	09/11/14	09/11/14	09/11/14	09/15/14	09/15/14
Analyte														
Volatile Organics by Method SW8260 (µg/L)														
1,1,1-Trichloroethane	0.50 U	0.50 U	**0.96 J**	0.50 U	0.50 U	**0.65 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	**1.9 J**	**2.0**	**4.3**	**1.1 J**	0.50 U	**3.6**	**2.4**	**2.8**	**1.3 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	**0.72 J**	**0.75 J**	**1.4 J**	**0.69 J**	0.50 U	**0.99 J**	**0.67 J**	**0.87 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Acetone	3.6 U	4.8 U	3.7 U	2.4 U	2.5 U	2.8 U	2.5 U	2.8 U	1.3 U	2.0 U	1.9 U	1.5 U	4.9 U	2.7 U
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**5.5**	0.50 U	0.50 U	0.50 U	**0.89 J**	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.55 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.78 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.0 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.3 U	1.3 U	1.3 U	1.3 UJ	1.3 UJ	1.3 U	1.3 U	1.3 U	**9.0**	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
O-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.1 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tert-Butyl Methyl Ether	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**4.2**	**3.4**	**0.99 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**4.5**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	**0.53 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	**19 J**	**19**	**32**	**2.5**	0.50 U	**40**	**22**	**11**	**11**	0.50 U	0.50 U	0.50 U	**0.72 J**	0.50 U
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-215	MW-215	MW-215	MW-215	MW-215	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
Sample Name:	MW-215-VP51	MW-215-VP52	MW-215-VP55	MW-215-VP55-FD	MW-215-VP56	MW-216-VP16	MW-216-VP18	MW-216-VP21	MW-216-VP23	MW-216-VP25	MW-216-VP27	MW-216-VP28	MW-216-VP30	MW-216-VP32
Depth:	560 - 560 ft	570 - 570 ft	590 - 590 ft	590 - 590 ft	610 - 610 ft	210 - 210 ft	230 - 230 ft	260 - 260 ft	280 - 280 ft	300 - 300 ft	320 - 320 ft	330 - 330 ft	350 - 350 ft	370 - 370 ft
Date:	09/16/14	09/16/14	09/17/14	09/17/14	09/17/14	09/09/14	09/10/14	09/10/14	09/10/14	09/10/14	09/11/14	09/11/14	09/11/14	09/11/14
Analyte														
Volatile Organics by Method SW8260 (µg/L)														
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.77 J**	0.50 U	**0.60 J**	**1.1 J**	**0.72 J**	0.50 U	0.50 U	**0.55 J**
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Acetone	1.3 U	2.7 U	3.1 U	4.0 U	2.5 U	2.4 U	2.7 U	2.5 U	2.7 U	2.8 U	1.7 U	**31**	1.8 U	1.9 U
Benzene	**2.6**	0.50 U	**0.66 J**	**0.66 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**4.7**	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.94 J**	**0.70 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	**1.3 J**	1.3 U	1.3 U	**1.4 J**	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	**15**	1.3 U	1.3 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
O-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tert-Butyl Methyl Ether	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**20**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	**0.97 J**	**0.51 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.1**	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.63 J**	0.50 U	0.50 U	**11**	**3.8**	**5.8**	**1.8 J**	**1.9 J**	**1.8 J**
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-217	MW-217	MW-217
Sample Name:	MW-216-VP34	MW-216-VP36	MW-216-VP38	MW-216-VP40	MW-216-VP42	MW-216-VP44	MW-216-VP48	MW-216-VP48-FD	MW-216-VP50	MW-216-VP53	MW-216-VP54	MW-217-VP16	MW-217-VP18	MW-217-VP20
Depth:	390 - 390 ft	410 - 410 ft	430 - 430 ft	450 - 450 ft	470 - 470 ft	490 - 490 ft	530 - 530 ft	530 - 530 ft	550 - 550 ft	580 - 580 ft	590 - 590 ft	210 - 210 ft	230 - 230 ft	250 - 250 ft
Date:	09/12/14	09/12/14	09/15/14	09/15/14	09/15/14	09/16/14	09/22/14	09/22/14	09/22/14	09/23/14	09/24/14	09/29/14	09/29/14	09/29/14
Analyte														
Volatile Organics by Method SW8260 (µg/L)														
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.59 J**
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.3 J**
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.86 J**	0.50 U	0.50 U	0.50 U	**0.56 J**
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ
2-Hexanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Acetone	2.7 U	2.7 U	1.7 U	1.5 U	1.9 U	1.4 U	2.5 U	2.5 U	1.6 U	1.3 U	1.3 U	3.7 U	4.2 U	3.9 U
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.68 J**	**0.68 J**	0.50 U	0.50 U	**1.4 J**	0.50 U	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	**0.53 J**	**0.70 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	**5.7**	1.3 U	1.3 U	1.3 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
O-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tert-Butyl Methyl Ether	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.69 J**	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	**0.57 J**	0.50 U	0.50 U	**1.3**	0.50 U	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	**0.71 J**	**2.3**	**0.77 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.0 J**	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	**1.4 J**	0.50 U	**0.58 J**	**0.59 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217
Sample Name:	MW-217-VP23	MW-217-VP24	MW-217-VP26	MW-217-VP28	MW-217-VP31	MW-217-VP31-FD	MW-217-VP33	MW-217-VP34	MW-217-VP37	MW-217-VP39	MW-217-VP40	MW-217-VP42	MW-217-VP44	MW-217-VP46
Depth:	270 - 270 ft	290 - 290 ft	310 - 310 ft	330 - 330 ft	350 - 350 ft	350 - 350 ft	370 - 370 ft	390 - 390 ft	410 - 410 ft	430 - 430 ft	450 - 450 ft	470 - 470 ft	490 - 490 ft	510 - 510 ft
Date:	09/30/14	09/30/14	09/30/14	09/30/14	10/01/14	10/01/14	10/01/14	10/01/14	10/02/14	10/02/14	10/02/14	10/03/14	10/06/14	10/06/14
Analyte														
Volatile Organics by Method SW8260 (µg/L)														
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	**0.55 J**	**1.1 J**	0.50 U	**0.83 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Acetone	3.2 U	4.5 U	4.0 U	4.4 U	3.0 U	3.2 U	3.4 U	4.0 U	3.4 U	4.0 U	3.6 U	2.0 U	1.8 U	2.0 U
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.56 J**	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**4.6**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
O-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tert-Butyl Methyl Ether	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	0.50 U	0.50 U	**0.71 J**	0.50 U	0.50 U	**0.81 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-217	MW-217	MW-217	MW-217	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219
Sample Name:	MW-217-VP48	MW-217-VP48-FD	MW-217-VP50	MW-217-VP52	MW-219-VP16	MW-219-VP18	MW-219-VP20	MW-219-VP22	MW-219-VP24	MW-219-VP26	MW-219-VP28	MW-219-VP30	MW-219-VP32	MW-219-VP34
Depth:	520 - 520 ft	520 - 520 ft	540 - 540 ft	570 - 570 ft	210 - 210 ft	230 - 230 ft	250 - 250 ft	270 - 270 ft	290 - 290 ft	310 - 310 ft	330 - 330 ft	350 - 350 ft	370 - 370 ft	390 - 390 ft
Date:	10/07/14	10/07/14	10/07/14	10/08/14	10/17/14	10/20/14	10/20/14	10/20/14	10/20/14	10/20/14	10/21/14	10/21/14	10/21/14	10/21/14
Analyte														
Volatile Organics by Method SW8260 (µg/L)														
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.2**
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.88 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.55 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Acetone	1.6 U	1.4 U	1.5 U	**6.0**	2.6 U	2.2 U	2.2 U	2.3 U	2.3 U	2.1 U	1.3 U	2.9 U	2.2 U	2.5 U
Benzene	0.50 U	0.50 U	0.50 U	**2.0 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.1 J**	0.50 U	0.50 U	**2.5**	**7.8**
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.4**
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**5.3**
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U	0.50 U	0.50 U	**0.97 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.3 U	1.3 U	1.3 U	**3.3 J**	1.3 UJ	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	**4.9 J**	1.3 U	1.3 U	1.3 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
O-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	**1.0 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	**0.61 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tert-Butyl Methyl Ether	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.50 J**	**11**
Toluene	0.50 U	0.50 U	0.50 U	**3.1**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**15**	**13**	0.50 U	**5.9**	**11**	**95**
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-220	MW-220
Sample Name:	MW-219-VP37	MW-219-VP38	MW-219-VP40	MW-219-VP40-FD	MW-219-VP43	MW-219-VP44	MW-219-VP46	MW-219-VP48	MW-219-VP50	MW-219-VP52	MW-219-VP52-FD	MW-219-VP54	MW-220-VP01	MW-220-VP04	
Depth:	420 - 420 ft	430 - 430 ft	450 - 450 ft	450 - 450 ft	470 - 470 ft	490 - 490 ft	510 - 510 ft	530 - 530 ft	550 - 550 ft	570 - 570 ft	570 - 570 ft	590 - 590 ft	59 - 59 ft	86 - 86 ft	
Date:	10/22/14	10/22/14	10/22/14	10/22/14	10/22/14	10/23/14	10/23/14	10/23/14	10/24/14	10/27/14	10/27/14	10/27/14	11/18/14	11/18/14	
Analyte															
Volatile Organics by Method SW8260 (µg/L)															
1,1,1-Trichloroethane	0.50 U	0.50 U	**0.52 J**	**0.50 J**	**2.5**	0.50 U	**4.2**	**5.7**	**3.9**	**0.94 J**	**0.99 J**	0.50 U	0.50 U	0.50 U	
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	**1.5 J**	0.50 U	**3.4**	**2.0**	**2.4**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.1**	**0.74 J**	**1.7 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,1-Dichloroethene	**1.7 J**	**1.7 J**	**2.2**	**2.1**	**8.0**	0.50 U	**14**	**17**	**15**	**2.3**	**2.4**	0.50 U	0.50 U	0.50 U	
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
2-Hexanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	
Acetone	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2.4 U	1.9 U	2.2 U	1.9 U	2.4 U	2.1 U	2.7 U	2.4 U	
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Carbon Tetrachloride	**9.1**	**11**	**13**	**13**	**12**	0.50 U	**19**	**31**	**13**	**1.8 J**	**2.0 J**	0.50 U	0.50 U	0.50 U	
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Chloroform	**0.63 J**	**0.52 J**	**0.98 J**	**1.0 J**	**4.3**	0.50 U	**4.4**	**1.5 J**	**3.6**	**0.50 J**	0.50 U	0.50 U	0.50 U	0.50 U	
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Cis-1,2-Dichloroethylene	**4.3**	**3.8**	**6.4**	**6.3**	**20**	0.50 U	**95**	**22**	**62**	**1.4 J**	**1.4 J**	0.50 U	0.50 U	0.50 U	
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
m,p-Xylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Methyl Ethyl Ketone (2-Butanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**4.1**	0.50 U	0.50 U	
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
O-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Tert-Butyl Methyl Ether	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Tetrachloroethylene (PCE)	**5.7**	**6.6**	**11**	**10**	**20**	0.50 U	**33**	**38**	**26**	**25**	**27**	**2.7**	0.50 U	0.50 U	
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
Trichloroethylene (TCE)	**71**	**78**	**120**	**110**	**290**	0.50 U	**460**	**280**	**370**	**48**	**50**	**6.2**	0.50 U	0.50 U	
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**5.6**	0.50 U	**0.56 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220
Sample Name:	MW-220-VP04-FD	MW-220-VP06	MW-220-VP09	MW-220-VP10	MW-220-VP12	MW-220-VP14	MW-220-VP14-FD	MW-220-VP16	MW-220-VP20	MW-220-VP22	MW-220-VP24	MW-220-VP26	MW-220-VP28	MW-220-VP32
Depth:	86 - 86 ft	110 - 110 ft	140 - 140 ft	150 - 150 ft	170 - 170 ft	190 - 190 ft	190 - 190 ft	210 - 210 ft	250 - 250 ft	270 - 270 ft	290 - 290 ft	310 - 310 ft	330 - 330 ft	370 - 370 ft
Date:	11/18/14	11/19/14	11/19/14	11/19/14	11/19/14	11/20/14	11/20/14	11/20/14	12/01/14	12/01/14	12/01/14	12/01/14	12/01/14	12/02/14
Analyte														
Volatile Organics by Method SW8260 (µg/L)														
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.5**	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.71 J**	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.72 J**	**0.57 J**	**1.3 J**	0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.95 J**	**7.4**	**2.6**	**6.7**	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.8**	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Acetone	2.5 U	3.6 U	3.8 U	3.2 U	3.1 U	4.3 U	3.9 U	4 U	3.7 U	4.2 U	4.4 U	3.1 U	4.2 U	1.3 U
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.55 J**	**1.2 J**	0.50 U	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**4.9**	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.0 J**	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	**0.62 J**	0.50 U	0.50 U	0.50 U	0.50 U	**1.4 J**	**7.0**	**13**	**39**	**57**	**72**	**2.3**
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
O-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tert-Butyl Methyl Ether	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	**0.85 J**	0.50 U	0.50 U	0.50 U	0.50 U	**0.95 J**	**1.3 J**	**2.3**	**2.7**	**10**	**55**	**35**
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	0.50 U	**4.4**	**2.5**	**0.92 J**	0.50 U	0.50 U	**2.2**	**7.7**	**17**	**33**	**160**	**67**	**62**
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.2**	0.50 U	**2.4**	0.50 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220
Sample Name:	MW-220-VP34	MW-220-VP36	MW-220-VP38	MW-220-VP40	MW-220-VP42	MW-220-VP45	MW-220-VP46
Depth:	390 - 390 ft	410 - 410 ft	430 - 430 ft	450 - 450 ft	470 - 470 ft	490 - 490 ft	510 - 510 ft
Date:	12/03/14	12/03/14	12/03/14	12/03/14	12/04/14	12/04/14	12/05/14
Analyte							
Volatile Organics by Method SW8260 (µg/L)							
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Acetone	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Benzene	0.50 U	**8.2**	0.50 U	0.50 U	**3.4**	0.50 U	**5.6**
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	**0.68 J**	0.50 U	**0.63 J**	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	**1.1 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U	**0.63 J**	0.50 U	0.50 U	0.50 U	0.50 U	**0.66 J**
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
O-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tert-Butyl Methyl Ether	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	**3.4**	**1.8 J**	**0.72 J**	0.50 U	**0.86 J**	0.50 U	**1.7 J**
Toluene	0.50 U	**2.3**	**0.75 J**	0.50 U	**1.7**	0.50 U	**2.2**
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	**23**	**19**	**2.5**	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-1 Summary of Volatile Organic Analysis Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Key:

Qualifiers

J- = Estimated value with low bias

U = Not detected (method detection limit shown)

UR = Not detected/result is rejected

Sum = Standard or guidance value applies to the sum of the analyte gr

-- = Analyte not analyzed for

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-2 Summary of Inorganic Results for Vertical Profile Groundwater Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Location ID:	MW-58	MW-58	MW-58	MW-58	MW-58	MW-58	MW-59	MW-59	MW-59	MW-59	MW-59	MW-59
Sample Name:	MW-58-VP03	MW-58-VP04	MW-58-VP04-FD	MW-58-VP05	MW-58-VP06	MW-58-VP07	MW-59-VP02	MW-59-VP03	MW-59-VP04	MW-59-VP05	MW-59-VP06	MW-59-VP06-FD
Depth:	69 - 69 ft	76 - 76 ft	76 - 76 ft	86 - 86 ft	96 - 96 ft	110 - 110 ft	68 - 68 ft	75 - 75 ft	85 - 85 ft	95 - 95 ft	110 - 110 ft	110 - 110 ft
Date:	09/30/14	10/01/14	10/01/14	10/01/14	10/01/14	10/02/14	11/05/14	11/05/14	11/05/14	11/05/14	11/05/14	11/05/14
Analyte												
Metals by Method SW6010B (µg/L)												
Aluminum	**290000**	**440000**	**430000**	**590000**	**9000**	**210000 J**	22 U	22 U	**110 J**	**120 J**	**210 J**	**200 J**
Antimony	75 U	75 U	75 U	75 U	3.7 U	75 UJ	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
Arsenic	**100 J**	**120 J**	**110 J**	**210**	5.6 U	**160 J**	**2.2 J**	1.8 U	1.8 U	1.8 U	**2.2 J**	1.8 U
Barium	**630 J**	**710 J**	**740 J**	**1100**	**130**	**870 J**	**6.8 J**	**14 J**	**35 J**	**38 J**	**14 J**	**15 J**
Beryllium	**12 J**	**16 J**	**16 J**	**24 J**	**0.40 J**	**12 J**	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Cadmium	6.7 U	6.7 U	6.7 U	6.7 U	0.34 U	6.7 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Calcium	**49000**	**18000 J**	**18000 J**	**38000**	**34000**	**30000**	**5800**	**5000**	**12000**	**7100**	**7900**	**8000 J**
Chromium, Total	**240**	**190 J**	**180 J**	**280**	**44**	**990 J**	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Cobalt	**78 J**	54 U	54 U	**210 J**	**4.9 J**	54 U	**6.9 J**	**3.0 J**	**8.3 J**	**8.6 J**	**3.9 J**	**3.2 J**
Copper	**130 J**	**120 J**	**110 J**	**170 J**	**11 J**	**210 J**	2.1 U	2.1 U	**2.7 J**	2.1 U	**2.1 J**	**2.4 J**
Iron	**140000**	**120000**	**120000**	**220000**	**8700**	**300000 J**	**480**	**620**	**500**	**900**	**900 J**	**250 J**
Lead	**180 J**	**220**	**220**	**280**	**13**	**300**	1.3 U	0.60 U	1.1 U	0.60 U	0.60 U	1.1 U
Magnesium	**10000 J**	**6900 J**	**7100 J**	**10000 J**	**3800**	**7300 J**	**1000**	**820 J**	**1700**	**920 J**	**1200**	**1200**
Manganese	**1700**	**960**	**910**	**2600**	**190**	**2800 J**	**250**	**140**	**46**	**150**	**58 J**	**22 J**
Nickel	**230 J**	**340 J**	**330 J**	**400 J**	**14 J**	**330 J**	**5.6 J**	**6.5 J**	**80**	**260**	**140**	**150**
Potassium	**20000 J**	9100 U	**9700 J**	**15000 J**	**3600 J**	**14000 J**	**760 J**	**710 J**	**4400 J**	**1700 J**	**1900 J**	**1800 J**
Selenium	42 U	42 U	**48 J**	42 U	2.1 U	42 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Silver	20 U	20 U	20 U	20 U	0.99 U	20 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
Sodium	**270000**	**82000**	**83000**	**96000**	**66000**	**75000 J**	**2300**	**1900**	**20000**	**11000**	**11000**	**11000**
Thallium	48 U	48 U	48 U	48 U	2.4 U	48 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Vanadium	**200 J**	**150 J**	**160 J**	**290 J**	**8.8 J**	**290 J**	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
Zinc	**210 J**	**480 J**	**480 J**	**560 J**	23 U	**420 J**	**130**	**85**	8.3 U	8.3 U	**93**	8.3 U
Mercury by Method SW7470A (µg/L)												
Mercury	**0.19**	**0.86**	**1.0**	**1.9**	0.060 U	**0.090 J**	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

Notes

µg/L = Micrograms per liter

Bold values denote positive hits.

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.1-3 Summary of Analytical Results for Groundwater Vertical Profile Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221
Sample Name:	MW-221-VP06	MW-221-VP08	MW-221-VP10	MW-221-VP12	MW-221-VP15	MW-221-VP16	MW-221-VP19	MW-221-VP20	MW-221-VP900	MW-221-VP22	MW-221-VP24	MW-221-VP26	MW-221-VP901	MW-221-VP28	MW-221-VP30	MW-221-VP32	MW-221-VP34	MW-221-VP36	MW-221-VP38
Depth:	107 - 107 ft	127 - 127 ft	147 - 147 ft	167 - 167 ft	192 - 192 ft	207 - 207 ft	232 - 232 ft	247 - 247 ft	247 - 247 ft	267 - 267 ft	287 - 287 ft	308 - 308 ft	308 - 308 ft	327 - 327 ft	347 - 347 ft	367 - 367 ft	387 - 387 ft	407 - 407 ft	427 - 427 ft
Date:	02/23/16	02/23/16	02/23/16	02/24/16	02/24/16	02/24/16	02/25/16	02/25/16	02/25/16	02/25/16	02/26/16	02/26/16	02/26/16	02/26/16	03/01/16	03/01/16	03/02/16	03/02/16	03/03/16
Analyte																			
Volatile Organic Compounds by Method 8260C (µg/L)																			
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.0 J**	**0.95 J**	**5.3**	**2.4**	**0.66 J**	**0.70 J**	**0.57 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.57 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.66 J**	**0.67 J**	**0.83 J**	**0.88 J**	**0.58 J**	**0.81 J**	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.9 J**	**1.7 J**	**9.5**	**6.4**	**3.3**	**3.5**	**2.2**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.2**	**2.0 J**	**9.6**	**17**	**23**	**23**	**11**	**2.5**	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	2.0 U	2.4 U	3.0 U	1.0 U	1.6 U	2.1 U	1.6 U	1.3 U	1.4 U	1.4 U	1.3 U	1.7 U	1.7 U	1.2 U	3.6 U	3.4 U	3.6 U	1.0 U	2.1 U
Benzene	0.50 U	0.50 U	0.50 U	**5.6**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**4.6**	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.9**	**29**	**28**	**170**	**150**	**160**	**160**	**56**	**2.3**	**0.81 J**	**0.99 J**	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.4**	**2.5**	**11**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.2 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.5 J**	**15**	**15**	**31**	**49**	**190**	**190**	**52**	**14**	**16**	**14**	**3.6**	**6.1**
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.88 J**	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.54 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**6.5**	**43**	**42**	**150**	**120**	**110**	**110**	**64**	**46**	**22**	**19**	**6.7**	**1.8 J**
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.3 J**	**8.8**	**9.0**	**9.9**	**0.85 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Xylenes	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U

Key at end of table.

Source: Ecology and Environment. 2016

Table 3.1-3 Summary of Analytical Results for Groundwater Vertical Profile Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	MW-221	MW-221	MW-221	MW-221	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222
Sample Name:	MW-221-VP40	MW-221-VP42	MW-221-VP44	MW-221-VP46	MW-222-VP05	MW-222-VP07	MW-222-VP900	MW-222-VP09	MW-222-VP11	MW-222-VP13	MW-222-VP15	MW-222-VP17	MW-222-VP19	MW-222-VP21	MW-222-VP23	MW-222-VP901	MW-222-VP26	MW-222-VP27	MW-222-VP29
Depth:	447 - 447 ft	467 - 467 ft	487 - 487 ft	507 - 507 ft	97 - 97 ft	117 - 117 ft	117 - 117 ft	137 - 137 ft	157 - 157 ft	177 - 177 ft	197 - 197 ft	217 - 217 ft	237 - 237 ft	257 - 257 ft	277 - 277 ft	277 - 277 ft	302 - 302 ft	317 - 317 ft	337 - 337 ft
Date:	03/03/16	03/03/16	03/04/16	03/04/16	03/08/16	03/08/16	03/08/16	03/08/16	03/08/16	03/08/16	03/08/16	03/08/16	03/08/16	03/09/16	03/09/16	03/09/16	03/10/16	03/10/16	03/11/16
Analyte																			
Volatile Organic Compounds by Method 8260C (µg/L)																			
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.64 J**	0.50 U	**0.93 J**
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.7 J**	**1.8 J**	**1.4 J**	**0.91 J**	**2.1**
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**19**	**20**	0.50 U	**1.2 J**	**43**
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.57 J**	**0.61 J**	0.50 U	0.50 U	**0.64 J**
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1.6 U	1.6 U	1.0 U	1.9 U	2.8 U	2.8 U	2.6 U	2.7 U	2.8 U	2.3 U	2.0 U	2.4 U	2.8 U	2.2 U	2.1 U	2.2 U	2.3 U	2.8 U	2.5 U
Benzene	0.50 U	0.50 U	**1.3 J**	**0.53 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.83 J**	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.76 J**	**0.71 J**	0.50 U	0.50 U	**0.57 J**
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.54 J**	**27**	**26**	**30**	**21**	**140**
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.92 J**	0.50 U	**2.5**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.62 J**	0.50 U	0.50 U
Methylcyclohexane	0.50 U	0.50 U	**3.2**	**3.6**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.6 J**
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	**32**	**11**	**2.3**	**5.3**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**110**	**110**	**6.8**	**9.3**	**100**
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.4 J**	**0.95 J**	**2.1**
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	**5.7**	**2.4**	**0.54 J**	**1.1 J**	0.50 U	**1.8 J**	**1.7 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.2**	**89**	**94**	**43**	**30**	**110**
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**5.8**	**5.9**	**7.7**	**3.3**	**23**
Xylenes	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	**1.6 J**

Key at end of table.

Source: Ecology and Environment. 2016

Table 3.1-3 Summary of Analytical Results for Groundwater Vertical Profile Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223
Sample Name:	MW-222-VP31	MW-222-VP34	MW-222-VP36	MW-222-VP37	MW-222-VP39	MW-222-VP41	MW-222-VP43	MW-222-VP45	MW-222-VP48	MW-222-VP49	MW-223-VP17	MW-223-VP19	MW-223-VP20	MW-223-VP22	MW-223-VP24	MW-223-VP26	MW-223-VP900	MW-223-VP28	MW-223-VP30
Depth:	357 - 357 ft	382 - 382 ft	402 - 402 ft	417 - 417 ft	437 - 437 ft	453 - 453 ft	477 - 477 ft	497 - 497 ft	522 - 522 ft	537 - 537 ft	210 - 210 ft	230 - 230 ft	247 - 247 ft	267 - 267 ft	287 - 287 ft	307 - 307 ft	307 - 307 ft	328 - 328 ft	347 - 347 ft
Date:	03/11/16	03/15/16	03/15/16	03/16/16	03/16/16	03/17/16	03/18/16	03/21/16	03/21/16	03/22/16	01/06/16	01/06/16	01/06/16	01/06/16	01/06/16	01/07/16	01/07/16	01/07/16	01/07/16
Analyte																			
Volatile Organic Compounds by Method 8260C (µg/L)																			
1,1,1-Trichloroethane	**1.0 J**	**4.3**	**0.81 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.53 J**	0.50 U	**0.60 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	**1.1 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	**1.5 J**	**0.79 J**	**0.75 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.7**	**1.2 J**	**2.6**	**1.6 J**	**2.2**	**1.1 J**	**0.97 J**	**0.51 J**	0.50 U
1,1-Dichloroethene	**3.1**	**14**	**1.7 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.0 J**	0.50 U	**0.90 J**	0.50 U	**0.64 J**	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	**17**	0.50 U	**7.4**	**0.55 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	**0.50 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	2.1 U	3.0 U	2.8 U	2.1 U	2.6 U	1.0 U	2.4 U	2.4 U	2.2 U	2.6 U	2.4 UJ	2.0 UJ	1.8 UJ	2.1 UJ	1.6 UJ	1.9 UJ	1.8 UJ	2.4 UJ	2.2 UJ
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**36**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	**23**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	**2.8**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	**180**	**33**	**37**	**4.7**	**2.3**	**0.60 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	**0.61 J**	**0.54 J**	**0.52 J**	**0.64 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.2 J**	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
o-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	**39**	**28**	**60**	**40**	**35**	**3.8**	**11**	**1.2 J**	**1.9 J**	**2.6**	0.50 U	0.50 U	0.50 U	0.50 U	**2.5**	**0.65 J**	**0.51 J**	0.50 U	0.50 U
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.5**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.50 J**	0.50 U	0.50 U
Trans-1,2-Dichloroethene	**3.1**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	**91**	**220**	**65**	**37**	**24**	**7.6**	**3.8**	**0.76 J**	0.50 U	0.50 U	**5.9**	**3.2**	**15**	**30**	**32**	**21**	**19**	**12**	**30**
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	**17**	**0.53 J**	**1.6 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Xylenes	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Key at end of table.

Source: Ecology and Environment. 2016

Table 3.1-3 Summary of Analytical Results for Groundwater Vertical Profile Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-223	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224
Sample Name:	MW-223-VP32	MW-223-VP35	MW-223-VP36	MW-223-VP38	MW-223-VP901	MW-223-VP40	MW-223-VP42	MW-223-VP44	MW-223-VP48	MW-223-VP50	MW-223-VP53	MW-223-VP55	MW-224-VP04	MW-224-VP06	MW-224-VP08	MW-224-VP900	MW-224-VP10	MW-224-VP12	MW-224-VP14
Depth:	367 - 367 ft	390 - 390 ft	407 - 407 ft	427 - 427 ft	427 - 427 ft	447 - 447 ft	467 - 467 ft	487 - 487 ft	527 - 527 ft	547 - 547 ft	577 - 577 ft	592 - 592 ft	87 - 87 ft	107 - 107 ft	127 - 127 ft	127 - 127 ft	147 - 147 ft	167 - 167 ft	187 - 187 ft
Date:	01/11/16	01/11/16	01/11/16	01/12/16	01/12/16	01/12/16	01/13/16	01/13/16	01/14/16	01/14/16	01/18/16	02/11/16	02/18/16	02/18/16	02/18/16	02/18/16	02/18/16	02/18/16	02/18/16
Analyte																			
Volatile Organic Compounds by Method 8260C (µg/L)																			
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.6 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.2 J**	**4.6**	**0.82 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 UJ	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**35**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1.0 UJ	2.0 UJ	1.1 UJ	1.4 UJ	1.5 UJ	2.6 UJ	3.3 UJ	3.0 UJ	2.3 UJ	2.9 UJ	1.9 UJ	**22 J**	1.1 U	1.3 U	1.4 U	1.7 U	1.3 U	1.3 U	1.3 U
Benzene	**3.6**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.8 J**	**0.52 J**	0.50 U	0.50 U	0.50 U	**8.4**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.4 J**	**6.4**	**0.67 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	**0.78 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	**1.1 J**	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	**6.4 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene (1,2-Dimethylbenzene)	**0.64 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	**0.72 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.3**	**28**	**1.6 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	**2.7**	0.50 U	0.50 U	**3.3**	**3.2**	0.50 U	**0.98 J**	0.50 U	0.50 U	0.50 U	0.50 U	**1.6**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	**32**	0.50 U	**3.0**	**2.8**	**2.9**	0.50 U	0.50 U	0.50 U	0.50 U	**5.1**	**36**	**3.1**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Xylenes	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U

Key at end of table.

Source: Ecology and Environment. 2016

Table 3.1-3 Summary of Analytical Results for Groundwater Vertical Profile Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224	MW-224	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225
Sample Name:	MW-224-VP17	MW-224-VP19	MW-224-VP20	MW-224-VP22	MW-224-VP901	MW-224-VP25	MW-224-VP27	MW-224-VP28	MW-224-VP31	MW-224-VP32	MW-224-VP35	MW-224-VP36	MW-225-VP03	MW-225-VP05	MW-225-VP900	MW-225-VP07	MW-225-VP09	MW-225-VP11	MW-225-VP13
Depth:	210 - 210 ft	230 - 230 ft	247 - 247 ft	267 - 267 ft	267 - 267 ft	290 - 290 ft	310 - 310 ft	330 - 330 ft	350 - 350 ft	367 - 367 ft	390 - 390 ft	407 - 407 ft	77 - 77 ft	97 - 97 ft	97 - 97 ft	117 - 117 ft	137 - 137 ft	157 - 157 ft	177 - 177 ft
Date:	02/19/16	02/22/16	02/22/16	02/22/16	02/22/16	02/24/16	02/25/16	02/25/16	02/25/16	02/29/16	02/29/16	03/01/16	03/14/16	03/14/16	03/14/16	03/14/16	03/14/16	03/15/16	03/15/16
Analyte																			
Volatile Organic Compounds by Method 8260C (µg/L)																			
1,1,1-Trichloroethane	0.50 U	0.50 U	**15**	**21**	**15**	**13**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.51 J**	**0.54 J**	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	**0.60 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	**3.5**	**6.9 J**	**3.4 J**	**4.7**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	0.50 U	**0.77 J**	**24**	**32**	**24**	**19**	**0.53 J**	**0.53 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.1**	**2.1**	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.73 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1.5 U	3.4 U	2.7 U	3.1 U	2.2 U	2.2 U	1.0 U	1.8 U	3.0 U	1.7 U	2.0 U	3.0 U	1.4 U	2.3 U	2.0 U	1.4 U	2.2 U	1.7 U	**120**
Benzene	0.50 U	0.50 U	0.50 U	**3.8**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.0**
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.66 J**
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.61 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.57 J**	**0.50 J**	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	**1.4 J**	0.50 U	**170**	**95**	**63**	**0.74 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**26**
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	0.50 U	0.50 U	**5.8**	**1.1 J**	**5.6**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**6.8**	0.50 U	0.50 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.4**	**1.5 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	**2.6**	**55 J**	**2.6 J**	**8900**	**13000**	**15000**	**480**	**8600**	**2200**	**34**	0.50 U	**1.2 J**	**1.3 J**	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.86 J**
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	0.50 U	0.50 U	**1.3 J**	0.50 U	**100**	**49**	**30**	**0.51 J**	**2.0**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.80 J**	0.50 U	**0.60 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Xylenes	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U

Key at end of table.

Source: Ecology and Environment. 2016

Table 3.1-3 Summary of Analytical Results for Groundwater Vertical Profile Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225	MW-225
Sample Name:	MW-225-VP15	MW-225-VP901	MW-225-VP17	MW-225-VP22	MW-225-VP23	MW-225-VP26	MW-225-VP27	MW-225-VP29	MW-225-VP31	MW-225-VP33	MW-225-VP37	MW-225-VP39	MW-225-VP41
Depth:	197 - 197 ft	197 - 197 ft	217 - 217 ft	262 - 262 ft	277 - 277 ft	307 - 307 ft	317 - 317 ft	337 - 337 ft	357 - 357 ft	377 - 377 ft	417 - 417 ft	437 - 437 ft	460 - 460 ft
Date:	03/15/16	03/15/16	03/15/16	03/16/16	03/16/16	03/16/16	03/17/16	03/17/16	03/17/16	03/17/16	03/21/16	03/21/16	03/22/16
Analyte													
Volatile Organic Compounds by Method 8260C (µg/L)													
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.71 J**	0.50 U	0.50 U	0.50 U	0.50 U	**1.2 J**	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.61 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.56 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.0 J**	0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.0 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.5 J**	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	2.3 U	2.6 U	2.5 U	2.3 U	2.0 U	1.8 U	1.7 U	1.7 U	3.5 U	3.4 U	1.8 U	2.5 U	3.2 U
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.5**	**0.72 J**	0.50 U	0.50 U	**1.2 J**
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**1.5 J**	0.50 U	0.50 U	0.50 U	0.50 U	**5.2**	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	**0.87 J**	**2.3**	**2.0 J**	**6.9**	**7.0**	**2.8**	**0.53 J**	0.50 U	**6.0**	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	**0.85 J**	0.50 U	0.50 U	0.50 U	0.50 U	**0.57 J**	**0.51 J**	**0.88 J**	0.50 U
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
o-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	**11**	**19**	**110**	**130**	**16**	**9.9**	**17**	**40**	**2.6**	**1.9 J**
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.60 J**
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	0.50 U	0.50 U	**1.3 J**	**3.8**	**5.0**	**19**	**17**	**14**	**1.0 J**	**0.56 J**	**13**	**1.3 J**
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**3.3**	0.50 U	**1.2 J**	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Xylenes	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U

Key at end of table.

Source: Ecology and Environment. 2016

Table 3.1-3 Summary of Analytical Results for Groundwater Vertical Profile Samples
Sylvania FUSRAP Site, Hicksville, NY

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

Other

G = Guidance value (no standard available)

N/A = Not regulated/no available criteria

µg/L = Micrograms per liter

Notes:

1. Bold values denote positive hits.
2. VP900 and VP901 designate field duplicate samples.

Key at end of table.

Source: Ecology and Environment. 2016

Table 3.1-4 Summary of Analytical Results for Drill Water and Rinsate Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID: / Sample Name: / Depth: / Date: / Analyte	DW-221 02/23/16	DW-222 03/10/16	DW-223 01/11/16	DW-224 02/23/16	DW-225 03/15/16	RB-MW221 02/29/16	RB-MW222 03/10/16	RB-MW223 01/12/16	RB-MW224 02/18/16	RB-MW225 03/16/16
Volatile Organic Compounds by Method 8260C (µg/L)										
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane	0.25 U	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane (P-Dioxane)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1.9 U	2.5 U	1.7 UJ	2.6 U	2.1 U	2.5 U	3.6 U	1.7 UJ	1.4 U	1.8 U
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	**0.86 J**	0.50 U	**0.94 J**	**0.96 J**	**0.68 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Disulfide	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon Tetrachloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cis-1,3-Dichloropropene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibromochloromethane	**0.62 J**	0.50 U	0.50 U	**0.57 J**	**0.87 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropylbenzene (Cumene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Ethyl Ketone (2-Butanone)	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	0.50 U	**0.85 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
o-Xylene (1,2-Dimethylbenzene)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene (PCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	**1.6**	0.50 U	**1.1**	**17**	**5.6**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trans-1,3-Dichloropropene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Trichloroethylene (TCE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Xylenes	1.5 U	1.5 U	1.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.0 U	1.5 U	1.5 U

Key at end of table.

Source: Ecology and Environment,. 2016

Table 3.1-4 Summary of Analytical Results for Drill Water and Rinsate Samples
Sylvania FUSRAP Site, Hicksville, NY

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

Other

G = Guidance value (no standard available)

N/A = Not regulated/no available criteria

µg/L = Micrograms per liter

Note:

Bold values denote positive hits.

Key at end of table.

Source: Ecology and Environment,. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-3	MW-4	MW-8	MW-9	MW-10	MW-11	MW-12	MW-12	MW-13S	MW-13D
		Sample Name:	MW-3-SP15	MW-4-SP15	MW-8-SP15	MW-9-SP15	MW-10-SP15	MW-11-SP15	MW-12-SP15	MW-12-SP15-FD	MW-13S-SP15	MW-13D-SP15
		Depth:	58 - 78 ft	66 - 76 ft	120 - 130 ft	72 - 82 ft	120 - 130 ft	71 - 81 ft	120 - 130 ft	120 - 130 ft	70 - 80 ft	290 - 300 ft
		Date:	03/26/15	03/26/15	03/26/15	03/26/15	03/30/15	03/30/15	03/24/15	03/24/15	03/18/15	03/18/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0633 U	0.0633 U	0.0633 U	0.0633 U	**0.106**	0.0633 U	**4.54**	**4.74**	0.0633 U	0.0633 U
Metals by Method SW6010 (µg/L)												
Nickel			**280**	**14 J**	**980**	**2.8 J**	**6.9 J**	**3.4 J**	**16 J**	**13 J**	**12 J**	2.6 U
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	0.069 U	0.069 U	0.17 U	0.069 U	0.17 U	0.17 U	0.069 U	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.25 U	0.10 U	0.25 U	0.25 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.38 U	0.15 U	0.38 U	0.38 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	0.068 U	0.068 U	0.17 U	0.068 U	0.17 U	0.17 U	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.21 U	0.21 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.20 UR	0.078 UR	0.20 U	0.20 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.060 U	0.060 U	0.060 U	0.060 U	0.15 UR	0.060 UR	0.15 U	0.15 U	0.060 U	0.060 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.25 U	0.10 U	0.25 U	0.25 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.24 U	0.097 U	0.24 U	0.24 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.20 UR	0.078 UR	0.20 U	0.20 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.29 UR	0.12 UR	0.29 U	0.29 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.56 U	0.22 U	0.56 U	0.56 U	0.22 U	0.22 U
Acetone			0.34 U	0.34 U	0.34 U	0.34 U	0.86 U	0.34 U	0.86 U	0.86 U	0.34 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.16 U	0.064 U	0.16 U	0.16 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.22 U	0.088 U	0.22 U	0.22 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.42 UR	0.17 UR	0.42 U	0.42 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.13 U	0.051 U	0.13 U	0.13 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.31 U	0.13 U	0.31 U	0.31 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.37 U	0.15 U	0.37 U	0.37 U	0.15 U	0.15 U
Chloroform			0.10 U	0.10 U	0.10 U	0.10 U	0.26 U	0.10 U	0.26 U	0.26 U	0.10 U	0.10 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.19 U	0.077 U	0.19 U	0.19 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	**0.28 J**	0.087 U	0.087 U	0.22 U	0.087 U	0.22 U	0.22 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.17 U	0.067 U	0.17 U	0.17 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U	0.32 U	0.32 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.21 UJ	0.21 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.22 U	0.086 U	0.22 U	0.22 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.21 U	0.21 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.36 U	0.14 U	0.36 U	0.36 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	1.3 U	0.52 U	1.3 U	1.3 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.30 U	0.12 U	0.30 U	0.30 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	0.11 U	0.11 U	0.29 U	0.11 U	0.29 U	0.29 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.68 U	0.27 U	0.68 U	0.68 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.16 U	0.063 U	0.16 U	0.16 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**25 J**	**75**	**0.36 J**	**240**	**420**	**58**	**610 J**	**660**	0.18 U	0.18 U
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.18 U	0.072 U	0.18 U	0.18 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.21 U	0.21 U	0.083 U	0.083 U
Trichloroethene (TCE)			**0.45 J**	**0.51 J**	0.25 U	**0.31 J**	**2.5**	**0.55 J**	**2.9**	**2.7**	0.25 U	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.28 U	0.11 U	0.28 U	0.28 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.21 U	0.21 U	0.084 U	0.084 U

Key at end of table.

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-14S	MW-14D	MW-14DD	MW-15S	MW-15D	MW-15DD	MW-16S	MW-16D	MW-16D	MW-17S
		Sample Name:	MW-14S-SP15	MW-14D-SP15	MW-14DD-SP15	MW-15S-SP15	MW-15D-SP15	MW-15DD-SP15	MW-16S-SP15	MW-16D-SP15	MW-16D-SP15-FD	MW-17S-SP15
		Depth:	70 - 80 ft	295 - 305 ft	365 - 375 ft	70 - 80 ft	300 - 310 ft	360 - 370 ft	70 - 80 ft	280 - 290 ft	280 - 290 ft	65 - 75 ft
		Date:	03/18/15	03/18/15	03/18/15	03/31/15	04/01/15	03/31/15	03/17/15	03/17/15	03/17/15	03/27/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			**0.0646**	0.0633 U	0.0633 U	**0.288**	**0.232**	0.0633 U	0.0633 U	**0.0708**	**0.0799**	0.0633 U
Metals by Method SW6010 (µg/L)												
Nickel			**24 J**	**10 J**	**3.1 J**	**25 J**	**7.1 J**	**3.8 J**	2.6 U	**3.4 J**	**3.1 J**	**5.7 J**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	**1.6 J**	**0.97 J**	0.069 U	0.069 U	**0.15 J**	0.069 U	**0.71 J**	**0.75 J**	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	**2.5 J**	**1.7**	0.068 U	0.068 U	**0.26 J**	0.068 U	**0.81 J**	**0.79 J**	0.068 U
1,1-Dichloroethene			0.083 U	**1.3 J**	**0.81 J**	0.083 U	0.083 U	0.083 U	0.083 U	**0.67 J**	**0.69 J**	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.06 U	0.06 U	0.06 U	0.060 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	**2.3 J**	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.7 U	0.34 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	**0.28 J**	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.10 U	**0.22 J**	**0.26 J**	**2.5**	0.10 U	0.10 U	0.10 U	**0.41 J**	**0.42 J**	0.10 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			**0.91 J**	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	0.11 U	**0.80 J**	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	**0.84 J**	**0.92 J**	**1.1**
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	**1.3**	**0.39 J**	0.25 U	0.25 U	0.25 U	0.25 U	**0.57 J**	**0.59 J**	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	**1.5**	**1.7**	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-18S	MW-18I	MW-19D	MW-19S	MW-20S	MW-20I	MW-20D	MW-21S	MW-21I	MW-21D
		Sample Name:	MW-18S-SP15	MW-18I-SP15	MW-19D-SP15	MW-19S-SP15	MW-20S-SP15	MW-20I-SP15	MW-20D-SP15	MW-21S-SP15	MW-21I-SP15	MW-21D-SP15
		Depth:	62 - 72 ft	120 - 130 ft	295 - 305 ft	70 - 80 ft	70 - 80 ft	140 - 150 ft	300 - 310 ft	70 - 80 ft	170 - 180 ft	300 - 310 ft
		Date:	03/18/15	03/18/15	03/17/15	03/17/15	03/19/15	03/19/15	03/24/15	03/17/15	03/16/15	03/16/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			**3820**	**245**	0.0633 U	**0.0664**	**21700**	**16.3**	0.0633 U	0.0633 U	0.0633 U	0.0633 U
Metals by Method SW6010 (µg/L)												
Nickel			**16 J**	2.6 U	**4 J**	**3.2 J**	**5.3 J**	2.6 U	**4.4 J**	**3.3 J**	**4.5 J**	**2.7 J**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	**0.83 J**	0.069 U	0.069 U	0.069 U	**0.32 J**	0.069 U	**0.59 J**	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	**2.1**	0.068 U	0.068 U	0.068 U	**0.53 J**	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	0.083 U	**0.99 J**	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	**0.49 J**	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.060 U	0.060 U	0.06 U	0.06 U	0.060 U	0.060 U	0.060 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	**1.3 J**	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.10 U	**6.4**	**0.12 J**	0.10 U	0.10 U	**4.4 J**	**0.27 J**	0.10 U	0.10 U	0.10 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	**0.61 J**	0.11 U	0.11 U	0.11 U	**0.34 J**	0.11 U	0.11 U	**0.21 J**	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**1.6 J**	0.18 U	**0.29 J**	**0.85 J**	**30 J**	**0.80 J**	0.18 U	0.18 U	0.18 U	0.18 U
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	0.25 U	**0.93 J**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	**0.38 J**	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-22D	MW-22S	MW-22I	MW-23S	MW-23I	MW-23D	MW-24S	MW-24DD	MW-25S	MW-25I
		Sample Name:	MW-22D-SP15	MW-22S-SP15	MW-22I-SP15	MW-23S-SP15	MW-23I-SP15	MW-23D-SP15	MW-24S-SP15	MW-24DD-SP15	MW-25S-SP15	MW-25I-SP15
		Depth:	305 - 315 ft	70 - 80 ft	140 - 150 ft	90 - 100 ft	170 - 180 ft	330 - 340 ft	70 - 80 ft	360 - 370 ft	105 - 115 ft	230 - 240 ft
		Date:	03/18/15	03/17/15	03/17/15	03/24/15	03/24/15	03/17/15	03/18/15	03/18/15	03/19/15	03/16/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			**0.0881**	**65.1**	0.0633 U	**9.88**	**4.44**	**1.04**	**685**	0.0633 U	**7.00**	0.0633 U
Metals by Method SW6010 (µg/L)												
Nickel			**4.5 J**	**16 J**	**4.9 J**	**1600**	**18 J**	**16 J**	**83**	**3.1 J**	**13 J**	**9.2 J**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	6.9 U	**0.25 J**	0.069 U	**0.28 J**	**0.28 J**	0.35 U	**0.25 J**	0.069 U	**0.38 J**
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.51 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.75 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	6.8 U	0.068 U	0.068 U	**0.65 J**	0.068 U	0.34 U	**0.33 J**	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	8.3 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	7.8 U	0.078 U	0.078 U	0.078 U	0.078 U	0.39 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.06 U	6 U	0.06 U	0.060 U	0.060 U	0.06 U	0.3 U	0.06 U	0.060 U	0.06 U
1,2-Dichloroethane			0.10 U	10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.5 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	9.7 U	0.097 U	0.097 U	0.097 U	0.097 U	0.49 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	7.8 U	0.078 U	0.078 U	0.078 U	0.078 U	0.39 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.58 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.1 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.7 U	0.34 U	0.34 U	0.34 U
Benzene			0.064 U	6.4 U	0.064 U	0.064 U	0.064 U	0.064 U	0.32 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	8.8 U	0.088 U	0.088 U	0.088 U	0.088 U	0.44 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.83 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	5.1 U	0.051 U	0.051 U	0.051 U	0.051 U	0.26 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.63 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.74 U	0.15 U	0.15 U	0.15 U
Chloroform			**1.8**	10 U	**3.5**	0.10 U	0.10 U	0.10 U	0.51 U	0.10 U	0.10 U	0.10 U
Chloromethane			0.077 U	7.7 U	0.077 U	0.077 U	0.077 U	0.077 U	0.39 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	8.7 U	0.087 U	0.087 U	0.087 U	0.087 U	0.44 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	6.7 U	0.067 U	0.067 U	0.067 U	0.067 U	0.34 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.64 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	8.4 U	0.084 U	0.084 U	0.084 U	0.084 U	0.42 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	8.6 U	0.086 U	0.086 U	0.086 U	0.086 U	0.43 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	8.3 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.71 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	52 U	0.52 U	0.52 U	0.52 U	0.52 U	2.6 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.61 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	11 U	**0.31 J**	0.11 U	0.11 U	0.11 U	0.57 U	0.11 U	0.11 U	**0.2 J**
Methylene Chloride			0.27 U	27 U	0.27 U	0.27 U	0.27 U	0.27 U	1.4 U	0.27 U	**1.0 J**	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	6.3 U	0.063 U	0.063 U	0.063 U	0.063 U	0.32 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**1.3**	**16000**	**0.32 J**	0.18 U	**0.27 J**	**2.6**	**460 J**	**0.62 J**	0.18 U	0.18 U
Toluene			0.072 U	7.2 U	0.072 U	0.072 U	0.072 U	0.072 U	0.36 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	8.3 U	0.083 U	0.083 U	0.083 U	0.083 U	0.42 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	**100**	0.25 U	0.25 U	**0.31 J**	**0.56 J**	**2.8 J**	**0.91 J**	0.25 U	0.25 U
Trichlorofluoromethane			0.11 U	11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.57 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	8.4 U	0.084 U	0.084 U	0.084 U	0.084 U	0.42 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-25D	MW-26S	MW-26D	MW-26D	MW-27S	MW-27D	MW-27DD	MW-28S	MW-28I	MW-28D
		Sample Name:	MW-25D-SP15	MW-26S-SP15	MW-26D-SP15	MW-26D-SP15-FD	MW-27S-SP15	MW-27D-SP15	MW-27DD-SP15	MW-28S-SP15	MW-28I-SP15	MW-28D-SP15
		Depth:	340 - 350 ft	110 - 120 ft	266 - 276 ft	266 - 276 ft	78 - 88 ft	280 - 290 ft	365 - 375 ft	90 - 100 ft	150 - 160 ft	277 - 287 ft
		Date:	03/16/15	03/19/15	03/17/15	03/17/15	03/17/15	03/17/15	03/17/15	03/17/15	03/17/15	03/17/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0633 U	**7.79**	**0.872**	**0.822**	**1.79**	**1.05**	0.0633 U	**1.66**	**1.72**	**0.649**
Metals by Method SW6010 (µg/L)												
Nickel			**4.1 J**	**320**	**5.5 J**	**5.3 J**	**32 J**	2.6 U	**3.6 J**	**4.8 J**	**7.2 J**	**4.8 J**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			**0.28 J**	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	**0.78 J**	0.069 U	**0.15 J**	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	**1.0**	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	**0.48 J**	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.06 U	0.060 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	1.9 U	0.34 U	0.34 U	1.9 U	0.34 U	0.34 U	0.34 U	1.8 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	**0.16 J**	0.10 U	**4.7**	**2.8**
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	**1.1**	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			0.18 U	0.18 U	0.18 U	0.18 U	**3.1**	0.18 U	**0.97 J**	**180**	0.18 U	**2.3**
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	**3.2**	**1.4**	0.25 U	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-29S	MW-30S	MW-30I	MW-30D	MW-31I	MW-31D	MW-32D	MW-33S	MW-33D	MW-33D
		Sample Name:	MW-29S-SP15	MW-30S-SP15	MW-30I-SP15	MW-30D-SP15	MW-31I-SP15	MW-31D-SP15	MW-32D-SP15	MW-33S-SP15	MW-33D-SP15	MW-33D-SP15-FD
		Depth:	66 - 76 ft	90 - 100 ft	230 - 240 ft	330 - 340 ft	180 - 190 ft	320 - 330 ft	295 - 305 ft	65 - 75 ft	290 - 300 ft	290 - 300 ft
		Date:	03/17/15	03/16/15	03/17/15	03/16/15	03/17/15	03/16/15	03/17/15	03/23/15	03/23/15	03/23/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	**0.0689**	**0.139**	**114**	**0.270**	**110**
Metals by Method SW6010 (µg/L)												
Nickel			**17 J**	**6.7 J**	2.6 U	**29 J**	**8.2 J**	**51**	**4.7 J**	**16 J**	**15 J**	**16 J**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	**4.6**	**0.18 J**	0.069 U	**0.5 J**	0.069 U	3.5 U	0.069 U	3.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	5.1 U	0.10 U	5.1 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	7.5 U	0.15 U	7.5 U
1,1-Dichloroethane			0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	**0.59 J**	0.068 U	3.4 U	0.068 U	3.4 U
1,1-Dichloroethene			0.083 U	0.083 U	**4.2**	0.083 U	0.083 U	0.083 U	0.083 U	4.2 U	0.083 U	4.2 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	3.9 U	0.078 U	3.9 U
1,2-Dichlorobenzene			0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	3.0 U	0.060 U	3.0 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	5.0 U	0.10 U	5.0 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	4.9 U	0.097 U	4.9 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	3.9 U	0.078 U	3.9 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	5.8 U	0.12 U	5.8 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	11 U	0.22 U	11 U
Acetone			0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	17 U	0.34 U	17 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	3.2 U	0.064 U	3.2 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	4.4 U	0.088 U	4.4 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	8.3 U	0.17 U	8.3 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	2.6 U	0.051 U	2.6 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	6.3 U	0.13 U	6.3 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	7.4 U	0.15 U	7.4 U
Chloroform			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	**0.20 J**	**0.81 J**	5.1 U	0.10 U	5.1 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	3.9 U	0.077 U	3.9 U
Cis-1,2-Dichloroethylene			**1.1**	0.087 U	**0.69 J**	0.087 U	0.087 U	0.087 U	0.087 U	4.4 U	**0.96 J**	4.4 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	3.4 U	0.067 U	3.4 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	6.4 U	0.13 U	6.4 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	4.2 UJ	0.084 UJ	4.2 UJ
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	4.3 U	0.086 U	4.3 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	4.2 U	0.083 U	4.2 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	7.1 U	0.14 U	7.1 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	26 U	0.52 U	26 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	6.1 U	0.12 U	6.1 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	**0.21 J**	0.11 U	0.11 U	0.11 U	0.11 U	5.7 U	0.11 U	5.7 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	14 U	**1.2**	14 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	3.2 U	0.063 U	3.2 U
Tetrachloroethylene (PCE)			**180**	**1.1**	**0.29 J**	0.18 U	0.18 U	**10**	**18**	**6400**	**160**	**6200**
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	**0.16 J**	3.6 U	0.072 U	3.6 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	4.2 U	0.083 U	4.2 U
Trichloroethene (TCE)			**2.4**	0.25 U	**2.3**	0.25 U	0.25 U	**0.86 J**	**0.30 J**	13 U	**0.67 J**	13 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	5.7 U	0.11 U	5.7 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	4.2 U	0.084 U	4.2 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-34S	MW-34D	MW-39S	MW-41S	MW-42I	MW-43S	MW-44S	MW-49S	MW-49S	MW-50I
		Sample Name:	MW-34S-SP15	MW-34D-SP15	MW-39S-SP15	MW-41S-SP15	MW-42I-SP15	MW-43S-SP15	MW-44S-SP15	MW-49S-SP15	MW-49S-SP15-FD	MW-50I-SP15
		Depth:	65 - 75 ft	270 - 280 ft	76 - 86 ft	66 - 76 ft	140 - 150 ft	63 - 73 ft	65 - 75 ft	100 - 110 ft	100 - 110 ft	120 - 130 ft
		Date:	03/19/15	03/19/15	03/17/15	03/19/15	03/19/15	03/19/15	03/24/15	03/18/15	03/18/15	03/17/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total		0.0633 U	**0.101**	0.0633 U	**453**	**224**	**23.7**	**18.5**	**0.991**	**0.757**	**11.2**
Metals by Method SW6010 (µg/L)												
Nickel		2.6 U	**2.8 J**	**4 J**	**3.4 J**	**4.5 J**	**10 J**	**2200**	**5.7 J**	**5.8 J**	**360**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane		0.069 U	**0.43 J**	**2.0 J**	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	**0.21 J**
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.10 U	0.10 U	1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane		0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane		0.068 U	**0.73 J**	0.68 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene		0.083 U	**0.39 J**	0.83 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene		0.078 U	0.078 U	0.78 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene		0.060 U	0.060 U	0.6 U	0.060 U	0.060 U	0.060 U	0.060 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane		0.10 U	0.10 U	1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane		0.097 U	0.097 U	0.97 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene		0.078 U	0.078 U	0.78 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene		0.12 U	0.12 U	1.2 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)		1.2 U	1.2 U	**1.5 J**	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone		0.22 U	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone		0.34 U	0.34 U	3.4 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Benzene		0.064 U	0.064 U	0.64 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane		0.088 U	0.088 U	0.88 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform		0.17 U	0.17 U	1.7 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide		0.051 U	0.051 U	0.51 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride		0.13 U	0.13 U	1.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene		0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform		0.10 U	**0.14 J**	1 U	0.10 U	**2.3**	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chloromethane		0.077 U	0.077 U	0.77 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene		0.087 U	0.087 U	0.87 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
Cyclohexane		0.067 U	0.067 U	0.67 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane		0.13 U	0.13 U	1.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane		0.084 UJ	0.084 UJ	0.84 U	0.084 U	0.084 UJ	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene		0.086 U	0.086 U	0.86 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)		0.083 U	0.083 U	0.83 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene		0.14 U	0.14 U	1.4 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)		0.52 U	0.52 U	5.2 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		0.12 U	0.12 U	1.2 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)		0.11 U	0.11 U	1.1 U	0.11 U	**0.26 J**	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride		0.27 U	0.27 U	2.7 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)		0.063 U	0.063 U	0.63 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)		0.18 U	**2.5**	**1900**	**12 J**	0.18 U	**400**	**91**	0.18 U	0.18 U	0.18 U
Toluene		0.072 U	0.072 U	0.72 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene		0.083 U	0.083 U	0.83 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)		0.25 U	**0.34 J**	**4.1 J**	0.25 U	0.25 U	**0.73 J**	0.25 U	0.25 U	0.25 U	**0.30 J**
Trichlorofluoromethane		0.11 U	0.11 U	1.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride		0.084 U	0.084 U	0.84 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-51I	MW-52D	MW-53S	MW-55S	MW-55S	MW-58S-75	MW-59S-75	MW-201-220	MW-201-220	MW-202-220
		Sample Name:	MW-51I-SP15	MW-52D-SP15	MW-53S-SP15	MW-55S-SP15	MW-55S-SP15-FD	MW-58S-SP15	MW-59S-SP15	MW-201-220-SP15	FD	MW-202-220-SP15
		Depth:	130 - 140 ft	275 - 285 ft	70 - 80 ft	86 - 96 ft	86 - 96 ft	75 - 85 ft	75 - 85 ft	210 - 220 ft	210 - 220 ft	210 - 220 ft
		Date:	03/18/15	03/19/15	03/23/15	03/19/15	03/19/15	03/17/15	03/17/15	03/26/15	03/26/15	03/19/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0633 U	**0.169**	**29.1**	0.0633 U	0.0633 U	**0.0613**	**0.0613**	0.0633 U	0.0633 U	0.0618 U [1]
Metals by Method SW6010 (µg/L)												
Nickel			**35 J**	**6.5 J**	**11 J**	**2.9 J**	**2.8 J**	13 U	13 U	**5.9 J**	**6.3 J**	13 U [2]
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	3.5 U	0.069 U	0.069 U	**6.2 J**	**0.17 J**	0.069 U	0.069 U	**0.16 J**
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	0.10 U	5.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	7.5 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	3.4 U	0.068 U	0.068 U	**2.3 J**	0.068 U	0.068 U	0.068 U	**0.30 J**
1,1-Dichloroethene			0.083 U	0.083 U	4.2 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	3.9 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.06 U	**0.24 J**	3.0 U	0.060 U	0.060 U	0.06 U	0.06 U	0.060 U	0.060 U	0.060 U
1,2-Dichloroethane			0.10 U	0.10 U	5.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	4.9 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	3.9 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	5.8 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	**1.9 J**	1.2 U	1.2 U	1.2 U	**57**
2-Hexanone			0.22 U	0.22 U	11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			1 U	0.34 U	17 U	0.34 U	1.1 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Benzene			0.064 U	0.064 U	3.2 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	4.4 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	8.3 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	2.6 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	6.3 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	7.4 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.10 U	0.10 U	5.1 U	**2.2**	**2.2**	0.10 U	0.10 U	**0.81 J**	**0.82 J**	**0.23 J**
Chloromethane			0.077 U	0.077 U	3.9 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	**1.4**	4.4 U	0.087 U	0.087 U	**7.2 J**	0.087 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	3.4 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	6.4 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 UJ	4.2 UJ	0.084 UJ	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	4.3 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	4.2 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	7.1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.86 U	26 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	6.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	5.7 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	**1.3**	14 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	3.2 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**0.39 J**	**220**	**5700**	0.18 U	0.18 U	**210 J**	**3.1 J**	0.18 U	0.18 U	**0.96 J**
Toluene			0.072 U	0.072 U	3.6 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	4.2 U	0.083 U	0.083 U	**0.57 J**	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	**0.84 J**	13 U	0.25 U	0.25 U	**1.4 J**	**0.56 J**	**1.3**	**1.4**	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	5.7 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	4.2 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-202-380	MW-202-495	MW-203-160	MW-203-360	MW-203-440	MW-203-440	MW-204-320	MW-204-470	MW-205-285	MW-205-470
		Sample Name:	MW-202-380-SP15	MW-202-495-SP15	MW-203-160-SP15	MW-203-360-SP15	MW-203-440-SP15	FD	MW-204-320-SP15	MW-204-470-SP15	MW-205-285-SP15	MW-205-470-SP15
		Depth:	370 - 380 ft	485 - 495 ft	150 - 160 ft	350 - 360 ft	430 - 440 ft	430 - 440 ft	310 - 320 ft	460 - 470 ft	275 - 285 ft	460 - 470 ft
		Date:	03/18/15	03/18/15	03/18/15	03/18/15	03/18/15	03/18/15	04/01/15	03/31/15	03/30/15	03/30/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0618 U [1]	**0.725** [1]	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U
Metals by Method SW6010 (µg/L)												
Nickel			13 U [2]	13 U [2]	**3.4 J**	**2.7 J**	**3.8 J**	**3 J**	**5.6 J**	2.6 U	**15 J**	2.6 U
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			**18 J**	0.069 U	**0.61 J**	**13 J**	0.069 U	0.069 U	**1.0**	**0.15 J**	0.069 U	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.51 U	0.10 U	**0.79 J**	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	**0.98 J**	0.10 U
1,1,2-Trichloroethane			**1.7 J**	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			**1.5 J**	**0.38 J**	**0.61 J**	**0.96 J**	0.068 U	0.068 U	**0.23 J**	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene			**27 J**	0.083 U	**3 J**	**10 J**	0.083 U	0.083 U	0.083 U	0.083 U	**0.51 J**	0.083 U
1,2,4-Trichlorobenzene			0.39 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.30 U	0.060 U	**1.1 J**	0.06 U	0.06 U	0.06 U	0.060 U	0.060 U	0.060 U	0.060 U
1,2-Dichloroethane			0.50 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.49 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.39 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.58 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	**2.4 J**	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			1.1 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.45 U	0.22 U
Acetone			1.7 U	1.9 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.7 U	0.34 U	0.34 U
Benzene			0.32 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.44 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.83 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.26 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			**0.66 J**	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.74 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.51 U	**0.22 J**	**0.22 J**	**0.13 J**	0.10 U	0.10 U	**0.88 J**	0.10 U	**0.18 J**	0.10 U
Chloromethane			0.39 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			**7.2 J**	**3.4**	**2 J**	**6.6 J**	0.087 U	0.087 U	**1.9**	0.087 U	**31**	0.087 U
Cyclohexane			0.34 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.64 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.42 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.43 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.42 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.71 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			2.6 U	0.52 U	0.52 U	0.55 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.61 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	**1.7 J**	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.57 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			1.4 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.32 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**1.4 J**	0.18 U	**69 J**	**4.2 J**	0.18 U	0.18 U	**26**	**0.37 J**	**29**	**0.35 J**
Toluene			0.36 U	**0.15 J**	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.42 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			**610**	**18**	**25 J**	**82 J**	**0.53 J**	0.25 U	**32**	**1.4**	**41**	0.25 U
Trichlorofluoromethane			0.57 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.42 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-206-320	MW-206-470	MW-207-170	MW-207-170	MW-207-250	MW-207-320	MW-208-350	MW-208-540	MW-209-380	MW-209-530
		Sample Name:	MW-206-320-SP15	MW-206-470-SP15	MW-207-170-SP15	FD	MW-207-250-SP15	MW-207-320-SP15	MW-208-350-SP15	MW-208-540-SP15	MW-209-380-SP15	MW-209-530-SP15
		Depth:	310 - 320 ft	460 - 470 ft	160 - 170 ft	160 - 170 ft	240 - 250 ft	310 - 320 ft	340 - 350 ft	530 - 540 ft	370 - 380 ft	520 - 530 ft
		Date:	03/31/15	03/30/15	03/19/15	03/19/15	03/19/15	03/19/15	03/19/15	03/19/15	03/26/15	03/26/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0633 U	0.0633 U	0.0633 U	0.0633 U	**7.82**	0.0633 U	**.0639 J** [1]	0.0618 U [1]	**0.0667** [1]	.0618 U [1]
Metals by Method SW6010 (µg/L)												
Nickel			**7.1 J**	2.6 U	**8.5 J**	**8.0 J**	**4.0 J**	**4.6 J**	13 U [2]	13 U [2]	**14 J** [2]	13 U [2]
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.17 U	0.069 U	0.14 U	0.14 U	0.069 U	0.069 U	0.069 U	0.069 U	**2.9**	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.25 U	0.10 U	0.20 U	0.20 U	0.10 U	0.10 U	**2.0**	0.10 U	**2.8**	0.10 U
1,1,2-Trichloroethane			0.38 U	0.15 U	0.30 U	0.30 U	0.15 U	0.15 U	0.15 U	0.15 U	0.38 U	0.15 U
1,1-Dichloroethane			0.17 U	0.068 U	0.14 U	0.14 U	0.068 U	0.068 U	0.068 U	0.068 U	**0.73 J**	0.068 U
1,1-Dichloroethene			0.21 U	0.083 U	0.17 U	0.17 U	0.083 U	0.083 U	0.083 U	0.083 U	**7.8**	0.083 U
1,2,4-Trichlorobenzene			0.20 U	0.078 UR	0.16 U	0.16 U	0.078 U	0.078 U	0.078 U	0.078 U	0.20 U	0.078 U
1,2-Dichlorobenzene			0.15 U	0.060 UR	0.12 U	0.12 U	0.060 U	0.060 U	**1.4**	0.060 U	0.15 U	0.060 U
1,2-Dichloroethane			0.25 U	0.10 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.25 U	0.10 U
1,2-Dichloropropane			0.24 U	0.097 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.24 U	0.097 U
1,3-Dichlorobenzene			0.20 U	0.078 UR	0.16 U	0.16 U	0.078 U	0.078 U	0.078 U	0.078 U	0.20 U	0.078 U
1,4-Dichlorobenzene			0.29 U	0.12 UR	0.23 U	0.23 U	0.12 U	0.12 U	**0.16 J**	0.12 U	0.29 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	**5.8**	1.2 U
2-Hexanone			0.56 U	0.22 U	0.45 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.56 U	0.22 U
Acetone			0.86 U	0.34 U	0.69 U	0.69 U	0.34 U	0.34 U	0.34 U	1.8 U	4.6 U	0.34 U
Benzene			0.16 U	0.064 U	0.13 U	0.13 U	0.064 U	0.064 U	0.064 U	0.064 U	0.16 U	0.064 U
Bromodichloromethane			0.22 U	0.088 U	0.18 U	0.18 U	0.088 U	0.088 U	0.088 U	0.088 U	0.22 U	0.088 U
Bromoform			0.42 U	0.17 UR	0.33 U	0.33 U	0.17 U	0.17 U	0.17 U	0.17 U	0.42 U	0.17 U
Carbon Disulfide			0.13 U	0.051 U	0.10 U	0.10 U	0.051 U	0.051 U	0.051 U	0.051 U	0.13 U	0.051 U
Carbon Tetrachloride			0.31 U	0.13 U	0.25 U	0.25 U	0.13 U	0.13 U	0.13 U	0.13 U	**27**	0.13 U
Chlorobenzene			0.37 U	0.15 U	0.30 U	0.30 U	0.15 U	0.15 U	0.15 U	0.15 U	0.37 U	0.15 U
Chloroform			**0.40 J**	**0.29 J**	0.20 U	**0.21 J**	**13**	0.10 U	**2.1**	0.10 U	**1.6 J**	0.10 U
Chloromethane			0.19 U	0.077 U	0.15 U	0.15 U	0.077 U	0.077 U	0.077 U	0.077 U	0.19 U	0.077 U
Cis-1,2-Dichloroethylene			**2.3 J**	0.087 U	**1.3 J**	**1.5 J**	0.087 U	0.087 U	**0.73 J**	0.087 U	**62**	0.087 U
Cyclohexane			0.17 U	0.067 U	0.13 U	0.13 U	0.067 U	0.067 U	0.067 U	0.067 U	0.17 U	0.067 U
Dibromochloromethane			0.32 U	0.13 U	0.25 U	0.25 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U
Dichlorodifluoromethane			0.21 U	0.084 U	0.17 UJ	0.17 UJ	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U
Ethylbenzene			0.22 U	0.086 U	0.17 U	0.17 U	0.086 U	0.086 U	0.086 U	0.086 U	0.22 U	0.086 U
Isopropylbenzene (Cumene)			0.21 U	0.083 U	0.17 U	0.17 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U
m,p-Xylene			0.36 U	0.14 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.36 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			1.3 U	0.52 U	1.0 U	1.0 U	0.52 U	0.52 U	0.52 U	0.52 U	1.3 U	**0.56 J**
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.30 U	0.12 U	0.24 U	0.24 U	0.12 U	0.12 U	0.12 U	0.12 U	0.30 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.29 U	0.11 U	0.23 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.29 U	0.11 U
Methylene Chloride			0.68 U	0.27 U	0.54 U	0.54 U	0.27 U	0.27 U	**0.85 J**	0.27 U	0.68 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.16 U	0.063 U	0.13 U	0.13 U	0.063 U	0.063 U	0.063 U	0.063 U	0.16 U	0.063 U
Tetrachloroethylene (PCE)			**480**	**0.83 J**	**370**	**380**	**17**	0.18 U	**58**	**3.4**	**120**	**10**
Toluene			0.18 U	0.072 U	0.14 U	0.14 U	0.072 U	0.072 U	0.072 U	**0.25 J**	0.18 U	0.072 U
Trans-1,2-Dichloroethene			0.21 U	0.083 U	0.17 U	0.17 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U
Trichloroethene (TCE)			**2.1 J**	0.25 U	**2.4**	**2.7**	0.25 U	0.25 U	**45**	**0.33 J**	**340**	**0.57 J**
Trichlorofluoromethane			0.28 U	0.11 U	0.23 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.28 U	0.11 U
Vinyl Chloride			0.21 U	0.084 U	0.17 U	0.17 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-210-280	MW-210-380	MW-210-380	MW-210-470	MW-211-190	MW-211-250	MW-211-455	MW-212-580	MW-213-570	MW-214-570
		Sample Name:	MW-210-280-SP15	MW-210-380-SP15	FD	MW-210-470-SP15	MW-211-190-SP15	MW-211-250-SP15	MW-211-455-SP15	MW-212-580-SP15	MW-213-570-SP15	MW-214-570-SP15
		Depth:	270 - 280 ft	370 - 380 ft	370 - 380 ft	460 - 470 ft	180 - 190 ft	240 - 250 ft	445 - 455 ft	570 - 580 ft	560 - 570 ft	560 - 570 ft
		Date:	03/30/15	03/30/15	03/30/15	03/30/15	05/04/15	05/04/15	05/04/15	03/30/15	05/04/15	05/04/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			.0618 U [1]	.0618 U [1]	--	.0618 U [1]	.0618 U [1]	.0618 U [1]	.0618 U [1]	.0618 U [1]	.0618 U [1]	0.0639 U [2]
Metals by Method SW6010 (µg/L)												
Nickel			13 U [2]	13 U [2]	--	13 U [2]	13 U [2]	13 U [2]	26 U [4]	13 U [2]	13 U [2]	13 U [2]
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	**0.21 J**	0.069 U	**0.23 J**	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	**1.1**	**0.94 J**	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	**0.28 J**	0.068 U	**1.8**	**0.37 J**	**0.27 J**	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	**0.54 J**	**0.41 J**	0.083 U	**0.38 J**	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 UR	0.078 UR	0.078 U	0.078 UR	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			**2.0**	**1.9**	**1.9**	**1.9**	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 UR	0.078 UR	0.078 U	0.078 UR	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			**0.17 J**	**0.26 J**	**0.24 J**	0.12 UR	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	**2.8 J**	**4.3 J**	**1.5 J**	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	1.9 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 UR	0.17 UR	0.17 U	0.17 UR	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			**0.34 J**	**3.5**	**3.8**	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			**11**	**7.6**	**7.4**	**5.6**	**0.87 J**	**0.29 J**	0.087 U	**0.22 J**	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	0.11 U	0.11 U	**0.45 J**	**0.41 J**	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**190**	**160**	**160**	**17**	**0.50 J**	**0.33 J**	0.18 U	**8.8**	0.18 U	0.18 U
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	**0.49 J**	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			**12**	**42**	**41**	**4.8**	**4.2**	0.25 U	0.25 U	**2.7**	0.25 U	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			**0.25 J**	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-215-395	MW-216-510	MW-217-490	MW-218-95	MW-219-560	MW-219-560	MW-220-325	MW-221-320	MW-222-340	MW-223-580
		Sample Name:	MW-215-395-SP15	MW-216-510-SP15	MW-217-490-SP15	MW-218-95-SP16	MW-219-560-SP15	FD	MW-220-325-SP15	MW-221-320-SP16	MW-222-340-SP16	MW-223-580-SP16
		Depth:	385 - 395 ft	500 - 510 ft	480 - 490 ft	85 - 95 ft	550 - 560 ft	550 - 560 ft	315 - 325 ft	310 - 320 ft	330 - 340 ft	570 - 580 ft
		Date:	03/18/15	03/19/15	03/18/15	04/12/16	03/19/15	03/19/15	03/19/15	04/13/16	04/13/16	04/15/16
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			--	--	--	**0.0566**	--	--	--	--	--	--
Metals by Method SW6010 (µg/L)												
Nickel			--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			**0.99 J**	0.069 U	0.069 U	--	**9.9**	**9.6 J**	**5 J**	**1.7 J**	**0.95 J**	**3.0**
1,1,2-Trichloro-1,2,2-Trifluoroethane			**0.33 J**	0.10 U	0.10 U	--	**14**	**13 J**	**2.5 J**	0.51 U	**1.4 J**	**0.36 J**
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	--	0.75 U	0.38 U	1.5 U	0.75 U	0.38 U	0.15 U
1,1-Dichloroethane			**6.1 J**	0.068 U	0.068 U	--	**2.8 J**	**2.6 J**	**4.8 J**	**2.3 J**	**2.9**	**0.37 J**
1,1-Dichloroethene			**1.3 J**	0.083 U	0.083 U	--	**26**	**24 J**	**27**	**8.0**	**6.7**	**8.0**
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	--	0.39 U	0.2 U	0.78 U	0.39 U	0.20 U	0.078 U
1,2-Dichlorobenzene			0.06 U	0.06 U	0.06 U	--	0.3 U	0.15 U	**110**	**140**	**140**	0.060 U
1,2-Dichloroethane			**0.27 J**	0.10 U	0.10 U	--	0.5 U	**0.68 J**	1 U	0.50 U	0.25 U	**0.24 J**
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	--	0.49 U	0.24 U	0.97 U	0.49 U	0.24 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	--	0.39 U	0.2 U	**0.99 J**	**0.69 J**	**0.53 J**	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	--	0.58 U	0.29 U	**2.7 J**	**1.8 J**	**2.1 J**	0.12 U
1,4-Dioxane (P-Dioxane)			**3.2 J**	1.2 U	1.2 U	--	**19**	**18**	**21**	**2.4 J**	**6.1**	**6.9**
2-Hexanone			0.22 U	0.22 U	0.22 U	--	1.1 U	0.56 U	2.2 U	1.1 UJ	0.56 UJ	0.22 UJ
Acetone			0.34 U	0.34 U	0.34 U	--	1.7 U	0.86 U	3.4 U	1.7 U	**5.2 J**	**3.2 J**
Benzene			0.064 U	**1.3**	0.064 U	--	0.32 U	0.16 U	0.64 U	0.32 U	0.16 U	**1.3**
Bromodichloromethane			0.088 U	0.088 U	0.088 U	--	0.44 U	0.22 U	0.88 U	0.44 U	0.22 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	--	0.83 U	0.42 U	1.7 U	0.83 U	0.42 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	--	0.26 U	0.13 U	0.51 U	0.26 U	0.13 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	--	**32**	**32 J**	1.3 U	0.63 U	0.31 U	**6.4**
Chlorobenzene			0.15 U	0.15 U	0.15 U	--	0.74 U	0.37 U	**3.6 J**	0.74 U	0.37 U	0.15 U
Chloroform			**1.7 J**	0.10 U	0.10 U	--	**6.6**	**6.5 J**	**2.6 J**	0.51 U	**1.7 J**	**2.8**
Chloromethane			0.077 U	0.077 U	0.077 U	--	0.39 U	0.19 U	0.77 U	0.39 U	0.19 U	0.077 U
Cis-1,2-Dichloroethylene			**0.27 J**	0.087 U	0.087 U	--	**88**	**90 J**	**390**	**450**	**440**	**1.0**
Cyclohexane			0.067 U	0.067 U	0.067 U	--	0.34 U	0.17 U	0.67 U	0.34 U	0.17 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	--	0.64 U	0.32 U	1.3 U	0.64 U	0.32 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	--	0.42 U	0.21 U	0.84 U	0.42 U	0.21 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	--	0.43 U	0.22 U	0.86 U	0.43 U	0.22 U	**0.44 J**
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	--	0.42 U	0.21 U	0.83 U	0.42 U	0.21 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	--	0.71 U	0.36 U	1.4 U	0.71 U	0.36 U	**0.45 J**
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	--	2.6 U	1.3 U	5.2 U	**8.5 J**	1.3 UJ	**0.88 J**
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	--	0.61 U	0.3 U	1.2 U	0.61 UJ	0.30 UJ	0.12 UJ
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	0.11 U	--	0.57 U	0.29 U	1.1 U	0.57 U	0.29 U	**1.1 J**
Methylene Chloride			0.27 U	0.27 U	0.27 U	--	1.4 U	0.68 U	2.7 U	1.4 U	0.68 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	--	0.32 U	0.16 U	0.63 U	**2.3 J**	**5.0**	**0.35 J**
Tetrachloroethylene (PCE)			**6 J**	0.18 U	0.18 U	--	**350**	**380 J**	**1500**	**910**	**380**	**63**
Toluene			**0.74 J**	**0.95 J**	0.072 U	--	**1.2 J**	**1.2 J**	0.72 U	**0.91 J**	0.18 U	**5.5**
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	--	0.42 U	0.21 U	0.83 U	**1.1 J**	**1.4 J**	0.083 U
Trichloroethene (TCE)			**39 J**	0.25 U	0.25 U	--	**640**	**660 J**	**500**	**300**	**280**	**61**
Trichlorofluoromethane			0.11 U	**1.5**	0.11 U	--	0.57 U	0.28 U	1.1 U	0.57 U	0.28 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	--	0.42 U	0.21 U	**3.5 J**	**15**	**55**	0.084 U

Key at end of table.

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	MW-224-330	MW-225-330	MW-P110-355	MW-P110-440	MW-P114-170	MW-P114-290	PW-2-1	PW-2-2	PW-2-3	PW-2-4
		Sample Name:	MW-224-330-SP16	MW-225-330-SP16	SP15	SP15	SP15	SP15	PW-02-01-SP13	PW-02-02-SP13	PW-02-03-SP13	PW-02-04-SP13
		Depth:	320 - 330 ft	320 - 330 ft	345 - 355 ft	430 - 440 ft	160 - 170 ft	280 - 290 ft	71 - 73 ft	86 - 88 ft	101 - 103 ft	116 - 118 ft
		Date:	04/13/16	04/14/16	05/04/15	05/04/15	05/05/15	05/04/15	04/17/13	04/18/13	04/17/13	04/18/13
Total Uranium by Method D5174 (µg/L)												
Uranium, Total		--	--	**0.0711** [1]	.0618 U [1]	**0.0868** [1]	**0.111** [1]	0.0618 U	0.0618 U	0.176	0.0618 U	
Metals by Method SW6010 (µg/L)												
Nickel		--	--	13 U [2]	13 U [2]	13 U [2]	13 U [2]	13 U	13 U	13 U	13 U	
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane		14 U	**1.6 J**	**2.6**	0.17 U	**0.35 J**	**4.6 J**	0.069 U	0.069 U	0.41 J	0.069 U	
1,1,2-Trichloro-1,2,2-Trifluoroethane		20 U	0.25 U	**3.8**	0.25 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	
1,1,2-Trichloroethane		30 U	0.38 U	0.38 U	0.38 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
1,1-Dichloroethane		14 U	**0.86 J**	**1.5 J**	0.17 U	**2.6**	**5.5 J**	0.068 U	0.068 U	0.068 U	0.068 U	
1,1-Dichloroethene		17 U	**3.2**	**4.6**	0.21 U	**1.6**	**9.0 J**	0.083 U	0.083 U	0.083 U	0.083 U	
1,2,4-Trichlorobenzene		16 U	0.20 U	0.20 U	0.20 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	
1,2-Dichlorobenzene		**40 J**	0.15 U	0.15 U	0.15 U	**0.18 J**	0.060 U	0.06 U	0.06 U	0.06 U	0.06 U	
1,2-Dichloroethane		20 U	0.25 U	0.25 U	0.25 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	
1,2-Dichloropropane		19 U	0.24 U	0.24 U	0.24 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	
1,3-Dichlorobenzene		16 U	0.20 U	0.20 U	0.20 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	
1,4-Dichlorobenzene		23 U	0.29 U	0.29 U	0.29 U	**0.19 J**	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
1,4-Dioxane (P-Dioxane)		25 U	**1.4 J**	**7.6**	**1.8 J**	**3.1 J**	**6.4 J**	1.2 U	1.2 U	1.2 U	1.2 U	
2-Hexanone		45 UJ	0.56 UJ	0.56 U	0.56 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
Acetone		69 U	**5.0 J**	0.86 U	0.86 U	0.34 U	0.34 U	0.84 J	1.2 J	0.34 U	1.3 J	
Benzene		13 U	0.16 U	**0.70 J**	0.16 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	
Bromodichloromethane		18 U	0.22 U	0.22 U	0.22 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	
Bromoform		33 U	0.42 U	0.42 U	0.42 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
Carbon Disulfide		10 U	0.13 U	0.13 U	0.13 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	
Carbon Tetrachloride		25 U	0.31 U	**4.9**	0.31 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
Chlorobenzene		30 U	0.37 U	0.37 U	0.37 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
Chloroform		20 U	**3.0**	**1.7 J**	0.26 U	**0.66 J**	**1.0 J**	0.1 U	0.1 U	0.1 U	0.1 U	
Chloromethane		15 U	0.19 U	0.19 U	0.19 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	
Cis-1,2-Dichloroethylene		**62 J**	**19**	**17**	**2.2 J**	**25**	**8.7 J**	0.087 U	0.5 J	0.087 U	0.087 U	
Cyclohexane		13 U	0.17 U	0.17 U	0.17 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	
Dibromochloromethane		25 U	0.32 U	0.32 U	0.32 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
Dichlorodifluoromethane		17 U	0.21 U	0.21 U	0.21 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	
Ethylbenzene		17 U	0.22 U	0.22 U	0.22 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	
Isopropylbenzene (Cumene)		17 U	0.21 U	0.21 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	
m,p-Xylene		28 U	0.36 U	0.36 U	0.36 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
Methyl Ethyl Ketone (2-Butanone)		100 UJ	1.3 UJ	1.3 U	1.3 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		24 UJ	0.30 UJ	0.30 U	0.30 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
Methyl tert-Butyl Ether (MTBE)		23 U	**0.56 J**	0.29 U	0.29 U	**0.65 J**	**0.36 J**	0.11 U	0.11 U	0.11 U	0.11 U	
Methylene Chloride		54 U	0.68 U	0.68 U	0.68 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
o-Xylene (1,2-Dimethylbenzene)		13 U	0.16 U	0.16 U	0.16 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	
Tetrachloroethylene (PCE)		**24000**	**480**	**340**	**500**	**5.5**	**8.2 J**	0.18 U	0.18 U	0.18 U	0.18 U	
Toluene		14 U	**1.1 J**	0.18 U	0.18 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	
Trans-1,2-Dichloroethene		17 U	0.21 U	0.21 U	0.21 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	
Trichloroethene (TCE)		50 U	**44**	**260**	**4.0**	**180**	**34 J**	0.25 U	0.25 U	0.25 U	0.25 U	
Trichlorofluoromethane		23 U	0.28 U	0.28 U	0.28 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
Vinyl Chloride		17 U	0.21 U	0.21 U	0.21 U	**0.8 J**	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	PW-2-5	PW-2-6	PW-2-6	PW-2-7	PW-3-1	PW-3-1	PW-3-2	PW-3-3	PW-3-4	PW-3-5
		Sample Name:	PW-02-05-SP15	PW-02-06-SP15	PW-02-06-SP15-FD	PW-02-07-SP15	PW-03-01-SP13	PW-03-01-SP13-FD	PW-03-02-SP13	PW-03-03-SP13	PW-03-04-SP13	PW-03-05-SP13
		Depth:	131 - 133 ft	146 - 148 ft	146 - 148 ft	162.5 - 163 ft	70 - 72 ft	70 -72 ft	85 - 87 ft	100 - 102 ft	115 - 117 ft	130 - 132 ft
		Date:	03/23/15	03/26/15	03/26/15	03/26/15	04/16/13	04/16/13	04/16/13	04/16/13	04/17/13	04/17/13
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			**0.145**	0.0633 U	0.0633 U	0.0633 U [4]	0.431 J	0.0618 UJ	0.0618 U	0.0618 U	0.301	0.0618 U
Metals by Method SW6010 (µg/L)												
Nickel			**4.7 J**	**3.1 J**	**3.3 J**	**5.5 J** [4]	13 U	13 U	13 U	13 U	13 U	13 U
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	0.069 U	0.069 U	1.4	1.3	2.5 J	0.6 J	0.069 U	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	0.068 U	0.068 U	0.54 J	0.54 J	1.2	0.19 J	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.3 J	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.16 J	0.17 J	0.078 U	0.078 U
1,2-Dichlorobenzene			0.060 U	0.060 U	0.060 U	0.060 U	0.06 U	0.06 U	0.2 J	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	0.34 U	0.34 U	0.34 U	0.95 J	1.1 J	0.34 U	1.4 J	0.93 J	0.91 J
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 UJ	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.10 U	**0.54 J**	**0.48 J**	**0.24 J**	0.1 U	0.1 U	0.1 U	0.1 U	0.13 J	0.1 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	0.087 U	0.087 U	**1.1**	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UJ	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 UJ	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			**0.32 J**	**1.8 J**	**1.7 J**	**0.25 J**	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			0.18 U	**0.32 J**	**0.28 J**	**130**	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	0.25 U	0.25 U	**3.1**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	PW-3-6	PW-3-7	PW-4-1	PW-4-2	PW-4-3	PW-4-4	PW-4-5	PW-4-6	PW-4-7	PW-6-1	PW-6-2
		Sample Name:	PW-03-06-SP13	PW-03-07-SP13	PW-04-01-SP13	PW-04-02-SP13	PW-04-03-SP13	PW-04-04-SP13	PW-04-05-SP13	PW-04-06-SP13	PW-04-07-SP13	PW-06-01-SP13	PW-06-02-SP13
		Depth:	145 - 147 ft	162.5 - 163 ft	71 - 73 ft	86 - 88 ft	101 - 103 ft	116 - 118 ft	131 - 133 ft	146 - 148 ft	162.5 - 163 ft	70 - 72 ft	90 - 92 ft
		Date:	04/16/13	04/16/13	04/10/13	04/11/13	04/11/13	04/10/13	04/11/13	04/11/13	04/11/13	04/21/13	04/21/13
Total Uranium by Method D5174 (µg/L)													
Uranium, Total			0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U	0.0618 U
Metals by Method SW6010 (µg/L)													
Nickel			13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
Volatile Organic Compounds by Method 8260B (µg/L)													
1,1,1-Trichloroethane			0.069 U	0.069 U	0.069 U	3.2	9.7	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.51 J
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	0.068 U	2.1	6	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.24 J
1,1-Dichloroethene			0.083 U	0.083 U	0.083 U	0.31 J	0.79 J	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.16 J	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.06 U	0.06 U	0.06 U	0.066 J	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane			0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.5 J	3.4 J	1.9 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.25 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.31 J
Acetone			0.46 J	1.7 J	1.1 J	1.3 J	0.34 U	1.3 J	1.5 J	1.4 J	1.2 J	0.34 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.16 J	0.36 J	0.2 J	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.57 J	0.28 J	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.1 U	0.1 U	0.21 J	0.43 J	0.62 J	0.1 U	0.1 U	0.1 U	0.12 J	0.1 U	0.1 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.1 J	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	0.19 J	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.5 J	0.28 J	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.14 J	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	15	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			0.18 U	6.3	0.18 U	0.22 J	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	0.32 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.15 J	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	PW-6-3	PW-6-4	PW-6-5	PW-6-6	PW-6-7	PW-7-1	PW-7-1	PW-7-2	PW-7-3	PW-7-4
		Sample Name:	PW-06-03-SP13	PW-06-04-SP13	PW-06-05-SP15	PW-06-06-SP15	PW-06-07-SP15	PW-07-01-SP13	PW-07-01-SP13-FD	PW-07-02-SP13	PW-07-03-SP13	PW-07-04-SP13
		Depth:	118 - 120 ft	150 - 152 ft	166 - 168 ft	180 - 182 ft	221.5 - 222 ft	70 - 72 ft	70 - 72 ft	95 - 97 ft	120 - 122 ft	145 - 147 ft
		Date:	04/21/13	04/21/13	03/28/15	03/28/15	03/28/15	04/22/13	04/22/13	04/22/13	04/15/13	04/15/13
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0618 U	0.0618 U	.0618 U [1]	.0618 U [1]	.0618 U [1]	0.0618 U	0.0618 U	0.0627	0.0618 U	0.0618 U
Metals by Method SW6010 (µg/L)												
Nickel			13 U	13 U	13 U [2]	13 U [2]	13 U [2]	13 U	13 U	13 U	13 U	13 U
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.48 J	0.069 U	0.069 U	0.069 U	0.069 U	0.6 J	1.5	0.19 J	0.069 U	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.1 U	0.1 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.37 J	0.068 U	0.068 U	0.068 U	0.068 U	0.5 J	2.5	0.14 J	0.068 U	0.068 U
1,1-Dichloroethene			0.32 J	0.083 U	0.083 U	0.083 U	0.083 U	0.61 J	1.5	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 UR	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.06 U	0.06 U	0.060 U	0.060 U	0.060 UR	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
1,2-Dichloroethane			0.1 U	0.1 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 UR	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 UR	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 J	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.29 J	0.22 U	0.22 U	0.22 U	0.27 J	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.85 J	0.34 U	2.3	0.68 J
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 UR	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	**0.26 J**	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.1 U	0.1 U	0.10 U	**5.9**	**0.22 J**	0.1 U	0.16 J	0.1 U	0.1 U	0.1 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	0.087 U	0.087 U	0.087 U	**0.46 J**	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.18 J	**0.32 J**	**1.7 J**	0.11 U	1.1 J	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			0.4 J	1.1	**0.90 J**	**1.5**	**93**	0.42 J	0.94 J	0.18 U	0.18 U	0.18 U
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.55 J	0.25 U	0.25 U	0.25 U	**0.97 J**	0.55 J	5.9	0.25 U	0.25 U	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	PW-7-4	PW-7-5	PW-7-6	PW-7-7	S-1-325	S-1-450	W-01-75	W-01-120	W-02-70	W-03-72
		Sample Name:	PW-07-04-SP13-FD	PW-07-05-SP15	PW-07-06-SP15	PW-07-07-SP15	S-1-325-SP15	S-1-450-SP15	W-01-75-SP15	W-01-120-SP15	W-02-70-SP15	W-03-72-SP15
		Depth:	145 - 147 ft	170 - 172 ft	197 - 199 ft	220.5 - 221 ft	285 - 325 ft	410 - 450 ft	65 - 75 ft	110 - 120 ft	60 - 70 ft	62 - 72 ft
		Date:	04/15/13	03/30/15	03/30/15	03/30/15	05/05/15	05/05/15	03/25/15	03/25/15	03/26/15	03/24/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0618 U	0.0618 U [1]	0.0618 U [1]	0.0618 U [1]	.0618 U [1]	.0618 U [3]	0.0633 U	**0.0657**	0.633 UJ	**0.0857**
Metals by Method SW6010 (µg/L)												
Nickel			13 U	13 U [2]	13 U [2]	13 U [2]	13 U [2]	13 U [3]	2.6 U	**4.3 J**	**120**	**2.6 J**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	0.069 U	0.069 U	**0.91 J**	0.069 U	0.069 U	0.069 U	**0.16 J**	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	**0.34 J**	0.10 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	0.068 U	0.068 U	**0.37 J**	0.068 U	**0.73 J**	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	**1.3**	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.06 U	0.060 U	0.060 U	0.060 U	0.06 U	0.060 U	**8.6**	**0.17 J**	0.060 U	0.060 U
1,2-Dichloroethane			0.1 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	**0.51 J**	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			0.81 J	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	**1.4**	**1.4**	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.1 U	0.10 U	0.10 U	0.10 U	**0.38 J**	**0.30 J**	0.10 U	0.10 U	0.10 U	0.10 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	0.087 U	0.087 U	0.087 U	**0.41 J**	**8.2**	**7.3**	0.087 U	0.087 U	**1.8**
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	**6.1**	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	**1.8**	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			0.18 U	**0.86 J**	0.18 U	0.18 U	**33**	**190**	**49**	**1.2**	**2.8**	**21**
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	**1.9**	0.25 U	0.25 U	**12**	**50**	**98**	**0.76 J**	**0.51 J**	**0.73 J**
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	W-03-112	W-05-78	W-06-79	W-06-79	W-08-71	W-10-71	W-10-120	W-11-70	W-12-70	W-12-120
		Sample Name:	W-03-112-SP15	W-05-78-SP15	W-06-79-SP15	W-06-79-SP15-FD	W-08-71-SP15	W-10-71-SP15	W-10-120-SP15	W-11-70-SP15	W-12-70-SP15	W-12-120-SP15
		Depth:	102 - 112 ft	68 - 78 ft	69 - 79 ft	69 - 79 ft	61 - 71 ft	61 - 71 ft	110 - 120 ft	60 - 70 ft	60 - 70 ft	110 - 120 ft
		Date:	03/24/15	03/25/15	03/25/15	03/25/15	03/26/15	03/26/15	03/27/15	03/27/15	03/26/15	03/26/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U	0.0633 U
Metals by Method SW6010 (µg/L)												
Nickel			**9.1 J**	**2.7 J**	**2.7 J**	2.6 U	**7.0 J**	**43**	**12 J**	**13 J**	2.6 U	**57**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.17 U	0.069 U	0.069 U	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.25 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.38 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.17 U	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.20 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.15 U	0.060 U	0.060 U	0.060 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.25 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.24 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.20 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.29 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.56 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.86 U	0.34 U	0.34 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.16 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.22 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.42 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.13 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.31 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.37 U	0.15 U	0.15 U	0.15 U
Chloroform			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.26 U	0.10 U	0.10 U	0.10 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.19 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			**0.50 J**	0.087 U	0.087 U	0.087 U	**0.23 J**	0.087 U	0.22 U	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.17 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.32 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.22 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.36 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	1.3 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.30 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.29 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.68 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.16 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**12**	**3.8**	0.18 U	0.18 U	**14**	**19**	**400**	0.18 U	**0.28 J**	**290**
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.18 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.21 U	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			**1.7**	**5.8**	0.25 U	0.25 U	**0.31 J**	**24**	0.63 U	0.25 U	0.25 U	**0.36 J**
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.28 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.21 U	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	W-14-150	W-16-148	W-17-130	W-18-150	W-18-150	W-19-110	W-19-150	W-20-120	W-20-160	W-22-95
		Sample Name:	W-14-150-SP15	W-16-148-SP15	W-17-130-SP15	W-18-150-SP15	W-18-150-SP15-FD	W-19-110-SP15	W-19-150-SP15	W-20-120-SP15	W-20-160-SP15	W-22-95-SP15
		Depth:	140 - 150 ft	138 - 148 ft	120 - 130 ft	140 - 150 ft	140 - 150 ft	100 - 110 ft	140 - 150 ft	110 - 120 ft	150 - 160 ft	85 - 95 ft
		Date:	03/25/15	03/25/15	03/24/15	03/25/15	03/25/15	03/23/15	03/23/15	03/23/15	03/23/15	03/25/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			0.0633 U	**0.146**	**0.0664**	**0.0979** [1]	--	.0618 U [1]	.0618 U [1]	**0.0758** [1]	.0618 U [1]	**0.112**
Metals by Method SW6010 (µg/L)												
Nickel			**98**	**20 J**	**5.9 J**	**120** [2]	--	13 U [2]	13 U [2]	13 U [2]	13 U [2]	**2.8 J**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.69 U	0.17 U	0.069 U	0.069 U	0.069 U	0.69 U	0.069 U	0.069 U	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	1.0 U	0.25 U	0.10 U	0.10 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	1.5 U	0.38 U	0.15 U	0.15 U	0.15 U	1.5 U	0.15 U	0.15 U	0.15 U
1,1-Dichloroethane			0.068 U	0.68 U	0.17 U	0.068 U	0.068 U	0.068 U	0.68 U	0.068 U	**0.92 J**	0.068 U
1,1-Dichloroethene			0.083 U	0.83 U	0.21 U	**3.4**	**3.4**	0.083 U	0.83 U	0.083 U	**0.84 J**	0.083 U
1,2,4-Trichlorobenzene			0.078 U	0.78 U	0.20 U	0.078 U	0.078 U	0.078 U	0.78 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.060 U	0.60 U	0.15 U	**0.35 J**	**0.35 J**	0.060 U	0.60 U	0.060 U	**56**	0.060 U
1,2-Dichloroethane			0.10 U	1.0 U	0.25 U	0.10 U	0.10 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.97 U	0.24 U	0.097 U	0.097 U	0.097 U	0.97 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.78 U	0.20 U	0.078 U	0.078 U	0.078 U	0.78 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	1.2 U	0.29 U	0.12 U	0.12 U	0.12 U	1.2 U	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	**1.5 J**	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	2.2 U	0.56 U	0.22 U	0.22 U	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U
Acetone			1.9 U	3.4 U	0.86 U	0.34 U	**0.34**	0.34 U	3.4 U	0.34 U	0.34 U	0.34 U
Benzene			0.064 U	0.64 U	0.16 U	0.064 U	0.064 U	0.064 U	0.64 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.88 U	0.22 U	0.088 U	0.088 U	0.088 U	0.88 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	1.7 U	0.42 U	0.17 U	0.17 U	0.17 U	1.7 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.51 U	0.13 U	0.051 U	0.051 U	0.051 U	0.51 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	1.3 U	0.31 U	0.13 U	0.13 U	0.13 U	1.3 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	1.5 U	0.37 U	0.15 U	0.15 U	0.15 U	1.5 U	0.15 U	**0.34 J**	0.15 U
Chloroform			0.10 U	**1.0 J**	0.26 U	0.10 U	0.10 U	0.10 U	**5.4 J**	0.10 U	0.10 U	0.10 U
Chloromethane			0.077 U	0.77 U	0.19 U	0.077 U	0.077 U	0.077 U	0.77 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	**8.8 J**	0.22 U	**80**	**74**	0.087 U	**55**	**5.2**	**12**	0.087 U
Cyclohexane			0.067 U	0.67 U	0.17 U	0.067 U	0.067 U	0.067 U	0.67 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	1.3 U	0.32 U	0.13 U	0.13 U	0.13 U	1.3 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 U	0.84 U	0.21 U	0.084 U	0.084 U	0.084 UJ	0.84 UJ	0.084 UJ	0.084 UJ	0.084 U
Ethylbenzene			0.086 U	0.86 U	0.22 U	0.086 U	0.086 U	0.086 U	0.86 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.83 U	0.21 U	0.083 U	0.083 U	0.083 U	0.83 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	1.4 U	0.36 U	0.14 U	0.14 U	0.14 U	1.4 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	5.2 U	1.3 U	0.52 U	0.52 U	0.52 U	5.2 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	1.2 U	0.30 U	0.12 U	0.12 U	0.12 U	1.2 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	1.1 U	0.29 U	0.11 U	**0.20 J**	0.11 U	1.1 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	2.7 U	0.68 U	0.27 U	0.27 U	0.27 U	2.7 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.63 U	0.16 U	0.063 U	0.063 U	0.063 U	0.63 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**0.82 J**	**2600**	**470**	**94**	**79**	**30**	**2300**	**27**	**53**	**3.8**
Toluene			0.072 U	0.72 U	0.18 U	0.072 U	0.072 U	0.072 U	0.72 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.83 U	0.21 U	**1.5**	0.083 U	0.083 U	0.83 U	**0.36 J**	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	**25**	**1.1 J**	**28**	**28**	0.25 U	**40**	**21**	**20**	**4.6**
Trichlorofluoromethane			0.11 U	1.1 U	0.28 U	0.11 U	0.11 U	0.11 U	1.1 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			0.084 U	0.84 U	0.21 U	**36**	**36**	0.084 U	0.84 U	0.084 U	**4.1**	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Notes	Location ID:	W-23-110	W-24-260	W-25-150	W-25-188	W-26-270	W-27-240	W-27-285	W-30-285	W-31-95	W-32-110
		Sample Name:	W-23-110-SP15	W-24-260-SP15	W-25-150-SP15	W-25-188-SP15	W-26-270-SP15	W-27-240-SP15	W-27-285-SP15	W-30-285-SP15	W-31-95-SP15	W-32-110-SP15
		Depth:	100 - 110 ft	250 - 260 ft	140 - 150 ft	178 - 188 ft	260 - 270 ft	230 - 240 ft	275 - 285 ft	275 - 285 ft	85 - 95 ft	100 - 110 ft
		Date:	03/23/15	03/23/15	03/24/15	03/24/15	03/25/15	03/25/15	03/26/15	03/25/15	03/25/15	03/26/15
Total Uranium by Method D5174 (µg/L)												
Uranium, Total			.0618 U [3]	**0.288** [1]	**0.0765** [1]	**0.0688** [1]	.0618 U [1]	.0618 U [1]	.0618 U [1]	**0.15** [1]	0.0633 U	**0.0666**
Metals by Method SW6010 (µg/L)												
Nickel			13 U [3]	13 U [2]	13 U [2]	13 U [2]	13 U [2]	13 U [2]	13 U [2]	**52** [2]	2.6 U	**11 J**
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane			0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U
1,1,2-Trichloro-1,2,2-Trifluoroethane			0.10 U	**1.5 J**	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1,2-Trichloroethane			0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	**8.3**
1,1-Dichloroethane			0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	**0.28 J**	0.068 U	0.068 U	0.068 U	0.068 U
1,1-Dichloroethene			0.083 U	**0.49 J**	0.083 U	**0.80 J**	0.083 U	**0.49 J**	**0.88 J**	0.083 U	0.083 U	0.083 U
1,2,4-Trichlorobenzene			0.078 U	**0.51 J**	0.078 U	**0.40 J**	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,2-Dichlorobenzene			0.060 U	**0.54 J**	0.060 U	**26**	0.060 U	**9.3**	**2.6**	0.060 U	0.060 U	0.060 U
1,2-Dichloroethane			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,2-Dichloropropane			0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
1,3-Dichlorobenzene			0.078 U	0.078 U	0.078 U	**0.43 J**	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
1,4-Dichlorobenzene			0.12 U	0.12 U	0.12 U	**1.7**	0.12 U	0.12 U	**0.19 J**	0.12 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)			1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Hexanone			0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetone			0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.9 U	0.34 U
Benzene			0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
Bromodichloromethane			0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U	0.088 U
Bromoform			0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Carbon Disulfide			0.051 U	0.051 U	0.5 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Carbon Tetrachloride			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene			0.15 U	0.15 U	0.15 U	**1.9 J**	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloroform			0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	**0.11 J**	0.10 U	0.10 U	0.10 U
Chloromethane			0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene			0.087 U	**2.3 J**	0.087 U	**21**	0.087 U	**18**	**72**	0.087 U	0.087 U	0.087 U
Cyclohexane			0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
Dibromochloromethane			0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dichlorodifluoromethane			0.084 UJ	0.084 UJ	0.084 UJ	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
Ethylbenzene			0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)			0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
m,p-Xylene			0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)			0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)			0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)			0.11 U	0.11 U	0.11 U	**0.20 J**	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Methylene Chloride			0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)			0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)			**92**	**13 J**	0.18 U	**3.1**	**4.7**	**34**	**180**	0.18 U	0.18 U	**150**
Toluene			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene			0.083 U	0.083 U	0.083 U	**0.26 J**	0.083 U	0.083 U	**0.88 J**	0.083 U	0.083 U	0.083 U
Trichloroethene (TCE)			0.25 U	**4.4 J**	**0.40 J**	**8.0**	0.25 U	**18**	**26**	0.25 U	0.25 U	0.25 U
Trichlorofluoromethane			0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Vinyl Chloride			**0.86 J**	0.084 U	0.084 U	**4.1**	0.084 U	**0.97 J**	**4.4**	0.084 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Location ID: / Sample Name: / Depth: / Date: / Notes	W-34-285 W-34-285-SP15 275 - 285 ft 03/24/15	W-36-390 W-36-390-SP15 350 - 390 ft 03/27/15	W-36-448 W-36-448-SP15 418 - 448 ft 03/27/15	W-36-448 W-36-448-SP15-FD 418 - 448 ft 03/27/15	W-37-325 W-37-325-SP15 285 - 325 ft 03/24/15	W-37-385 W-37-385-SP15 355 - 385 ft 03/25/15	W-37-385 W-37-385-SP15-FD 355 - 385 ft 03/25/15
Total Uranium by Method D5174 (µg/L)								
Uranium, Total		--	**0.324** [1]	**0.184** [1]	--	**0.17** [1]	**0.0618** [1]	--
Metals by Method SW6010 (µg/L)								
Nickel		13 U [2]	**15 J** [2]	**120** [2]	--	13 U [2]	**19** [2]	--
Volatile Organic Compounds by Method 8260B (µg/L)								
1,1,1-Trichloroethane		0.069 U	**1.2 J**	**0.67 J**	**0.67 J**	0.17 U	**19**	**18**
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.10 U	**4.1 J**	**2.5**	**2.7**	**1.7 J**	**11**	**10**
1,1,2-Trichloroethane		0.15 U	0.75 U	0.38 U	0.38 U	0.38 U	**0.84 J**	**0.88 J**
1,1-Dichloroethane		0.068 U	**1.8 J**	**1.0 J**	**1.0 J**	0.17 U	0.068 U	0.068 U
1,1-Dichloroethene		0.083 U	**2.6 J**	**1.2 J**	**1.2 J**	**16**	**57**	**52**
1,2,4-Trichlorobenzene		0.078 U	0.39 U	0.20 U	0.20 U	0.20 U	0.078 U	0.078 U
1,2-Dichlorobenzene		**1.2**	0.30 U	0.15 U	0.15 U	**0.43 J**	0.060 U	0.060 U
1,2-Dichloroethane		0.10 U	0.50 U	0.25 U	0.25 U	0.25 U	0.10 U	0.10 U
1,2-Dichloropropane		0.097 U	0.49 U	0.24 U	0.24 U	0.24 U	**0.43 J**	**0.38 J**
1,3-Dichlorobenzene		0.078 U	0.39 U	0.20 U	0.20 U	0.20 U	0.078 U	0.078 U
1,4-Dichlorobenzene		0.12 U	0.58 U	0.29 U	0.29 U	0.29 U	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)		1.2 U	**9.4**	**3.4 J**	**3.8 J**	**25**	**30**	**31**
2-Hexanone		0.22 U	1.1 U	0.56 U	0.56 U	0.56 U	0.22 U	0.22 U
Acetone		0.34 U	1.7 U	0.86 U	0.86 U	0.86 U	0.34 U	0.34 U
Benzene		0.064 U	0.32 U	0.16 U	0.16 U	0.16 U	0.064 U	0.064 U
Bromodichloromethane		0.088 U	0.44 U	0.22 U	0.22 U	0.22 U	0.088 U	0.088 U
Bromoform		0.17 U	0.83 U	0.42 U	0.42 U	0.42 U	0.17 U	0.17 U
Carbon Disulfide		0.051 U	0.26 U	0.13 U	0.13 U	0.13 U	0.051 U	**0.31 J**
Carbon Tetrachloride		0.13 U	**19**	**5.7**	**6.0**	**19**	**6.0**	**5.9**
Chlorobenzene		0.15 U	0.74 U	0.37 U	0.37 U	0.37 U	0.15 U	0.15 U
Chloroform		**6.6**	**2.5 J**	**1.1 J**	**1.1 J**	**230**	**87**	**87**
Chloromethane		0.077 U	0.39 U	0.19 U	0.19 U	0.19 U	0.077 U	0.077 U
Cis-1,2-Dichloroethylene		**5.5**	**120**	**50**	**51**	**6.6**	**3.3**	**3.2**
Cyclohexane		0.067 U	0.34 U	0.17 U	0.17 U	0.17 U	**3.3**	0.067 U
Dibromochloromethane		0.13 U	0.64 U	0.32 U	0.32 U	0.32 U	0.13 U	0.13 U
Dichlorodifluoromethane		0.084 U	0.42 U	0.21 U	0.21 U	0.21 U	0.084 U	0.084 U
Ethylbenzene		0.086 U	0.43 U	0.22 U	0.22 U	0.22 U	0.086 U	0.086 U
Isopropylbenzene (Cumene)		0.083 U	0.42 U	0.21 U	0.21 U	0.21 U	0.083 U	0.083 U
m,p-Xylene		0.14 U	0.71 U	0.36 U	0.36 U	0.36 U	0.14 U	0.14 U
Methyl Ethyl Ketone (2-Butanone)		0.52 U	2.6 U	1.3 U	1.3 U	1.3 U	0.52 U	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		0.12 U	0.61 U	0.30 U	0.30 U	0.30 U	0.12 U	0.12 U
Methyl tert-Butyl Ether (MTBE)		0.11 U	0.57 U	0.29 U	0.29 U	0.29 U	0.11 U	0.11 U
Methylene Chloride		0.27 U	1.4 U	0.68 U	0.68 U	0.68 U	0.27 U	0.27 U
o-Xylene (1,2-Dimethylbenzene)		0.063 U	0.32 U	0.16 U	0.16 U	0.16 U	0.063 U	0.063 U
Tetrachloroethylene (PCE)		**20**	**110**	**76**	**78**	**160**	**79**	**78**
Toluene		0.072 U	0.36 U	0.18 U	0.18 U	0.18 U	0.072 U	0.072 U
Trans-1,2-Dichloroethene		**0.29 J**	**9.4**	**3.0**	**2.7**	0.21 U	0.083 U	0.083 U
Trichloroethene (TCE)		**3.2**	**520**	**210**	**220**	**240**	**97**	**97**
Trichlorofluoromethane		0.11 U	0.57 U	0.28 U	0.28 U	0.28 U	**2.5**	**2.3**
Vinyl Chloride		**2.1**	0.42 U	0.21 U	0.21 U	0.21 U	0.084 U	0.084 U

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-1 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

UR = Not detected/result is rejected

Other

µg/L = Micrograms per liter

-- = Analyte not analyzed for

"-FD" denotes field duplicate sample

Bold values denote positive hits.

Exceeds groundwater standard.

Exceeds groundwater guidance value.

Notes:

1. SP13 Data
2. SU13 Data
3. SP13 Filtered Results
4. Filtered Results

Key at end of table.

Source: Ecology and Environment, Inc. 2016

Table 3.2-2 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	MW-215	MW-216	MW-217	MW-218	MW-219	MW-220	MW-221	MW-222	MW-223	MW-224	MW-225	MW-225	MW-58
Sample Name:	MW-215-395-SP16	MW-216-510-SP16	MW-217-490-SP16	MW-218-95-SP16	MW-219-560-SP16	MW-220-325-SP16	MW-221-320-SP16	MW-222-340-SP16	MW-223-580-SP16	MW-224-330-SP16	MW-225-330-SP16	MW-401-SP16	MW-58-75-SP16
Depth:	385 - 395 ft	500 - 510 ft	480 - 490 ft	85 - 95 ft	550 - 560 ft	315 - 325 ft	310 - 320 ft	330 - 340 ft	570 - 580 ft	320 - 330 ft	320 - 330 ft	320 - 330 ft	65 - 75 ft
Date:	04/14/16	04/13/16	04/14/16	04/12/16	04/13/16	04/14/16	04/13/16	04/13/16	04/15/16	04/13/16	04/14/16	04/14/16	04/12/16
Analyte													
Total Uranium by Method D5174 (µg/L)													
Uranium, Total	--	--	--	**0.0566**	--	--	--	--	--	--	--	--	0.0533 U
Metals by Method SW6010B (µg/L)													
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	400 U
Volatile Organic Compounds by Method 8260_SIM (µg/L)													
1,4-Dioxane (P-Dioxane)	**5.3**	1.2 U	1.2 U	--	**21**	**31**	**2.4 J**	**6.1**	**6.9**	25 U	**1.4 J**	1.2 U	1.2 U
Volatile Organic Compounds by Method 8260B (µg/L)													
1,1,1-Trichloroethane	**1.4**	0.069 U	0.069 U	--	**10**	**4.2 J**	**1.7 J**	**0.95 J**	**3.0**	14 U	**1.6 J**	**1.8 J**	**18**
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.098 U	--	0.98 U	0.98 U	0.49 U	0.25 U	0.098 U	20 U	0.25 U	0.25 U	0.25 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.54 J**	0.10 U	0.10 U	--	**14**	1.0 U	0.51 U	**1.4 J**	**0.36 J**	20 U	0.25 U	0.25 U	0.25 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.15 U	--	1.5 U	1.5 U	0.75 U	0.38 U	0.15 U	30 U	0.38 U	0.38 U	0.38 U
1,1-Dichloroethane	**7.2**	0.068 U	0.068 U	--	**3.7 J**	**5.1 J**	**2.3 J**	**2.9**	**0.37 J**	14 U	**0.86 J**	**0.82 J**	**6.0**
1,1-Dichloroethene	**1.8**	0.083 U	0.083 U	--	**26**	**36**	**8.0**	**6.7**	**8.0**	17 U	**3.2**	**3.3**	0.21 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.087 U	--	0.87 U	0.87 U	0.44 U	0.22 U	0.087 U	17 U	0.22 U	0.22 U	0.22 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.078 U	--	0.78 U	0.78 U	0.39 U	0.20 U	0.078 U	16 U	0.20 U	0.20 U	0.20 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	0.41 U	--	4.1 U	4.1 U	2.1 U	1.0 U	0.41 U	82 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	0.13 U	0.13 U	0.13 U	--	1.3 U	1.3 U	0.64 U	0.32 U	0.13 U	26 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.060 U	0.060 U	0.060 U	--	0.60 U	**92**	**140**	**140**	0.060 U	**40 J**	0.15 U	0.15 U	0.15 U
1,2-Dichloroethane	**0.22 J**	0.10 U	0.10 U	--	1.0 U	1.0 U	0.50 U	0.25 U	**0.24 J**	20 U	0.25 U	0.25 U	0.25 U
1,2-Dichloropropane	0.097 U	0.097 U	0.097 U	--	0.97 U	0.97 U	0.49 U	0.24 U	0.097 U	19 U	0.24 U	0.24 U	0.24 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.078 U	--	0.78 U	**1.1 J**	**0.69 J**	**0.53 J**	0.078 U	16 U	0.20 U	0.20 U	0.20 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.12 U	--	1.2 U	**3.3 J**	**1.8 J**	**2.1 J**	0.12 U	23 U	0.29 U	0.29 U	0.29 U
2-Hexanone	0.22 UJ	0.22 UJ	0.22 UJ	--	2.2 UJ	2.2 UJ	1.1 UJ	0.56 UJ	0.22 UJ	45 UJ	0.56 UJ	0.56 UJ	0.56 UJ
Acetone	**2.2 J**	0.34 U	0.34 U	--	**19 J**	3.4 U	1.7 U	**5.2 J**	**3.2 J**	69 U	**5.0 J**	**12 J**	0.86 U
Benzene	0.064 U	**0.95 J**	0.064 U	--	0.64 U	0.64 U	0.32 U	0.16 U	**1.3**	13 U	0.16 U	0.16 U	0.16 U
Bromochloromethane	0.13 U	0.13 U	0.13 U	--	1.3 U	1.3 U	0.67 U	0.33 U	0.13 U	27 U	0.33 U	0.33 U	0.33 U
Bromodichloromethane	0.088 U	0.088 U	0.088 U	--	0.88 U	0.88 U	0.44 U	0.22 U	0.088 U	18 U	0.22 U	0.22 U	0.22 U
Bromoform	0.17 U	0.17 U	0.17 U	--	1.7 U	1.7 U	0.83 U	0.42 U	0.17 U	33 U	0.42 U	0.42 U	0.42 U
Bromomethane	0.25 U	0.25 U	0.25 U	--	2.5 U	2.5 U	1.3 U	0.63 U	0.25 U	50 U	0.63 U	0.63 U	0.63 U
Carbon Disulfide	0.051 U	0.051 U	0.051 U	--	0.51 U	0.51 U	0.26 U	0.13 U	0.051 U	10 U	0.13 U	0.13 U	0.13 U
Carbon Tetrachloride	0.13 U	0.13 U	0.13 U	--	**39**	1.3 U	0.63 U	0.31 U	**6.4**	25 U	0.31 U	0.31 U	0.31 U
Chlorobenzene	0.15 U	0.15 U	0.15 U	--	1.5 U	**3.5 J**	0.74 U	0.37 U	0.15 U	30 U	0.37 U	0.37 U	0.37 U
Chloroethane	0.099 U	0.099 U	0.099 U	--	0.99 U	0.99 U	0.50 U	0.25 U	0.099 U	20 U	0.25 U	0.25 U	0.25 U
Chloroform	**1.9**	0.10 U	0.10 U	--	**6.6 J**	**2.0 J**	0.51 U	**1.7 J**	**2.8**	20 U	**3.0**	**3.0**	0.26 U
Chloromethane	0.077 U	0.077 U	0.077 U	--	0.77 U	0.77 U	0.39 U	0.19 U	0.077 U	15 U	0.19 U	0.19 U	0.19 U
Cis-1,2-Dichloroethylene	**0.38 J**	0.087 U	0.087 U	--	**130**	**250**	**450**	**440**	**1.0**	**62 J**	**19**	**20**	**20**
Cis-1,3-Dichloropropene	0.073 U	0.073 U	0.073 U	--	0.73 U	0.73 U	0.37 U	0.18 U	0.073 U	15 U	0.18 U	0.18 U	0.18 U
Cyclohexane	0.067 U	0.067 U	0.067 U	--	0.67 U	0.67 U	0.34 U	0.17 U	0.067 U	13 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.13 U	0.13 U	0.13 U	--	1.3 U	1.3 U	0.64 U	0.32 U	0.13 U	25 U	0.32 U	0.32 U	0.32 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.084 U	--	0.84 U	0.84 U	0.42 U	0.21 U	0.084 U	17 U	0.21 U	0.21 U	0.21 U
Ethylbenzene	0.086 U	0.086 U	0.086 U	--	0.86 U	0.86 U	0.43 U	0.22 U	**0.44 J**	17 U	0.22 U	0.22 U	0.22 U
Isopropylbenzene (Cumene)	0.083 U	0.083 U	0.083 U	--	0.83 U	0.83 U	0.42 U	0.21 U	0.083 U	17 U	0.21 U	0.21 U	0.21 U
m,p-Xylene	0.14 U	0.14 U	0.14 U	--	1.4 U	1.4 U	0.71 U	0.36 U	**0.45 J**	28 U	0.36 U	0.36 U	0.36 U
Methyl Acetate	0.37 UJ	0.37 UJ	0.37 UJ	--	3.7 UJ	3.7 UJ	1.8 UJ	0.92 UJ	0.37 UJ	73 UJ	0.92 UJ	0.92 UJ	0.92 UJ
Methyl Ethyl Ketone (2-Butanone)	0.52 UJ	0.52 UJ	0.52 UJ	--	**43 J**	5.2 UJ	**8.5 J**	1.3 UJ	**0.88 J**	100 UJ	1.3 UJ	1.3 UJ	1.3 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.12 UJ	0.12 UJ	0.12 UJ	--	1.2 UJ	1.2 UJ	0.61 UJ	0.30 UJ	0.12 UJ	24 UJ	0.30 UJ	0.30 UJ	0.30 UJ
Methyl tert-Butyl Ether (MTBE)	0.11 U	0.11 U	0.11 U	--	1.1 U	1.1 U	0.57 U	0.29 U	**1.1 J**	23 U	**0.56 J**	**0.56 J**	0.29 U
Methylcyclohexane	0.10 U	0.10 U	0.10 U	--	1.0 U	1.0 U	0.52 U	0.26 U	0.10 U	21 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	0.27 U	0.27 U	0.27 U	--	2.7 U	2.7 U	1.4 U	0.68 U	0.27 U	54 U	0.68 U	0.68 U	0.68 U
o-Xylene (1,2-Dimethylbenzene)	0.063 U	0.063 U	0.063 U	--	0.63 U	0.63 U	**2.3 J**	**5.0**	**0.35 J**	13 U	0.16 U	0.16 U	0.16 U
Styrene	0.074 U	0.074 U	0.074 U	--	0.74 U	0.74 U	0.37 U	0.19 U	0.074 U	15 U	0.19 U	0.19 U	0.19 U
Tetrachloroethylene (PCE)	**10**	0.18 U	0.18 U	--	**320**	**3200**	**910**	**380**	**63**	**24000**	**480**	**460**	**410**
Toluene	0.072 U	**0.57 J**	0.072 U	--	0.72 U	0.72 U	**0.91 J**	0.18 U	**5.5**	14 U	**1.1 J**	**1.2 J**	0.18 U
Trans-1,2-Dichloroethene	0.083 U	0.083 U	0.083 U	--	0.83 U	**2.0 J**	**1.1 J**	**1.4 J**	0.083 U	17 U	0.21 U	0.21 U	0.21 U
Trans-1,3-Dichloropropene	0.083 U	0.083 U	0.083 U	--	0.83 U	0.83 U	0.42 U	0.21 U	0.083 U	17 U	0.21 U	0.21 U	0.21 U
Trichloroethylene (TCE)	**42**	0.25 U	0.25 U	--	**1100**	**510**	**300**	**280**	**61**	50 U	**44**	**45**	**5.1**
Trichlorofluoromethane	0.11 U	**0.34 J**	0.11 U	--	1.1 U	1.1 U	0.57 U	0.28 U	0.11 U	23 U	0.28 U	0.28 U	0.28 U
Vinyl Chloride	0.084 U	0.084 U	0.084 U	--	0.84 U	0.84 U	**15**	**55**	0.084 U	17 U	0.21 U	0.21 U	0.21 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.2-2 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	MW-59	MW-59	MWP-110-355	MWP-110-440	S-1-325	S-1-450
Sample Name:	MW-59-75-SP16	MW-400-SP16	MWP-110-355-SP16	MWP-110-440-SP16	S-1-325-SP16	S-1-450-SP16
Depth:	65 - 75 ft	65 - 75 ft	345 - 355 ft	430 - 440 ft	285 - 325 ft	410 - 450 ft
Date:	04/12/16	04/12/16	04/13/16	04/13/16	04/12/16	04/12/16
Analyte						
Total Uranium by Method D5174 (µg/L)						
Uranium, Total	0.0533 U	0.0533 U	--	--	--	--
Metals by Method SW6010B (µg/L)						
Nickel	40 U	40 U	--	--	--	--
Volatile Organic Compounds by Method 8260_SIM (µg/L)						
1,4-Dioxane (P-Dioxane)	1.2 U	1.2 U	**12**	**3.1 J**	**1.7 J**	1.2 U
Volatile Organic Compounds by Method 8260B (µg/L)						
1,1,1-Trichloroethane	0.069 U	0.069 U	**2.4 J**	0.17 U	**1.0**	0.17 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U	0.25 U	0.25 U	0.098 U	0.25 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.10 U	0.10 U	**3.0**	0.25 U	0.10 U	0.25 U
1,1,2-Trichloroethane	0.15 U	0.15 U	0.38 U	0.38 U	0.15 U	0.38 U
1,1-Dichloroethane	0.068 U	0.068 U	**1.5 J**	0.17 U	**0.36 J**	0.17 U
1,1-Dichloroethene	0.083 U	0.083 U	**3.9**	0.21 U	**1.3**	0.21 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U	0.22 U	0.22 U	0.087 U	0.22 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U	0.20 U	0.20 U	0.078 U	0.20 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U	1.0 U	1.0 U	0.41 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	0.13 U	0.13 U	0.32 U	0.32 U	0.13 U	0.32 U
1,2-Dichlorobenzene	0.060 U	0.060 U	0.15 U	0.15 U	0.060 U	0.15 U
1,2-Dichloroethane	0.10 U	0.10 U	0.25 U	0.25 U	0.10 U	0.25 U
1,2-Dichloropropane	0.097 U	0.097 U	0.24 U	0.24 U	0.097 U	0.24 U
1,3-Dichlorobenzene	0.078 U	0.078 U	0.20 U	0.20 U	0.078 U	0.20 U
1,4-Dichlorobenzene	0.12 U	0.12 U	0.29 U	0.29 U	0.12 U	0.29 U
2-Hexanone	0.22 UJ	0.22 UJ	0.56 UJ	0.56 UJ	0.22 UJ	0.56 UJ
Acetone	**3.0 J**	**4.2 J**	0.86 U	0.86 U	0.34 U	**4.6 J**
Benzene	0.064 U	0.064 U	**0.62 J**	0.16 U	0.064 U	0.16 U
Bromochloromethane	0.13 U	0.13 U	0.33 U	0.33 U	0.13 U	0.33 U
Bromodichloromethane	0.088 U	0.088 U	0.22 U	0.22 U	0.088 U	0.22 U
Bromoform	0.17 U	0.17 U	0.42 U	0.42 U	0.17 U	0.42 U
Bromomethane	0.25 U	0.25 U	0.63 U	0.63 U	0.25 U	0.63 U
Carbon Disulfide	0.051 U	0.051 U	0.13 U	0.13 U	0.051 U	0.13 U
Carbon Tetrachloride	0.13 U	0.13 U	**4.3**	0.31 U	**1.3**	**2.0 J**
Chlorobenzene	0.15 U	0.15 U	0.37 U	0.37 U	0.15 U	0.37 U
Chloroethane	0.099 U	0.099 U	0.25 U	0.25 U	0.099 U	0.25 U
Chloroform	0.10 U	0.10 U	**1.7 J**	0.26 U	**0.39 J**	**0.41 J**
Chloromethane	0.077 U	0.077 U	0.19 U	0.19 U	0.077 U	0.19 U
Cis-1,2-Dichloroethylene	0.087 U	0.087 U	**30**	**3.4**	**0.38 J**	**12**
Cis-1,3-Dichloropropene	0.073 U	0.073 U	0.18 U	0.18 U	0.073 U	0.18 U
Cyclohexane	0.067 U	0.067 U	0.17 U	0.17 U	0.067 U	0.17 U
Dibromochloromethane	0.13 U	0.13 U	0.32 U	0.32 U	0.13 U	0.32 U
Dichlorodifluoromethane	0.084 U	0.084 U	0.21 U	0.21 U	0.084 U	0.21 U
Ethylbenzene	0.086 U	0.086 U	0.22 U	0.22 U	0.086 U	0.22 U
Isopropylbenzene (Cumene)	0.083 U	0.083 U	0.21 U	0.21 U	0.083 U	0.21 U
m,p-Xylene	0.14 U	0.14 U	0.36 U	0.36 U	0.14 U	0.36 U
Methyl Acetate	0.37 UJ	0.37 UJ	0.92 UJ	0.92 UJ	0.37 UJ	0.92 UJ
Methyl Ethyl Ketone (2-Butanone)	0.52 UJ	0.52 UJ	1.3 UJ	1.3 UJ	0.52 UJ	1.3 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.12 UJ	0.12 UJ	0.30 UJ	0.30 UJ	0.12 UJ	0.30 UJ
Methyl tert-Butyl Ether (MTBE)	0.11 U	0.11 U	0.29 U	0.29 U	**0.22 J**	0.29 U
Methylcyclohexane	0.10 U	0.10 U	0.26 U	0.26 U	0.10 U	0.26 U
Methylene Chloride	0.27 U	0.27 U	0.68 U	0.68 U	0.27 U	0.68 U
o-Xylene (1,2-Dimethylbenzene)	0.063 U	0.063 U	0.16 U	0.16 U	0.063 U	0.16 U
Styrene	0.074 U	0.074 U	0.19 U	0.19 U	0.074 U	0.19 U
Tetrachloroethylene (PCE)	**3.5**	**3.3**	**360**	**390**	**27**	**360**
Toluene	0.072 U	0.072 U	0.18 U	0.18 U	0.072 U	0.18 U
Trans-1,2-Dichloroethene	0.083 U	0.083 U	0.21 U	0.21 U	0.083 U	0.21 U
Trans-1,3-Dichloropropene	0.083 U	0.083 U	0.21 U	0.21 U	0.083 U	0.21 U
Trichloroethylene (TCE)	0.25 U	0.25 U	**240**	**4.0**	**12**	**92**
Trichlorofluoromethane	0.11 U	0.11 U	0.28 U	0.28 U	0.11 U	0.28 U
Vinyl Chloride	0.084 U	0.084 U	0.21 U	0.21 U	0.084 U	0.21 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.2-2 Summary of Analytical Results for Groundwater Samples
Sylvania FUSRAP Site, Hicksville, NY

Location ID:	
Sample Name:	
Depth:	
Date:	
Analyte	

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

Other

µg/L = Micrograms per liter

-- = Analyte not analyzed for

Notes:

1. Bold values denote positive hits.
2. MW-400 and MW-401 designate field duplicate samples.

Key at end of table.

Source: Ecology and Environment, 2016

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Table 3.2-3 Summary of Analytical Results for Trip Blank and Rinsate Samples
Sylvania FUSRAP Site, Hicksville, NY

Analyte	Location ID: / Sample Name: / Depth: / Date:	RB01 04/13/16	SP16 04/14/16
Total Uranium by Method D5174 (µg/L)			
Uranium, Total		--	--
Metals by Method SW6010B (µg/L)			
Nickel		--	--
Volatile Organic Compounds by Method 8260_SIM (µg/L)			
1,4-Dioxane (P-Dioxane)		5.0 U	5.0 U
Volatile Organic Compounds by Method 8260B (µg/L)			
1,1,1-Trichloroethane		1.0 U	1.0 U
1,1,2,2-Tetrachloroethane		1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U
1,1,2-Trichloroethane		1.0 U	1.0 U
1,1-Dichloroethane		1.0 U	1.0 U
1,1-Dichloroethene		1.0 U	1.0 U
1,2,3-Trichlorobenzene		2.0 U	2.0 U
1,2,4-Trichlorobenzene		5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane		1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)		1.0 U	1.0 U
1,2-Dichlorobenzene		1.0 U	1.0 U
1,2-Dichloroethane		1.0 U	1.0 U
1,2-Dichloropropane		1.0 U	1.0 U
1,3-Dichlorobenzene		1.0 U	1.0 U
1,4-Dichlorobenzene		1.0 U	1.0 U
2-Hexanone		5.0 UJ	5.0 UJ
Acetone		**2.1 J**	2.0 U
Benzene		1.0 U	1.0 U
Bromochloromethane		1.0 U	1.0 U
Bromodichloromethane		1.0 U	1.0 U
Bromoform		1.0 U	1.0 U
Bromomethane		2.0 U	2.0 U
Carbon Disulfide		2.0 U	2.0 U
Carbon Tetrachloride		1.0 U	1.0 U
Chlorobenzene		2.0 U	2.0 U
Chloroethane		2.0 U	2.0 U
Chloroform		**0.18 J**	1.0 U
Chloromethane		2.0 U	2.0 U
Cis-1,2-Dichloroethylene		1.0 U	1.0 U
Cis-1,3-Dichloropropene		1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U
Dibromochloromethane		1.0 U	1.0 U
Dichlorodifluoromethane		2.0 U	2.0 U
Ethylbenzene		1.0 U	1.0 U
Isopropylbenzene (Cumene)		1.0 U	1.0 U
m,p-Xylene		2.0 U	2.0 U
Methyl Acetate		25 UJ	25 UJ
Methyl Ethyl Ketone (2-Butanone)		5.0 UJ	5.0 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		5.0 UJ	5.0 UJ
Methyl tert-Butyl Ether (MTBE)		2.0 U	2.0 U
Methylcyclohexane		4.0 U	4.0 U
Methylene Chloride		1.0 U	1.0 U
o-Xylene (1,2-Dimethylbenzene)		1.0 U	1.0 U
Styrene		1.0 U	1.0 U
Tetrachloroethylene (PCE)		1.0 U	1.0 U
Toluene		1.0 U	1.0 U
Trans-1,2-Dichloroethene		1.0 U	1.0 U
Trans-1,3-Dichloropropene		1.0 U	1.0 U
Trichloroethylene (TCE)		1.0 U	1.0 U
Trichlorofluoromethane		1.0 U	1.0 U
Vinyl Chloride		2.0 U	2.0 U

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

Other

µg/L = Micrograms per liter

Notes:

1. Bold values denote positive hits.
2. MW-400 and MW-401 designate field duplicate samples.

Source: Ecology and Environment, 2016

Table 3.3-1 Summary of Analytical Results for DR-Z Sludge Sample
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: DR-Z SLUDGE WC Depth: -- Date: 06/11/15
Thorium Isotopes by Method A-01-R, pCi/g	
Thorium-228	**10.5**
Thorium-230	**3.71**
Thorium-232	**10.3**
Uranium Isotopes by Method A-01-R, pCi/g	
Uranium-234	**233**
Uranium-235	**9.14**
Uranium-238	**22.9**
Radium Isotopes by Method GA-01-R, pCi/g	
Actinium-228	**7.89**
Bismuth-212	**9.51**
Bismuth-214	**1.98**
Lead-210	**4.53**
Lead-212	**7.55**
Lead-214	**1.82**
Potassium-40	**2.11**
Protactinium-234	--
Protactinium-234M	**29.6**
Radium-226	**82**
Radium-228	**7.89**
Thallium-208	**2.53**
Thorium-234	**8.69**
Uranium-235	--
Metals by Method 6010, mg/kg	
Aluminum	**2600**
Antimony	**9.1 J**
Arsenic	**350**
Barium	**2400**
Beryllium	**2.4 J**
Cadmium	**37**
Calcium	**8200**
Chromium, Total	**240**
Cobalt	**20 J**
Copper	**300**
Iron	**9800**
Lead	**2600**
Magnesium	**280 J**
Manganese	**60**
Nickel	**140**
Potassium	750 U
Selenium	2.1 U
Silver	**130**
Sodium	**130 J**
Thallium	2.0 U
Vanadium	**5.8 J**
Zinc	**390**
Mercury by Method 7471, mg/kg	
Mercury	**2.9**

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

Other

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

pCi/g = Picocuries per gram

-- = Analyte not analyzed for

"-FD" denotes field duplicate sample

Bold values denote positive hits.

Source: Ecology and Environment, 2016

Table 3.4-1 Compound Specific Isotope Analysis Results

Location	Soil Boring Sample	PCE		TCE		
		δC13	δCl37	δC13	δCl37	δH2
Shed 10 Area (i.e., area north of Building 70's entrance)	CSIA-05-Z1-A	-32.17	-0.68	U	U	U
	CSIA-05-Z1-B	-32.71	-0.89	U	U	U
	CSIA-05-Z1-C	-32.41	-0.51	U	U	U
MW-22 DNAPL	CSIA-01-Z4	-35.23	-1.33	U	U	U
	CSIA-01-Z5	-35.49	-1.56	-34.56	-1.29	156
	CSIA-01-Z6	-35.25	-1.78	-34.40	-1.64	138
	CSIA-01-Z7	-35.68	-1.24	-34.87	-1.30	147
	CSIA-01-Z8	-35.31	-1.49	-34.94	-1.51	130
	CSIA-02-Z6-A	-35.19	-1.49	NA	NA	NA
	CSIA-02-Z6-B	-35.57	-1.81	NA	NA	NA
	CSIA-02-Z7	-35.02	-1.67	NA	NA	NA
	CSIA-02-Z8	-35.26	-1.54	NA	NA	NA
	CSIA-02-Z9	-35.52	-1.38	NA	NA	NA

Location	Monitoring Well	PCE		TCE		
		δC13	δCl37	δC13	δCl37	δH2
MW-22 DNAPL Plume (End Member #2)	MW-11	-33.95	-0.90	U	U	U
	MW-12	-34.00	-0.91	-32.57	0.3	U
	MW-22S	-32.65	-0.93	-31.64	U	U
	MW-22S Duplicate	-32.96	-0.78	-32.13	U	U
	MW-53S	-32.48	-0.7	-30.82 J	U	U
Former Recharge Basin beneath Building 70 Warehouse Extension (Source)	MW-4	-32.31	-0.84	-37.70	U	U
	MW-29S	-32.53	-0.33	U	U	U
GI Source Area (Source)	W-01-75	-30.29	-0.55	-27.46	0.78	367
	W-01-75 Duplicate	-29.83	-0.64	-26.96	0.85	356
	W-25-188	-27.01	0.14	-25.24	0.95	U
	W-27-285	-31.04	-0.53	-29.43	0.17	338
Unknown Offsite Hot Spot (W-18/W-19 Area) (Trying to determine source of)	W-18-150	-31.59	-0.63	-30.53	0.35	326
	W-18-150 Duplicate	-31.01	-0.54	-30.63	0.36	329
	W-19-110	-32.84	-0.84	-32.40	U	U
	W-19-150	-32.05	-0.72	-30.43	0.16	319
	W-20-160	-30.72	-0.21	-30.04	0.26	U
	W-27-240	-26.88	0.20	-24.35	0.88	370
	MW-208-350	-33.02	-0.76	-32.01	0.15	317
Offsite NNW Plume / Western Peripheral (End Member #1)	MW-202-380	U	U	-28.66	0.54	377
	W-37-325	-26.65	0.01	-32.99	0.25	321
	MW-209-380	-30.08	-0.34	-32.99	0.19	314
Downgradient/Sentinel Wells (Trying to determine source of) Currently only evaluated MWP-110-355, MWP-110-440, and S-1-450.	MWP-114-170	U	U	-30.10	0.41	371
	MWP-110-355	-30.29	-0.37	-26.05	0.79	349
	MWP-110-440	-31.05	-0.56	U	U	U
	S-1-450	-30.05	-0.42	-27.03	0.84	362
	W-36-390	-29.53	0.04	-26.91	0.87	351
	W-36-448	-29.45	-0.17	-27.56	0.73	349
	MW-203-360	U	U	-20.59	1.08	367
	MW-210-380	-33.35	-0.87	-31.18	0.41	344
Eastern Peripheral (Source)	MW-207-170	-31.02	-0.41	U	U	U
	PW-2-07	-31.12	-0.79	-27.47	U	U
	PW-6-07	-31.08	-0.43	U	U	U

Notes:

U - Either there was no peak corresponding to the target analyte or that such a peak did not produce a reliable CSIA result.

J - Target analyte producted a low peak signal and the result is considered usable to +/- 20‰, but not the standard +/- 5‰.

NA - Target analyte not analyzed.

Table 3.5-1 Summary of Analytical Results for Building 70 Waste Drain Sludge Samples Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: DR-BB-PIPE SLUDGE Depth: 2 - 2.5 ft Date: 03/06/15
Thorium Isotopes by Method A-01-R, pCi/g	
Thorium-228	**0.757**
Thorium-230	**0.886**
Thorium-232	**0.545**
Uranium Isotopes by Method A-01-R, pCi/g	
Uranium-234	**93.8**
Uranium-235	**4.98**
Uranium-238	**44.0**
Uranium Isotopes by Calculation, pCi/g	
Uranium-234	--
Uranium-235	--
Uranium-238	--
Uranium Isotopes by Method 6020, mg/kg	
Uranium-234	**0.012 J**
Uranium-235	**1.4**
Uranium-236	**0.0051 J**
Uranium-238	**120**
Radium Isotopes and TICs by Method GA-01-R, pCi/g	
Actinium-228	**0.793**
Bismuth-212	--
Bismuth-214	**1.30**
Lead-210	--
Lead-212	**0.938**
Lead-214	**1.34**
Potassium-40	1.31 U
Protactinium-234	**60.0**
Protactinium-234M	--
Radium-226	**1.30**
Radium-228	**0.793**
Thallium-208	**0.298**
Thorium-234	**42.9**
Uranium-235	--

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.5-1 Summary of Analytical Results for Building 70 Waste Drain Sludge Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: DR-BB-PIPE SLUDGE Depth: 2 - 2.5 ft Date: 03/06/15
Metals by Method 6010, mg/kg	
Aluminum	**2300**
Antimony	4.8 U
Arsenic	**4.0 J**
Barium	**86**
Beryllium	1.2 U
Cadmium	**5.6 J**
Calcium	**110000**
Chromium, Total	**150**
Cobalt	**190**
Copper	**3500**
Iron	**19000**
Lead	**320**
Magnesium	**1000 J**
Manganese	**63**
Nickel	**180**
Potassium	1100 U
Selenium	3.2 U
Silver	**500**
Sodium	120 U
Thallium	2.9 U
Vanadium	7.8 U
Zinc	**950**
Mercury by Method 7471, mg/kg	
Mercury	**270**
Volatile Organics by Method 8260, µg/kg	
1,1,1-Trichloroethane	17 UJ
1,1,2,2-Tetrachloroethane	26 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	49 UJ
1,1,2-Trichloroethane	51 UJ
1,1-Dichloroethane	17 UJ
1,1-Dichloroethene	42 UJ
1,2,3-Trichlorobenzene	27 UJ
1,2,4-Trichlorobenzene	25 UJ
1,2-Dibromo-3-Chloropropane	110 UJ
1,2-Dibromoethane (Ethylene Dibromide)	29 UJ
1,2-Dichlorobenzene	23 UJ

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.5-1 Summary of Analytical Results for Building 70 Waste Drain Sludge Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: DR-BB-PIPE SLUDGE Depth: 2 - 2.5 ft Date: 03/06/15
1,2-Dichloroethane	19 UJ
1,2-Dichloropropane	27 UJ
1,3-Dichlorobenzene	13 UJ
1,4-Dichlorobenzene	26 UJ
1,4-Dioxane (P-Dioxane)	3300 UJ
2-Hexanone	22 UJ
Acetone	**170 J**
Benzene	17 UJ
Bromochloromethane	48 UJ
Bromodichloromethane	19 UJ
Bromoform	28 UJ
Bromomethane	42 UJ
Carbon Disulfide	21 UJ
Carbon Tetrachloride	30 UJ
Chlorobenzene	18 UJ
Chloroethane	23 UJ
Chloroform	18 UJ
Chloromethane	43 UJ
Cis-1,2-Dichloroethylene	18 UJ
Cis-1,3-Dichloropropene	11 UJ
Cyclohexane	21 UJ
Dibromochloromethane	17 UJ
Dichlorodifluoromethane	49 UJ
Ethylbenzene	**16000 J**
Isopropylbenzene	17 UJ
m,p-Xylene	**40 J**
Methyl Acetate	**130 J**
Methyl Ethyl Ketone (2-Butanone)	110 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	35 UJ
Methylcyclohexane	**71 J**
Methylene Chloride	87 UJ
o-Xylene	**190 J**
Styrene	**27000 J**
Tert-Butyl Methyl Ether	17 UJ
Tetrachloroethylene	**120 J**
Toluene	22 UJ
Trans-1,2-Dichloroethene	14 UJ

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.5-1 Summary of Analytical Results for Building 70 Waste Drain Sludge Samples Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: DR-BB-PIPE SLUDGE Depth: 2 - 2.5 ft Date: 03/06/15
Trans-1,3-Dichloropropene	17 UJ
Trichloroethylene	30 UJ

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

Other

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

pCi/g = Picocuries per gram

-- = Analyte not analyzed for

"-FD" denotes field duplicate sample

Bold values denote positive hits.

Key at end of table.

Source: Ecology and Environment, 2016

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Table 3.5-2 Summary of Analytical Results for Building 70 Waste Drain Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: DRY-E-B1-23-Z3 Depth: 22 - 23 ft Date: 03/05/15	FD 22 - 23 ft 03/05/15	DRYH-G-EAST 15 - 16 ft 11/04/14	DRYH-G-NORTH 15 - 16 ft 11/04/14	DRYH-G-WEST-1 15 - 16 ft 11/04/14	DRYH-G-WEST-2 16 - 17 ft 11/04/14	DRYH-G-Z3 17 - 18 ft 11/04/14	DRYH-G-Z4 29 - 30 ft 11/04/14	DRYH-G-Z5 39 - 40 ft 11/04/14	DRYH-G-Z6 45 - 46 ft 11/04/14	DRYH-G-Z6-FD 45 - 46 ft 11/04/14	DRYH-G-Z7 50 - 51 ft 11/04/14	DRYH-G-Z8 60 - 61 ft 11/05/14	Z23 22 - 23 ft 03/04/15
Thorium Isotopes by Method A-01-R, pCi/g														
Thorium-228	**0.136**	**0.109**	**9.71**	**4.73**	**11.2**	**0.511**	**0.169**	**3.89**	**0.136**	**0.148**	**0.119**	**0.463**	**0.647**	**0.237**
Thorium-230	**0.183**	**0.148**	**3.35**	**1.69**	**4.02**	**0.294**	**0.185**	**1.61**	**0.150**	**0.205**	**0.140**	**0.337**	**0.858**	**0.449**
Thorium-232	**0.183**	**0.153**	**9.26**	**4.69**	**10.7**	**0.574**	**0.0893**	**3.82**	**0.0869**	**0.102**	**0.139**	**0.542**	**0.73**	**0.236**
Uranium Isotopes by Method A-01-R, pCi/g														
Uranium-234	**0.266**	**0.159**	**355**	**197**	**435**	**15.3**	**1.66**	**231**	**0.139**	**0.105**	**0.113**	**0.268**	**0.664**	**11.0**
Uranium-235	0.0300 U	0.0472 U	**18.6**	**10.1**	**22.3**	**0.707**	**0.0568**	**11.4**	0.0288 U	0.0494 U	0.0302 U	0.0299 U	0.0450 U	**0.426**
Uranium-238	**0.183**	**0.192**	**9.46**	**7.38**	**16.7**	**0.791**	**0.276**	**8.02**	**0.0655**	**0.139**	**0.0787**	**0.278**	**0.599**	**2.39**
Uranium Isotopes by Method 6020, mg/kg														
Uranium-234	0.0017 U	0.0016 U	**0.0092 J**	**0.022 J**	**0.014 J**	**0.0024 J**	0.0013 U	**0.065**	0.0014 U	0.0013 U	0.0013 U	0.0017 U	0.0017 U	0.0016 U
Uranium-235	0.012 U	0.011 U	**1.3**	**2.8**	**1.8**	**0.26**	**0.032**	**8.5**	0.0092 U	0.0088 U	0.0088 U	0.011 U	0.012 U	**0.096**
Uranium-236	0.0023 U	0.0022 U	**0.0034 J**	**0.0074 J**	**0.0047 J-**	0.002 U	0.0018 U	**0.023 J**	0.0018 U	0.0017 U	0.0017 U	0.0022 U	0.0023 U	0.0021 U
Uranium-238	**0.51**	**0.34**	**3.8**	**13**	**6.8**	**2.0**	**0.59**	**28**	**0.20**	**0.48**	**0.079**	**0.40**	**0.83**	**4.2**
Radium Isotopes and TICs by Method GA-01-R, pCi/g														
Actinium-228	--	--	**7.68**	**3.49**	**6.06**	--	--	**2.43**	--	--	--	**0.685**	**1.51**	--
Beryllium-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bismuth-212	--	--	**9.29**	**3.35**	**10.8**	--	--	--	--	--	--	--	--	--
Bismuth-214	--	--	**1.26**	**0.883**	**1.59**	**0.361**	**0.265**	**0.793**	**0.237**	**0.219**	**0.158**	**0.483**	**1.15**	**0.416**
Lead-210	--	**3.41**	--	--	--	--	--	--	--	--	--	--	--	--
Lead-212	--	**0.150**	**7.88**	**3.35**	**8.98**	**0.478**	**0.163**	**2.49**	**0.223**	--	--	**0.571**	**1.56**	**0.237**
Lead-214	**0.188**	--	**1.60**	**0.884**	**1.88**	**0.383**	**0.211**	**0.793**	**0.222**	--	**0.165**	**0.502**	**1.37**	**0.351**
Potassium-40	**4.70 J**	1.94 UJ	**4.52**	**5.33**	2.37 U	**3.71**	**3.49**	**4.28**	**1.12**	**1.72 J**	0.789 UJ	**3.62**	**13.6**	**5.73**
Protactinium-234	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Radium-226	0.130 U	0.119 U	**1.26**	**0.883**	**1.59**	**0.361**	**0.265**	**0.793**	**0.237**	**0.219**	**0.158**	**0.483**	**1.15**	**0.416**
Radium-228	**0.211**	0.278 U	**7.68**	**3.49**	**6.06**	0.249 U	0.248 U	**2.43**	0.215 U	0.137 U	0.146 U	**0.685**	**1.51**	0.230 U
Thallium-208	**0.0794**	--	**2.82**	**1.23**	**3.43**	**0.172**	**0.0692**	**0.956**	**0.0933**	--	--	**0.253**	**0.532**	**0.0689**
Thorium-234	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Uranium-235	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals by Method 6010, mg/kg														
Aluminum	**2300 J**	**1000 J**	**13000**	**6700**	**16000**	**1400**	**1700**	**6900**	**970**	**1200**	**570**	**970**	**3900 J**	**1700**
Antimony	0.70 U	0.67 U	**43**	**22 J**	**70**	3.1 U	2.7 U	**6.5 J**	2.8 U	2.7 U	2.7 U	3.4 U	3.5 UJ	0.66 U
Arsenic	**1.4 J**	**1.7 J**	**230**	**280**	**350 J-**	**18**	2.1 U	**70**	**2.5 J**	**2.0 J**	2.1 U	**4.4 J**	**6.8 J**	**3.5**
Barium	**5.8 J**	**6.7 J**	**760**	**680**	**840**	**120**	**60**	**360**	**2.8 J**	**5.3 J**	**3.6 J**	**3.9 J**	**16 J**	**6.4 J**
Beryllium	0.17 U	0.16 U	1 U	0.95 U	1 UJ	0.75 U	0.66 U	0.84 U	0.68 U	0.65 U	0.65 U	0.83 U	0.86 U	0.16 U
Cadmium	0.078 U	0.074 U	**16**	**14**	**24 J**	**0.4 J**	0.30 U	**1.3 J**	0.31 U	0.29 U	0.30 U	0.37 U	0.39 U	0.073 U
Calcium	**130 J**	**130 J**	**2500 J**	**2300 J**	**4900 J**	**370 J**	**72 J**	**1500 J**	61 U	58 U	59 U	74 U	**200 J**	**170 J**
Chromium, Total	**11**	**12**	**780**	**420**	**1000**	**42**	**8.7 J**	**250**	**3.9 J**	**41**	**2.7 J**	**6.2 J**	**21**	**7.0**
Cobalt	**1.7 J**	**1.8 J**	**1400**	**970**	**1400**	**55**	**3.7 J**	**220**	1.3 U	**2.3 J**	**1.6 J**	**1.8 J**	**9.3 J**	**1.3 J**
Copper	**110 J**	**20 J**	**1500**	**1200**	**2100**	**70**	**9.8 J**	**360**	**4.9 J**	**5.9 J**	2.1 U	2.7 U	**5.8 J**	**14**
Iron	**4800**	**5700**	**7700**	**3400**	**7000**	**5000**	**6600**	**6500**	**3300**	**5800 J**	**1700 J**	**6400**	**32000**	**6800**
Lead	**18**	**17**	**2800**	**2100**	**3500**	**140**	1.1 U	**690**	1.2 U	1.1 U	1.1 U	1.4 U	4.9 U	**35**
Magnesium	**180 J**	**220**	**730 J**	**400 J**	**660 J**	**220 J**	**710 J**	**610 J**	**77 J**	**68 J**	**36 J**	**57 J**	**310 J**	**350**
Manganese	**55**	**49**	**50**	**38**	**80 J**	**22**	**300**	**48**	**35**	**110**	**83**	**62**	**250 J**	**50**
Nickel	**3.4 J**	**3.5 J**	**2200**	**1200**	**2600**	**71**	**3.3 J**	**400**	**1.3 J**	**1.3 J**	1.0 U	**2.3 J**	**8.9 J**	**3.7 J**
Potassium	170 U	160 U	980 U	920 U	1000 U	730 U	640 U	810 U	660 U	620 U	630 U	800 U	830 U	**180 J**
Selenium	0.47 U	0.45 U	**99**	**82**	**130 J**	13 U	1.8 U	**22**	3.6 U	1.8 U	3.5 U	2.3 U	2.4 U	0.44 U
Silver	**1.8 J**	**2.0 J**	**240**	**200**	**140**	**130**	**6.2 J**	**240**	1.1 U	1.4 U	1.6 U	0.77 U	1.3 U	**0.17 J**
Sodium	17 U	17 U	**330 J**	**280 J**	**520 J-**	76 U	67 U	**220 J**	69 U	66 U	66 U	84 U	87 U	16 U
Thallium	0.43 U	0.41 U	2.6 U	2.4 U	2.6 UR	1.9 U	1.7 U	2.1 U	1.7 U	1.6 U	1.7 U	2.1 U	2.2 U	0.41 U
Vanadium	4.8 U	**5.7 J**	13 U	9.3 U	21 U	5.1 U	5.3 U	17 U	4.6 U	4.4 U	4.4 U	5.8 U	15 U	**12**
Zinc	**72**	**76**	**3500**	**1900**	**3400**	**160**	20 U	**560**	14 U	7.0 U	4.9 U	14 U	40 U	**76**
Mercury by Method 7471, mg/kg														
Mercury	**0.042**	**0.054**	**2.4 J-**	**0.83 J-**	**2.1 J-**	**0.092 J-**	0.01 UR	**0.72 J-**	0.01 UR	0.011 UR	0.011 UR	0.012 UR	0.013 UR	**0.037 J**

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.5-2 Summary of Analytical Results for Building 70 Waste Drain Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name:	DRY-E-B1-23-Z3	FD	DRYH-G-EAST	DRYH-G-NORTH	DRYH-G-WEST-1	DRYH-G-WEST-2	DRYH-G-Z3	DRYH-G-Z4	DRYH-G-Z5	DRYH-G-Z6	DRYH-G-Z6-FD	DRYH-G-Z7	DRYH-G-Z8	Z23
	Depth:	22 - 23 ft	22 - 23 ft	15 - 16 ft	15 - 16 ft	15 - 16 ft	16 - 17 ft	17 - 18 ft	29 - 30 ft	39 - 40 ft	45 - 46 ft	45 - 46 ft	50 - 51 ft	60 - 61 ft	22 - 23 ft
	Date:	03/05/15	03/05/15	11/04/14	11/04/14	11/04/14	11/04/14	11/04/14	11/04/14	11/04/14	11/04/14	11/04/14	11/04/14	11/05/14	03/04/15
Volatile Organics by Method 8260, µg/kg															
1,1,1-Trichloroethane		0.37 U	0.50 U	14 UJ	9.6 UJ	16 U	0.46 UJ	0.42 U	17 UJ	0.49 U	0.5 U	0.48 U	0.44 U	--	0.37 U
1,1,2,2-Tetrachloroethane		0.35 U	0.47 U	21 UJ	15 UJ	24 U	0.43 UJ	0.39 U	26 UJ	0.46 U	0.46 U	0.44 U	0.41 U	--	0.35 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.5 U	2.0 U	39 UJ	27 UJ	45 U	1.8 UJ	1.6 U	49 UJ	1.9 U	1.9 U	1.9 U	1.7 U	--	1.5 U
1,1,2-Trichloroethane		0.50 U	0.67 U	41 UJ	28 UJ	48 U	0.61 UJ	0.56 U	51 UJ	0.65 U	0.66 U	0.63 U	0.58 U	--	0.50 U
1,1-Dichloroethane		0.34 U	0.46 U	14 UJ	9.7 UJ	16 U	0.42 UJ	0.38 U	17 UJ	0.45 U	0.45 U	0.43 U	0.4 U	--	0.34 U
1,1-Dichloroethene		1.4 U	1.9 U	34 UJ	23 UJ	39 U	1.7 UJ	1.6 U	42 UJ	1.8 U	1.9 U	1.8 U	1.6 U	--	1.4 U
1,2,3-Trichlorobenzene		0.39 U	0.52 U	22 UJ	15 UJ	25 U	0.47 UJ	0.43 U	27 UJ	0.51 U	0.51 U	0.49 U	0.45 U	--	0.39 U
1,2,4-Trichlorobenzene		0.37 U	0.50 U	20 UJ	14 UJ	23 U	0.45 UJ	0.41 U	25 UJ	0.49 U	0.49 U	0.47 U	0.43 U	--	0.37 U
1,2-Dibromo-3-Chloropropane		1.3 U	1.7 U	90 UJ	63 UJ	100 U	1.5 UJ	1.4 U	110 UJ	1.7 U	1.7 U	1.6 U	1.5 U	--	1.3 U
1,2-Dibromoethane (Ethylene Dibromide)		0.61 U	0.81 U	24 UJ	16 UJ	27 U	0.75 UJ	0.68 U	29 UJ	0.8 U	0.81 U	0.77 U	0.71 U	--	0.61 U
1,2-Dichlorobenzene		0.25 U	0.33 U	18 UJ	13 UJ	21 U	0.3 UJ	0.27 U	23 UJ	0.32 U	0.33 U	0.31 U	0.29 U	--	0.24 U
1,2-Dichloroethane		0.75 U	1.0 U	15 UJ	11 UJ	18 U	0.93 UJ	0.84 U	19 UJ	0.99 U	1 U	0.96 U	0.88 U	--	0.75 U
1,2-Dichloropropane		0.33 U	0.45 U	22 UJ	15 UJ	25 U	0.41 UJ	0.37 U	27 UJ	0.44 U	0.44 U	0.42 U	0.39 U	--	0.33 U
1,3-Dichlorobenzene		0.24 U	0.33 U	10 UJ	7.2 UJ	12 U	0.3 UJ	0.27 U	13 UJ	0.32 U	0.32 U	0.31 U	0.28 U	--	0.24 U
1,4-Dichlorobenzene		0.52 U	0.70 U	21 UJ	14 UJ	24 U	0.64 UJ	0.58 U	26 UJ	0.69 U	0.69 U	0.66 U	0.61 U	--	0.52 U
1,4-Dioxane (P-Dioxane)		31 U	42 U	2700 UJ	1900 UJ	3100 U	38 UJ	35 U	3400 UJ	41 U	41 U	40 U	36 U	--	31 U
2-Hexanone		**12 J**	2.1 U	17 UJ	12 UJ	20 U	1.9 UJ	1.7 U	22 UJ	2 U	2 U	2 U	1.8 U	--	1.5 U
Acetone		**25**	**26**	**230 J**	81 UJ	140 U	90 UJ	8.2 U	**320 J**	12 U	12 U	19 U	35 U	--	12 U
Benzene		0.22 U	0.29 U	14 UJ	9.5 UJ	16 U	0.27 UJ	0.25 U	17 UJ	0.29 U	0.29 U	0.28 U	0.26 U	--	0.22 U
Bromochloromethane		0.72 U	0.96 U	38 UJ	26 UJ	44 U	0.88 UJ	0.8 U	48 UJ	0.94 U	0.95 U	0.91 U	0.84 U	--	0.71 U
Bromodichloromethane		0.22 U	0.30 U	15 UJ	10 UJ	**22 J**	0.27 UJ	0.25 U	19 UJ	0.29 U	0.29 U	0.28 U	0.26 U	--	0.22 U
Bromoform		0.32 U	0.43 U	22 UJ	16 UJ	26 U	0.39 UJ	0.36 U	28 UJ	0.42 U	0.42 U	0.4 U	0.37 U	--	0.32 U
Bromomethane		0.96 U	1.3 U	33 UJ	23 UJ	39 U	1.2 UJ	1.1 U	42 UJ	1.3 U	1.3 U	1.2 U	1.1 U	--	0.96 U
Carbon Disulfide		**0.62 J**	0.80 U	**83 J**	**57 J**	**420**	**16 J**	0.67 U	21 UJ	0.78 U	0.79 U	0.76 U	0.7 U	--	0.59 U
Carbon Tetrachloride		0.45 U	0.60 U	**29 J**	17 UJ	**1600**	0.55 UJ	0.5 U	30 UJ	0.59 U	0.59 U	0.57 U	0.52 U	--	0.45 U
Chlorobenzene		0.33 U	0.45 U	14 UJ	9.9 UJ	17 U	0.41 UJ	0.37 U	18 UJ	0.44 U	0.44 U	0.42 U	0.39 U	--	0.33 U
Chloroethane		0.45 U	0.60 U	19 UJ	13 UJ	21 UJ	0.55 UJ	0.5 U	23 UJ	0.59 U	0.6 U	0.57 U	0.52 U	--	0.45 U
Chloroform		0.33 U	0.44 U	15 UJ	10 UJ	**61 J**	0.4 UJ	0.37 U	18 UJ	0.43 U	0.43 U	0.42 U	0.38 U	--	0.33 U
Chloromethane		0.56 U	0.76 U	35 UJ	24 UJ	40 UJ	0.69 UJ	0.63 U	43 UJ	0.74 U	0.75 U	0.72 U	0.66 U	--	0.56 U
Cis-1,2-Dichloroethylene		0.52 U	0.70 U	14 UJ	10 UJ	17 U	0.64 UJ	0.58 U	18 UJ	0.68 U	0.69 U	0.66 U	0.61 U	--	0.52 U
Cis-1,3-Dichloropropene		0.52 U	0.69 U	8.9 UJ	6.1 UJ	10 U	0.64 UJ	0.58 U	11 UJ	0.68 U	0.69 U	0.66 U	0.6 U	--	0.52 U
Cyclohexane		0.32 U	0.42 U	17 UJ	12 UJ	20 UJ	0.39 UJ	0.35 U	21 UJ	0.41 U	0.42 U	0.4 U	0.37 U	--	0.32 U
Dibromochloromethane		0.35 U	0.47 U	14 UJ	9.7 UJ	16 U	11 UJ	0.4 U	18 UJ	0.46 U	0.47 U	0.45 U	0.41 U	--	0.35 U
Dichlorodifluoromethane		1.1 U	1.5 U	40 UJ	27 UJ	46 UJ	1.4 UJ	1.3 U	49 UJ	1.5 U	1.5 U	1.4 U	1.3 U	--	1.1 U
Ethylbenzene		**3.3 J**	0.35 U	11 UJ	7.9 UJ	13 U	0.32 UJ	0.29 U	14 UJ	0.34 U	0.34 U	0.33 U	0.3 U	--	0.26 U
Isopropylbenzene (Cumene)		0.22 U	0.30 U	13 UJ	9.3 UJ	16 U	0.28 UJ	0.25 U	17 UJ	0.29 U	0.3 U	0.29 U	0.26 U	--	0.22 U
m,p-Xylene		**2.7 J**	0.66 U	21 UJ	14 UJ	24 U	0.61 UJ	0.55 U	**38 J**	0.65 U	0.66 U	0.63 U	0.58 U	--	0.49 U
Methyl Acetate		1.2 U	1.6 U	75 UJ	52 UJ	86 U	**4.4 J**	1.3 U	93 UJ	1.6 U	1.6 U	1.5 U	1.4 U	--	1.2 U
Methyl Ethyl Ketone		1.7 U	2.2 U	92 UJ	63 UJ	110 U	7.9 U	1.9 U	110 UJ	2.2 U	2.2 U	2.1 U	1.9 U	--	1.7 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		0.64 U	0.85 U	28 UJ	19 UJ	33 U	0.78 UJ	0.71 U	35 UJ	0.84 U	0.84 U	0.81 U	0.74 U	--	0.64 U
Methylcyclohexane		0.23 U	0.30 U	**540 J**	**310 J**	**4500 J**	**30 J**	0.25 U	**450 J**	0.3 U	0.3 U	0.29 U	0.26 U	--	0.23 U
Methylene Chloride		1.4 U	1.8 U	70 UJ	48 UJ	81 U	1.7 U	1.6 U	**210 J**	2.0 U	1.8 U	3.7 U	1.6 U	--	1.4 U
O-Xylene (1,2-Dimethylbenzene)		0.29 U	0.39 U	23 UJ	16 UJ	26 U	0.36 UJ	0.33 U	29 UJ	0.38 U	0.39 U	0.37 U	0.34 U	--	0.29 U
Styrene		**4.9**	0.40 U	20 UJ	14 UJ	23 U	0.37 UJ	0.34 U	25 UJ	0.4 U	0.4 U	0.38 U	0.35 U	--	0.30 U
Tert-Butyl Methyl Ether		0.41 U	0.55 U	14 UJ	9.5 UJ	16 U	0.51 UJ	0.46 U	17 UJ	0.54 U	0.55 U	0.53 U	0.48 U	--	0.41 U
Tetrachloroethylene		**1.8 J**	**1.0 J**	**490 J**	**230 J**	32 U	**560 J**	0.31 U	**950 J**	0.37 U	0.37 U	0.36 U	0.33 U	--	0.28 U
Toluene		**0.64 J**	0.82 U	18 UJ	**130 J**	20 U	0.75 UJ	0.68 U	**190 J**	0.8 U	0.81 U	0.77 U	0.71 U	--	0.61 U
Trans-1,2-Dichloroethene		0.82 U	1.1 U	11 UJ	7.8 UJ	13 U	1 UJ	0.92 U	14 UJ	1.1 U	1.1 U	1 U	0.96 U	--	0.82 U
Trans-1,3-Dichloropropene		0.30 U	0.41 U	13 UJ	9.2 UJ	15 U	0.37 UJ	0.34 U	17 UJ	0.4 U	0.4 U	0.39 U	0.35 U	--	0.30 U
Trichloroethylene		0.33 U	0.45 U	**52 J**	**300**	28 U	**3.7 J**	0.37 U	**320 J**	0.44 U	0.44 U	0.43 U	0.39 U	--	0.33 U
Trichlorofluoromethane		0.43 U	0.58 U	19 UJ	13 UJ	22 UJ	0.53 UJ	0.49 U	24 UJ	0.57 U	0.58 U	0.55 U	0.51 U	--	0.43 U
Vinyl Chloride		0.37 U	0.50 U	38 UJ	26 UJ	44 UJ	0.46 UJ	0.42 U	48 UJ	0.49 U	0.49 U	0.47 U	0.43 U	--	0.37 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.5-2 Summary of Analytical Results for Building 70 Waste Drain Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Sample Name: / Depth: / Date: / Analyte	DRYH-H-SG1 19 - 19 ft 03/03/15	DRYH-H-SG2 19 - 19 ft 03/03/15	DRYH-H-SG3 19 - 19 ft 03/03/15	Z3 16 - 17 ft 03/06/15	DRYH-I-SG1 15 - 16 ft 03/06/15	DRYH-J-SG1 16 - 17 ft 06/02/15	DRYH-J-SG2 16 - 17 ft 06/02/15	DRYH-J-SG3 16 - 17 ft 06/02/15	DRY-J-B1-19-Z3 18 - 19 ft 06/02/15
Thorium Isotopes by Method A-01-R, pCi/g									
Thorium-228	**0.246**	**0.232**	**0.266**	**0.175**	**0.29**	**0.295**	**0.167**	**0.264**	**0.128**
Thorium-230	**0.378**	**0.444**	**0.456**	**0.376**	**0.431**	**1.04**	**0.355**	**0.711**	**0.247**
Thorium-232	**0.364**	**0.22**	**0.282**	**0.215**	**0.306**	**0.178**	**0.152**	**0.214**	**0.140**
Uranium Isotopes by Method A-01-R, pCi/g									
Uranium-234	**3.01**	**4.59**	**11.7**	**5.70**	**8.51 J**	**1140**	**45.2**	**815**	**19.1**
Uranium-235	**0.140**	**0.178**	**0.494**	**0.241**	**0.401**	**53.1**	**2.78**	**33.5**	**1.06**
Uranium-238	**0.869**	**1.47**	**2.42**	**0.949**	**1.57**	**391**	**21.2**	**286**	**10.4**
Uranium Isotopes by Method 6020, mg/kg									
Uranium-234	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0019 U	**0.16 J**	**0.012**	**0.14**	**0.0032 J**
Uranium-235	**0.045**	**0.090**	**0.16**	**0.098**	**0.18**	**18 J**	**1.4**	**15**	**0.36**
Uranium-236	0.0024 U	0.0024 U	0.0024 U	0.0019 U	0.0025 U	**0.085 J**	**0.0051 J**	**0.053**	**0.0014 J**
Uranium-238	**1.9**	**4.5**	**6.1**	**3.4**	**11**	**1500 J**	**97**	**800**	**27**
Radium Isotopes and TICs by Method GA-01-R, pCi/g									
Actinium-228	--	--	**0.494**	**0.392**	--	--	**0.157**	--	--
Beryllium-7	--	--	--	--	**2.32**	--	--	--	--
Bismuth-212	--	--	--	--	--	--	--	--	--
Bismuth-214	**0.196**	--	**0.333**	**0.228**	**0.328**	**0.643**	**0.389**	**0.446**	**0.336**
Lead-210	**2.63**	**4.14**	**4.21**	--	**9.95**	--	--	--	--
Lead-212	**0.209**	**0.202**	**0.341**	**0.225**	**0.414**	**0.393**	**0.247**	**0.216**	**0.197**
Lead-214	**0.224**	**0.196**	**0.398**	**0.259**	**0.441**	**0.544**	**0.493**	**0.601**	**0.257**
Potassium-40	**3.69**	**5.33**	**5.69**	**6.23**	**6.26**	**5.26**	**5.60**	**3.46**	**6.69**
Protactinium-234	--	--	--	--	--	**321**	**23.5**	**184**	--
Radium-226	**0.196**	0.149 U	**0.333**	**0.228**	**0.328**	**0.643**	**0.389**	**0.446**	**0.336**
Radium-228	0.168 U	0.225 U	**0.494**	**0.392**	**0.283**	0.375 U	**0.157**	0.336 U	0.220 U
Thallium-208	**0.145**	--	--	**0.0681**	**0.238**	**0.145**	**0.0614**	--	**0.113**
Thorium-234	--	--	--	--	--	**292**	**17.3**	**164**	**7.27**
Uranium-235	--	--	--	--	--	**30.3**	**1.79**	**18.2**	**0.817**
Metals by Method 6010, mg/kg									
Aluminum	**2500**	**2300**	**2600**	**2300**	**5300**	**1800 J**	**1100**	**2100**	**870**
Antimony	0.75 U	0.74 U	0.73 U	0.60 U	**1.4 J**	3.0 U	2.8 U	2.7 U	2.8 U
Arsenic	**2.6**	**6.0**	**3.7**	**3.2**	**7.8**	2.3 U	2.1 U	2.1 U	2.1 U
Barium	**9.0 J**	**11 J**	**12**	**6.6 J**	**27**	**31 J**	**6.6 J**	**27 J**	**4.5 J**
Beryllium	0.18 U	0.18 U	0.18 U	0.14 U	0.19 U	0.73 U	0.67 U	0.65 U	0.68 U
Cadmium	0.22 U	0.50 U	0.26 U	0.066 U	**0.71 J**	**2.8 J**	0.30 U	**1.9 J**	0.31 U
Calcium	**120 J**	**160 J**	**200 J**	**68 J**	**670**	**480 J**	**88 J**	**780 J**	**61 J**
Chromium, Total	**21**	**26**	**17**	**13**	**150 J**	**22 J**	**3.2 J**	**16**	**2.3 J**
Cobalt	**1.4 J**	**1.9 J**	**2.3 J**	**1.8 J**	**3.6 J**	**9.5 J**	**1.5 J**	**10 J**	1.3 U
Copper	**53**	**110**	**59**	**56**	**220 J**	**280 J**	**44**	**300**	**9.8 J**
Iron	**6800**	**10000**	**8200**	**5900**	**8600**	**8100 J**	**3800**	**5600**	**3300**
Lead	**66**	**130**	**120**	**47**	**300 J**	**57 J**	1.2 U	**78**	1.2 U
Magnesium	**720**	**350**	**430**	**420**	**920 J**	**290 J**	**200 J**	**410 J**	**130 J**
Manganese	**25**	**37**	**44**	**63**	**47**	**55 J**	**34**	**55**	**49**
Nickel	**5.6 J**	**11**	**8.4 J**	**3.5 J**	**16**	**19 J**	**2.7 J**	**14 J**	**1.9 J**
Potassium	**230 J**	**170 J**	**190 J**	**200 J**	**350 J**	700 U	650 U	630 U	650 U
Selenium	0.50 U	0.49 U	0.49 U	0.40 U	**0.91 J**	2.0 U	1.8 U	1.8 U	1.9 U
Silver	**0.53 J**	**1.7 J**	**0.78 J**	0.14 U	**1.8 J**	0.68 U	0.63 U	0.61 U	0.63 U
Sodium	**19 J**	**38 J**	**29 J**	**15 J**	**78 J**	**90 J**	68 U	**420 J**	69 U
Thallium	0.46 U	**0.50 J**	**0.50 J**	0.37 U	0.48 U	1.8 U	1.7 U	1.7 U	1.7 U
Vanadium	**19**	**37**	**31**	**15**	**44**	**7.9 J**	**7.6 J**	**9.2 J**	**6.0 J**
Zinc	**190**	**480**	**330**	**34**	**250 J**	**120 J**	**21 J**	**140**	**13 J**
Mercury by Method 7471, mg/kg									
Mercury	**0.11**	**0.14**	**0.099**	**0.020 J**	**0.18**	**0.48 J**	**0.22**	**0.65**	**0.065**

Key at end of table.

Table 3.5-2 Summary of Analytical Results for Building 70 Waste Drain Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Sample Name:	DRYH-H-SG1	DRYH-H-SG2	DRYH-H-SG3	Z3	DRYH-I-SG1	DRYH-J-SG1	DRYH-J-SG2	DRYH-J-SG3	DRY-J-B1-19-Z3
Depth:	19 - 19 ft	19 - 19 ft	19 - 19 ft	16 - 17 ft	15 - 16 ft	16 - 17 ft	16 - 17 ft	16 - 17 ft	18 - 19 ft
Date:	03/03/15	03/03/15	03/03/15	03/06/15	03/06/15	06/02/15	06/02/15	06/02/15	06/02/15
Analyte									
Volatile Organics by Method 8260, µg/kg									
1,1,1-Trichloroethane	0.39 UR	0.45 UR	0.43 UR	0.37 U	0.80 UR	0.35 UJ	0.45 UJ	0.25 UR	0.25 UJ
1,1,2,2-Tetrachloroethane	0.36 UR	0.41 UR	0.40 UR	0.34 U	0.74 UR	0.32 UJ	0.41 UJ	0.23 UR	0.23 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.5 UR	1.7 UR	1.7 UR	1.4 U	3.1 UR	1.4 UJ	1.7 UJ	0.96 UR	0.97 UJ
1,1,2-Trichloroethane	0.51 UR	0.59 UR	0.57 UR	0.49 U	1.1 UR	0.46 UJ	0.59 UJ	0.33 UR	0.33 UJ
1,1-Dichloroethane	0.35 UR	0.41 UR	0.39 UR	0.33 U	0.73 UR	0.32 UJ	0.41 UJ	0.22 UR	0.23 UJ
1,1-Dichloroethene	1.4 UR	1.7 UR	1.6 UR	1.4 U	3.0 UR	1.3 UJ	1.7 UJ	0.92 UR	0.93 UJ
1,2,3-Trichlorobenzene	0.40 UR	0.46 UR	0.44 UR	0.38 U	0.82 UR	0.36 UJ	0.46 UJ	0.25 UR	0.26 UJ
1,2,4-Trichlorobenzene	0.38 UR	0.44 UR	0.42 UR	0.36 U	0.79 UR	0.34 UJ	0.44 UJ	0.24 UR	0.25 UJ
1,2-Dibromo-3-Chloropropane	1.3 UR	1.5 UR	1.4 UR	1.2 U	2.7 UR	1.2 UJ	1.5 UJ	0.83 UR	0.84 UJ
1,2-Dibromoethane (Ethylene Dibromide)	0.63 UR	0.72 UR	0.69 UR	0.59 U	1.3 UR	0.56 UJ	0.72 UJ	0.4 UR	0.4 UJ
1,2-Dichlorobenzene	0.25 UR	0.29 UR	0.28 UR	0.24 U	0.52 UR	0.23 UJ	0.29 UJ	0.16 UR	0.16 UJ
1,2-Dichloroethane	0.78 UR	0.90 UR	0.86 UR	0.74 U	1.6 UR	0.7 UJ	0.9 UJ	0.49 UR	0.5 UJ
1,2-Dichloropropane	0.34 UR	0.40 UR	0.38 UR	0.33 U	0.71 UR	0.31 UJ	0.4 UJ	0.22 UR	0.22 UJ
1,3-Dichlorobenzene	0.25 UR	0.29 UR	0.28 UR	0.24 U	0.52 UR	0.23 UJ	0.29 UJ	0.16 UR	0.16 UJ
1,4-Dichlorobenzene	0.54 UR	**0.98 J**	0.60 UR	0.51 U	1.1 UR	0.48 UJ	0.62 UJ	0.34 UR	0.35 UJ
1,4-Dioxane (P-Dioxane)	32 UR	37 UR	36 UR	30 U	66 UR	29 UJ	37 UJ	20 UR	21 UJ
2-Hexanone	1.6 UR	1.8 UR	1.8 UR	1.5 U	3.3 UR	1.4 UJ	1.8 UJ	1 UR	1.0 UJ
Acetone	5.8 UR	6.7 UR	6.4 UR	**15 J**	**190 J**	5.2 UJ	6.7 UJ	3.7 UR	3.7 UJ
Benzene	0.23 UR	0.26 UR	0.25 UR	0.22 U	0.47 UR	0.2 UJ	0.26 UJ	0.14 UR	0.15 UJ
Bromochloromethane	0.74 UR	0.85 UR	0.82 UR	0.70 U	1.5 UR	0.66 UJ	0.85 UJ	0.47 UR	0.47 UJ
Bromodichloromethane	0.23 UR	0.26 UR	0.25 UR	0.22 U	0.47 UR	0.20 UJ	0.26 UJ	0.14 UR	0.15 UJ
Bromoform	0.33 UR	0.38 UR	0.36 UR	0.31 U	0.68 UR	0.29 UJ	0.38 UJ	0.21 UR	0.21 UJ
Bromomethane	0.99 UR	1.1 UR	1.1 UR	0.94 U	2.0 UR	0.89 UJ	1.1 UJ	0.63 UR	0.63 UJ
Carbon Disulfide	0.62 UR	**2.4 J**	**0.99 J**	0.58 U	1.3 UR	0.55 UJ	0.71 UJ	0.39 UR	0.40 UJ
Carbon Tetrachloride	0.46 UR	0.53 UR	0.51 UR	0.44 U	0.95 UR	0.41 UJ	0.53 UJ	0.29 UR	0.30 UJ
Chlorobenzene	0.34 UR	0.39 UR	0.38 UR	0.32 U	0.71 UR	0.31 UJ	0.39 UJ	0.22 UR	0.22 UJ
Chloroethane	0.46 UR	0.53 UR	0.51 UR	0.44 U	0.96 UR	0.42 UJ	0.53 UJ	0.29 UR	0.3 UJ
Chloroform	0.34 UR	0.39 UR	0.37 UR	0.32 U	0.70 UR	0.30 UJ	0.39 UJ	0.21 UR	0.22 UJ
Chloromethane	0.58 UR	0.67 UR	0.65 UR	0.55 U	1.2 UR	0.52 UJ	0.67 UJ	0.37 UR	0.37 UJ
Cis-1,2-Dichloroethylene	0.54 UR	0.62 UR	0.59 UR	0.51 U	1.1 UR	0.48 UJ	0.62 UJ	0.34 UR	0.34 UJ
Cis-1,3-Dichloropropene	0.53 UR	0.62 UR	0.59 UR	0.51 U	1.1 UR	0.48 UJ	0.62 UJ	0.34 UR	0.34 UJ
Cyclohexane	0.33 UR	0.38 UR	0.36 UR	0.31 U	0.67 UR	0.29 UJ	0.38 UJ	0.21 UR	0.21 UJ
Dibromochloromethane	0.36 UR	0.42 UR	0.40 UR	0.35 U	0.75 UR	0.33 UJ	0.42 UJ	0.23 UR	0.23 UJ
Dichlorodifluoromethane	1.2 UR	1.4 UR	1.3 UR	1.1 U	2.4 UR	1.1 UJ	1.4 UJ	0.75 UR	0.76 UJ
Ethylbenzene	0.27 UR	0.31 UR	0.30 UR	0.25 U	0.55 UR	0.24 UJ	0.31 UJ	0.17 UR	0.17 UJ
Isopropylbenzene (Cumene)	0.23 UR	0.27 UR	0.26 UR	0.22 U	0.48 UR	0.21 UJ	0.27 UJ	0.15 UR	0.15 UJ
m,p-Xylene	0.51 UR	0.59 UR	0.57 UR	0.48 U	1.1 UR	0.46 UJ	0.59 UJ	0.32 UR	0.33 UJ
Methyl Acetate	1.2 UR	**3.8 J**	1.4 UR	1.2 U	**92 J**	1.1 UJ	1.4 UJ	**20 J**	0.80 UJ
Methyl Ethyl Ketone	6.5 UR	**15 J**	1.9 UR	1.6 U	**83 J**	1.5 UJ	2.0 UJ	1.1 UR	1.1 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.66 UR	0.76 UR	0.73 UR	0.62 U	1.4 UR	0.59 UJ	0.76 UJ	0.42 UR	0.42 UJ
Methylcyclohexane	0.23 UR	0.27 UR	0.26 UR	0.22 U	0.48 UR	0.21 UJ	0.27 UJ	0.15 UR	0.15 UJ
Methylene Chloride	1.4 UR	1.6 UR	1.6 UR	1.3 U	2.9 UR	1.3 UJ	1.6 UJ	0.90 UR	0.91 UJ
O-Xylene (1,2-Dimethylbenzene)	0.30 UR	0.35 UR	0.33 UR	0.29 U	0.62 UR	0.27 UJ	0.35 UJ	0.19 UR	0.19 UJ
Styrene	0.31 UR	0.36 UR	0.34 UR	0.30 U	0.64 UR	0.28 UJ	0.36 UJ	0.20 UR	0.20 UJ
Tert-Butyl Methyl Ether	0.43 UR	0.49 UR	0.47 UR	0.40 U	0.88 UR	0.38 UJ	0.49 UJ	0.27 UR	0.27 UJ
Tetrachloroethylene	0.29 UR	**1.8 J**	0.32 UR	**2.9 J**	**94 J**	**14 J**	**1.5 J**	**10 J**	0.19 UJ
Toluene	0.63 UR	**1.9 J**	0.70 UR	0.60 U	**9.7 J**	0.56 UJ	0.72 UJ	0.40 UR	0.40 UJ
Trans-1,2-Dichloroethene	0.85 UR	0.97 UR	0.94 UR	0.80 U	1.7 UR	0.76 UJ	0.97 UJ	0.54 UR	0.54 UJ
Trans-1,3-Dichloropropene	0.31 UR	0.36 UR	0.35 UR	0.30 U	0.65 UR	0.28 UJ	0.36 UJ	0.2 UR	0.2 UJ
Trichloroethylene	0.35 UR	0.40 UR	0.38 UR	0.33 U	0.71 UR	**1.7 J**	0.40 UJ	**0.63 J**	0.22 UJ
Trichlorofluoromethane	0.45 UR	0.52 UR	0.50 UR	0.43 U	0.93 UR	0.4 UJ	0.52 UJ	0.29 UR	0.29 UJ
Vinyl Chloride	0.38 UR	0.44 UR	0.43 UR	0.36 U	0.79 UR	0.34 UJ	0.44 UJ	0.24 UR	0.25 UJ

Key at end of table.

Table 3.5-2 Summary of Analytical Results for Building 70 Waste Drain Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name:	Depth:	Date:

Key:

Qualifiers

J = Estimated value

J- = Estimated value with low bias

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

UR = Not detected/result is rejected

Other

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

pCi/g = Picocuries per gram

-- = Analyte not analyzed for

"-FD" denotes field duplicate sample

Bold values denote positive hits.

Key at end of table.

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Table 3.5-3 Summary of Analytical Results for Building 70 Waste Drain Storm Water Sample
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: DRYH-H-L1 Date: 03/03/15	DRYH-H-L1-FD 03/03/15
Thorium Isotopes by Method A-01-R, pCi/L		
Thorium-228	0.212 U	0.198 U
Thorium-230	**0.164 J**	**0.192 J**
Thorium-232	0.0896 U	0.0943 U
Uranium Isotopes by Method A-01-R, pCi/L		
Uranium-234	**0.328**	**0.428**
Uranium-235	0.0619 U	0.101 U
Uranium-238	**0.228 J**	0.0811 UJ
Uranium Isotopes by Calculation, pCi/g		
Total Uranium	**0.429**	**0.558**
Uranium Isotopes by Method 6020, µg/L		
Uranium-234	0.0021 U	0.0021 U
Uranium-235	**0.0063 J**	**0.0058 J**
Uranium-236	0.0015 UJ	0.0015 U
Uranium-238	**0.58**	**0.49**
Radium Isotopes by Methods 9315 and 9320, pCi/L		
Radium-226	0.152 U	0.168 U
Radium-228	0.366 U	0.311 U
Metals by Method 6010, µg/L		
Aluminum	**270 J**	**230 J**
Antimony	3.7 U	3.7 U
Arsenic	3.6 U	1.8 U
Barium	**7.1 J**	**7.0 J**
Beryllium	0.28 U	0.28 U
Cadmium	0.34 U	0.34 U
Calcium	**2700**	**2600**
Chromium, Total	3.4 U	3.4 U
Cobalt	2.7 U	2.7 U
Copper	12 U	14 U
Iron	**270**	**240**
Lead	2 U	2.6 U
Magnesium	**400 J**	**400 J**
Manganese	**15**	**14 J**
Nickel	2.6 U	2.6 U
Potassium	460 U	460 U
Selenium	2.1 U	2.1 U
Silver	0.99 U	0.99 U
Sodium	**21000**	**21000**
Thallium	2.4 U	2.4 U
Vanadium	4.4 U	4.4 U
Zinc	**340**	**340**
Mercury by Method 7470, µg/L		
Mercury	**0.095 J**	**0.072 J**
Volatile Organics by Method 8260, µg/L		
1,1,1-Trichloroethane	0.069 U	0.069 U
1,1,2,2-Tetrachloroethane	0.098 U	0.098 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.10 U	0.10 U
1,1,2-Trichloroethane	0.15 U	0.15 U
1,1-Dichloroethane	0.068 U	0.068 U
1,1-Dichloroethene	0.083 U	0.083 U
1,2,3-Trichlorobenzene	0.087 U	0.087 U
1,2,4-Trichlorobenzene	0.078 U	0.078 U
1,2-Dibromo-3-Chloropropane	0.41 U	0.41 U
1,2-Dibromoethane (Ethylene Dibromide)	0.13 U	0.13 U
1,2-Dichlorobenzene	0.060 U	0.060 U
1,2-Dichloroethane	0.10 U	0.10 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.5-3 Summary of Analytical Results for Building 70 Waste Drain Storm Water Sample
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: DRYH-H-L1 Date: 03/03/15	DRYH-H-L1-FD 03/03/15
1,2-Dichloropropane	0.097 U	0.097 U
1,3-Dichlorobenzene	0.078 U	0.078 U
1,4-Dichlorobenzene	0.12 U	0.12 U
1,4-Dioxane (P-Dioxane)	1.2 U	1.2 U
2-Hexanone	0.22 U	0.22 U
Acetone	0.34 U	0.34 U
Benzene	0.064 U	0.064 U
Bromochloromethane	0.13 U	0.13 U
Bromodichloromethane	0.088 U	0.088 U
Bromoform	0.17 U	0.17 U
Bromomethane	0.25 U	0.25 U
Carbon Disulfide	0.051 U	0.051 U
Carbon Tetrachloride	0.13 U	0.13 U
Chlorobenzene	0.15 U	0.15 U
Chloroethane	0.099 U	0.099 U
Chloroform	0.10 U	0.10 U
Chloromethane	0.077 U	0.077 U
Cis-1,2-Dichloroethylene	0.087 U	0.087 U
Cis-1,3-Dichloropropene	0.073 U	0.073 U
Cyclohexane	0.067 U	0.067 U
Dibromochloromethane	0.13 U	0.13 U
Dichlorodifluoromethane	0.084 U	0.084 U
Ethylbenzene	0.086 U	0.086 U
Isopropylbenzene (Cumene)	0.083 U	0.083 U
m,p-Xylene	0.14 U	0.14 U
Methyl Acetate	0.37 U	0.37 U
Methyl Ethyl Ketone	**0.73 J**	0.52 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.12 U	0.12 U
Methylcyclohexane	0.10 UJ	0.10 UJ
Methylene Chloride	0.27 U	0.27 U
O-Xylene (1,2-Dimethylbenzene)	0.063 U	0.063 U
Styrene	0.074 U	0.074 U
Tert-Butyl Methyl Ether	0.11 U	0.11 U
Tetrachloroethylene (PCE)	0.18 U	0.18 U
Toluene	0.072 U	0.072 U
Trans-1,2-Dichloroethene	0.083 U	0.083 U
Trans-1,3-Dichloropropene	0.083 U	0.083 U
Trichloroethylene (TCE)	0.25 U	0.25 U
Trichlorofluoromethane	**0.86 J**	**0.91 J**
Vinyl Chloride	0.084 U	0.084 U

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

Other

µg/L = Micrograms per liter

pCi/L = Picocuries per liter

"-FD" denotes field duplicate sample

Bold values denote positive hits.

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.6-1 Summary of Analytical Results for Septic Tank Sludge Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: STS-01A-SP14 Depth: 9 - 10 ft Date: 04/23/14	STS-01B-SP14 9 - 10 ft 04/23/14	STS-01C-SP14 9 - 10 ft 04/23/14	STS-01D-SP14 9 - 10 ft 04/23/14	STS-01-FA13 9 - 10 ft 12/12/13	STS-01-FA13-FD 9 - 10 ft 12/12/13	STS-02-FA13 9 - 10 ft 12/12/13	STS-03-FA13 9 - 10 ft 12/12/13
Thorium Isotopes by Method A-01-R, pCi/g								
Thorium-228	--	--	--	--	**0.925**	**0.909**	**0.691**	**0.604**
Thorium-230	--	--	--	--	**3.27**	**3.28**	**0.837**	**0.466**
Thorium-232	--	--	--	--	**0.966**	**0.663**	**0.582**	**0.594**
Uranium Isotopes by Method A-01-R, pCi/g								
Uranium-234	**1.75**	**3.46**	**6.21**	**1.57**	**5380**	**6140**	**4.53**	**53.3**
Uranium-235	0.0707 U	**0.118**	**0.252**	**0.128**	**229**	**247**	**0.286**	**2.32**
Uranium-238	**0.545**	**0.890**	**0.921**	**0.600**	**178**	**158**	**1.57**	**1.80**
Uranium Isotopes by Calculation, pCi/g								
Uranium-234	--	--	--	--	**5280 J**	**15900 J**	10.4 UJ	**29.6 J**
Uranium-235	--	--	--	--	**174 J**	**557 J**	**0.0910 J**	**1.07 J**
Uranium-238	--	--	--	--	**297 J**	**142 J**	**1.04**	**0.518**
Uranium Isotopes by Method 6020, mg/kg								
Uranium-234	0.00033 U	**0.00052 J**	**0.00080 J**	0.00028 U	**0.85 J**	**2.6 J**	0.0017 U	**0.0048 J**
Uranium-235	**0.028**	**0.053**	**0.090**	**0.028**	**80 J**	**260 J**	**0.042**	**0.49**
Uranium-236	--	--	--	--	--	--	--	--
Uranium-238	**1.5**	**1.9**	**2.5**	**1.2**	**880 J**	**420 J**	**3.1**	**1.5**
Radium Isotopes and TICs by Method GA-01-R, pCi/g								
Actinium-228	--	--	--	--	--	**0.666**	**0.764**	**0.325**
Bismuth-212	--	--	--	--	--	--	--	--
Bismuth-214	--	--	--	--	**1.27**	**1.03**	**0.452**	**0.468**
Lead-210	--	--	--	--	--	--	--	--
Lead-212	--	--	--	--	**1.31**	**1.02**	**0.415**	**0.427**
Lead-214	--	--	--	--	**1.19**	**1.18**	**0.512**	**0.488**
Potassium-40	--	--	--	--	2.04 U	**2.05**	**6.38**	**8.01**
Protactinium-234	--	--	--	--	--	--	--	--
Protactinium-234M	--	--	--	--	**187**	**171**	--	--
Radium-226	--	--	--	--	**1.27**	**1.03**	**0.452**	**0.468**
Radium-228	--	--	--	--	0.644 U	**0.666**	**0.764**	**0.325**
Thallium-208	--	--	--	--	**0.469**	**0.300**	**0.178**	**0.173**
Thorium-234	--	--	--	--	**193**	**146**	--	--
Uranium-235	--	--	--	--	**249**	**308**	--	--
Unknown With 1st Highest Conc.	--	--	--	--	**249**	**308**	**0.764**	**0.488**
Unknown With 2nd Highest Conc.	--	--	--	--	**193**	**171**	**0.512**	**0.468**
Unknown With 3rd Highest Conc.	--	--	--	--	**187**	**146**	**0.452**	**0.427**
Unknown With 4th Highest Conc.	--	--	--	--	**1.31**	**1.18**	**0.415**	**0.325**
Unknown With 5th Highest Conc.	--	--	--	--	**1.27**	**1.03**	**0.178**	**0.173**
Unknown With 6th Highest Conc.	--	--	--	--	**1.19**	**1.02**	--	--
Unknown With 7th Highest Conc.	--	--	--	--	**0.469**	**0.666**	--	--
Unknown With 8th Highest Conc.	--	--	--	--	--	**0.300**	--	--

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.6-1 Summary of Analytical Results for Septic Tank Sludge Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: STS-01A-SP14 Depth: 9 - 10 ft Date: 04/23/14	STS-01B-SP14 9 - 10 ft 04/23/14	STS-01C-SP14 9 - 10 ft 04/23/14	STS-01D-SP14 9 - 10 ft 04/23/14	STS-01-FA13 9 - 10 ft 12/12/13	STS-01-FA13-FD 9 - 10 ft 12/12/13	STS-02-FA13 9 - 10 ft 12/12/13	STS-03-FA13 9 - 10 ft 12/12/13
Metals by Method 6010, mg/kg								
Aluminum	--	--	--	--	**3300**	**15000**	**9000**	**6000**
Antimony	--	--	--	--	12 U	12 U	7.1 U	7.3 U
Arsenic	--	--	--	--	5.8 U	**8.1 J**	**9.6 J**	**12**
Barium	--	--	--	--	**470**	**190**	**38 J**	**29 J**
Beryllium	--	--	--	--	3.1 U	3.3 U	1.9 U	1.9 U
Cadmium	--	--	--	--	**7.3 J**	**12**	1.1 U	1.1 U
Calcium	--	--	--	--	**15000**	**21000**	**25000**	**3900**
Chromium, Total	--	--	--	--	**140**	**440**	**14 J**	**11 J**
Cobalt	--	--	--	--	**30 J**	**19 J**	10 U	11 U
Copper	--	--	--	--	**1400**	**800**	**41**	**29**
Iron	--	--	--	--	**11000**	**26000**	**14000**	**9100**
Lead	--	--	--	--	**190**	**330**	**240**	**130**
Magnesium	--	--	--	--	**810 J**	**1200 J**	**13000**	**1200**
Manganese	--	--	--	--	**140**	**180**	**240**	**140**
Nickel	--	--	--	--	**180**	**310**	**11 J**	**11 J**
Potassium	--	--	--	--	6200 U	6500 U	3700 U	3800 U
Selenium	--	--	--	--	5.3 U	5.6 U	3.2 U	3.3 U
Silver	--	--	--	--	**66**	**50**	2.6 U	2.6 U
Sodium	--	--	--	--	860 U	910 U	520 U	530 U
Thallium	--	--	--	--	28 U	29 U	17 U	17 U
Vanadium	--	--	--	--	23 U	**35 J**	**25 J**	**18 J**
Zinc	--	--	--	--	**970**	**830**	**240**	**200**
Mercury by Method 7471, mg/kg								
Mercury	--	--	--	--	**6.9**	**4.1**	**0.27**	**0.076**
Volatile Organics by Method 8260, µg/kg								
1,1,1-Trichloroethane	--	--	--	--	**7400000**	**4800000**	**650 J**	19 UJ
1,1,2,2-Tetrachloroethane	--	--	--	--	870 U	930 U	18 UJ	30 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	--	--	--	1600 U	1700 U	34 UJ	55 UJ
1,1,2-Trichloroethane	--	--	--	--	1700 U	1800 U	35 UJ	58 UJ
1,1-Dichloroethane	--	--	--	--	**73000**	**91000**	**190 J**	20 UJ
1,1-Dichloroethene	--	--	--	--	**28000**	**41000**	29 UJ	47 UJ
1,2,3-Trichlorobenzene	--	--	--	--	900 U	960 U	19 UJ	31 UJ
1,2,4-Trichlorobenzene	--	--	--	--	840 U	890 U	17 UJ	29 UJ
1,2-Dibromo-3-Chloropropane	--	--	--	--	3800 U	4000 U	78 UJ	130 UJ
1,2-Dibromoethane (Ethylene Dibromide)	--	--	--	--	980 U	1000 U	20 UJ	33 UJ
1,2-Dichlorobenzene	--	--	--	--	770 U	820 U	16 UJ	26 UJ
1,2-Dichloroethane	--	--	--	--	640 U	680 U	13 UJ	22 UJ
1,2-Dichloropropane	--	--	--	--	900 U	960 U	19 UJ	31 UJ
1,3-Dichlorobenzene	--	--	--	--	440 U	460 U	9.0 UJ	**900 J**
1,4-Dichlorobenzene	--	--	--	--	**370000**	**300000**	**2900 J**	**3400 J**

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.6-1 Summary of Analytical Results for Septic Tank Sludge Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: STS-01A-SP14 Depth: 9 - 10 ft Date: 04/23/14	STS-01B-SP14 9 - 10 ft 04/23/14	STS-01C-SP14 9 - 10 ft 04/23/14	STS-01D-SP14 9 - 10 ft 04/23/14	STS-01-FA13 9 - 10 ft 12/12/13	STS-01-FA13-FD 9 - 10 ft 12/12/13	STS-02-FA13 9 - 10 ft 12/12/13	STS-03-FA13 9 - 10 ft 12/12/13
1,4-Dioxane (P-Dioxane)	--	--	--	--	110000 U	120000 U	2300 UJ	3800 UJ
2-Hexanone	--	--	--	--	720 U	770 U	15 UJ	25 UJ
Acetone	--	--	--	--	4900 U	5200 U	100 UJ	170 UJ
Benzene	--	--	--	--	570 U	610 U	12 UJ	19 UJ
Bromochloromethane	--	--	--	--	1600 U	1700 U	33 UJ	54 UJ
Bromodichloromethane	--	--	--	--	620 U	660 U	13 UJ	21 UJ
Bromoform	--	--	--	--	930 U	990 U	19 UJ	32 UJ
Bromomethane	--	--	--	--	1400 U	1500 U	29 UJ	47 UJ
Carbon Disulfide	--	--	--	--	710 U	750 U	15 UJ	24 UJ
Carbon Tetrachloride	--	--	--	--	1000 U	1100 U	21 UJ	34 UJ
Chlorobenzene	--	--	--	--	590 U	630 U	**2400 J**	**5400 J**
Chloroethane	--	--	--	--	770 U	820 U	16 UJ	26 UJ
Chloroform	--	--	--	--	600 U	640 U	12 UJ	21 UJ
Chloromethane	--	--	--	--	1400 U	1500 U	30 UJ	49 UJ
Cis-1,2-Dichloroethylene	--	--	--	--	**430000**	**530000**	**470 J**	20 UJ
Cis-1,3-Dichloropropene	--	--	--	--	370 U	390 U	7.6 UJ	12 UJ
Cyclohexane	--	--	--	--	700 U	750 U	15 UJ	24 UJ
Dibromochloromethane	--	--	--	--	580 U	620 U	12 UJ	20 UJ
Dichlorodifluoromethane	--	--	--	--	1600 U	1800 U	34 UJ	56 UJ
Ethylbenzene	--	--	--	--	**4500 J**	**4800 J**	**260 J**	**360 J**
Isopropylbenzene	--	--	--	--	560 U	590 U	**22 J**	**84 J**
m,p-Xylene	--	--	--	--	**11000 J**	**13000 J**	**200 J**	**770 J**
Methyl Acetate	--	--	--	--	3100 U	3300 U	64 UJ	**1100 J**
Methyl Ethyl Ketone (2-Butanone)	--	--	--	--	3800 U	4100 U	79 UJ	130 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	--	--	--	1200 U	1200 U	24 UJ	40 UJ
Methylcyclohexane	--	--	--	--	720 U	**790 J**	**48 J**	**200 J**
Methylene Chloride	--	--	--	--	2900 U	3100 U	60 UJ	99 UJ
o-Xylene	--	--	--	--	**3600 J**	**3900 J**	**110 J**	**220 J**
Styrene	--	--	--	--	830 U	880 U	17 UJ	28 UJ
Tert-Butyl Methyl Ether	--	--	--	--	570 U	600 U	12 UJ	19 UJ
Tetrachloroethylene	--	--	--	--	**16000000 J**	**5800000 J**	**420 J**	39 UJ
Toluene	--	--	--	--	**70000**	**120000**	15 UJ	**81 J**

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.6-1 Summary of Analytical Results for Septic Tank Sludge Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: / Depth: / Date:	STS-01A-SP14 9 - 10 ft 04/23/14	STS-01B-SP14 9 - 10 ft 04/23/14	STS-01C-SP14 9 - 10 ft 04/23/14	STS-01D-SP14 9 - 10 ft 04/23/14	STS-01-FA13 9 - 10 ft 12/12/13	STS-01-FA13-FD 9 - 10 ft 12/12/13	STS-02-FA13 9 - 10 ft 12/12/13	STS-03-FA13 9 - 10 ft 12/12/13
Trans-1,2-Dichloroethene		--	--	--	--	470 U	500 U	9.7 UJ	16 UJ
Trans-1,3-Dichloropropene		--	--	--	--	560 U	590 U	11 UJ	19 UJ
Trichloroethylene		--	--	--	--	**1500000**	**1500000**	**240 J**	34 UJ

Key:

Qualifiers

J = Estimated value

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

Other

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

pCi/g = Picocuries per gram

-- = Analyte not analyzed for

"-FD" denotes field duplicate sample

Bold values denote positive hits.

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.6-2 Summary of Analytical Results for Septic Tank Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Sample Name: / Depth: / Date: / Analyte	STB-01-Z1 6 - 7 ft 09/29/14	STB-01-Z2 13 - 14 ft 09/29/14	STB-01-Z3 21 - 22 ft 09/30/14	STB-01-Z4 27 - 28 ft 09/30/14	STB-01-Z5 36 - 37 ft 09/30/14	STB-01-Z5-FD 36 - 37 ft 09/30/14	STB-01-Z6 44 - 45 ft 09/30/14	STB-01-Z7 52 - 53 ft 09/30/14	STB-01-Z8 63 - 64 ft 09/30/14	STB-02-Z1 7 - 8 ft 10/03/14	STB-02-Z2 14 - 15 ft 10/03/14	STB-02-Z3 22 - 23 ft 10/03/14	STB-02-Z4 29 - 30 ft 10/03/14	STB-02-Z5 39 - 40 ft 10/03/14
Thorium Isotopes by Method A-01-R, pCi/g														
Thorium-228	**0.408**	**0.145 J**	0.0866 U	**0.154 J**	**0.120 J**	**0.146 J**	**0.228**	**0.398**	**0.209**	**0.609**	**0.149 J**	**0.223 J**	**0.226 J**	**0.164 J**
Thorium-230	**0.388**	**0.226**	**0.308**	**0.165**	**0.140 J**	**0.299 J**	**0.262**	**0.229**	**0.128**	**0.517**	**0.151 J**	**0.183**	**0.221**	**0.294**
Thorium-232	**0.369**	**0.122**	**0.0915**	**0.102**	0.0484 UJ	**0.205 J**	**0.170**	**0.348**	**0.137**	**0.467**	**0.15**	**0.0732**	**0.0658**	**0.0677**
Uranium Isotopes by Method A-01-R, pCi/g														
Uranium-234	**0.503**	**0.104**	**0.175**	**0.167**	**0.153**	**0.268**	**0.232**	**0.298**	**0.141**	**0.722**	**0.110**	**0.130**	**0.248**	**0.178**
Uranium-235	0.0482 U	**0.0305**	0.0312 U	0.0550 U	0.0484 U	0.0311 U	0.0514 U	**0.0313**	0.03 U	**0.0319**	**0.0293**	0.0482 U	**0.150**	0.0535 U
Uranium-238	**0.440**	**0.0632**	**0.0625**	**0.226**	**0.116 J**	**0.247 J**	**0.170**	**0.209**	**0.0602**	**0.657**	**0.153**	**0.128**	**0.127**	**0.164**
Uranium Isotopes by Method 6020, mg/kg														
Uranium-234	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Uranium-235	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Uranium-236	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Uranium-238	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Radium Isotopes and TICs by Method GA-01-R, pCi/g														
Actinium-228	--	--	--	--	--	--	**0.256**	**0.729**	**0.497**	**0.588**	--	--	--	--
Beryllium-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bismuth-212	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bismuth-214	**0.467**	**0.378**	**0.229**	**0.242**	--	**0.172**	--	**0.559**	**0.365**	**0.613**	**0.246**	--	**0.221**	**0.324**
Lead-210	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead-212	**0.460**	--	**0.166**	**0.123**	--	--	**0.361**	**0.827**	**0.368**	**0.666**	--	**0.193**	**0.195**	**0.184**
Lead-214	**0.474**	**0.350**	--	**0.275**	--	**0.164**	**0.355**	**0.492**	**0.370**	**0.710**	**0.241**	**0.231**	--	--
Potassium-40	**6.90**	**5.46**	**2.21**	**1.94**	**2.45**	**1.90**	**1.71**	**5.25**	0.99 U	**7.60**	**5.09**	**5.35**	**1.42**	1.54 U
Protactinium-234	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Radium-226	**0.467**	**0.378**	**0.229**	**0.242**	0.120 U	**0.172**	**0.120**	**0.559**	**0.365**	**0.613**	**0.246 J**	0.102 U	**0.221 J**	**0.324**
Radium-228	**0.323**	0.241 U	0.201 U	0.134 U	0.135 UJ	0.246 UJ	**0.256**	**0.729**	**0.497**	**0.588**	0.134 U	0.159 U	0.202 U	0.352 U
Thallium-208	**0.172**	--	--	--	--	--	**0.137**	**0.320**	**0.161**	**0.285**	--	--	**0.126**	--
Thorium-234	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Uranium-235	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals by Method 6010, mg/kg														
Aluminum	**6300**	**1600**	**800**	**1600**	**1700**	**1400**	**1000**	**820**	**560**	**9900**	**670**	**660**	**2700**	**3100**
Antimony	1.4 U	1.4 U	1.5 U	1.4 U	1.5 U	1.5 U	1.6 U	1.7 U	1.4 U	1.6 U	1.6 U	1.4 U	1.5 U	1.4 U
Arsenic	**3.6 J**	**1.2 J**	1.1 U	**1.3 J**	1.2 U	**1.3 J**	**1.3 J**	**1.7 J**	1.1 U	**7.1**	1.2 U	1.1 U	**4.2 J**	1.1 U
Barium	**18 J**	**8.8 J**	**5.7 J**	**6.1 J**	**5.3 J**	**4.3 J**	**4.6 J**	**6.9 J**	**3.7 J**	**34**	**3.9 J**	**5.4 J**	**9.1 J**	**16 J**
Beryllium	0.33 U	0.35 U	0.36 U	0.34 U	0.38 U	0.37 U	0.4 U	0.42 U	0.34 U	0.4 U	0.39 U	0.35 U	0.35 U	0.34 U
Cadmium	0.15 U	0.16 U	0.16 U	0.15 U	0.17 U	0.17 U	0.18 U	0.19 U	0.16 U	0.18 U	0.17 U	0.16 U	0.16 U	0.15 U
Calcium	**460 J**	**110 J**	**89 J**	**92 J**	**50 J**	**41 J**	**48 J**	**81 J**	31 U	**1800**	**81 J**	**130 J**	**84 J**	**86 J**
Chromium, Total	**11**	**7.8**	**3.9 J**	**8.0**	**2.8 J**	**3.5 J**	**3.4 J**	**5.1 J**	**5.1 J**	**15**	**2.2 J**	**6.8 J**	**18**	**5 J**
Cobalt	**4.4 J**	**1.6 J**	**0.95 J**	**0.94 J**	**0.75 J**	**0.80 J**	**1.2 J**	0.80 U	0.66 U	**4.2 J**	0.74 U	**1.0 J**	**2.5 J**	**4.3 J**
Copper	**6.5 J**	1.4 U	1.7 U	3.1 U	1.4 U	1.3 U	1.3 U	3.2 U	1.1 U	**18**	**2.1 J**	1.1 U	**3.2 J**	**5.5 J**
Iron	**8500**	**3300**	**5000**	**4500**	**2500**	**3500**	**3600**	**3100**	**1600**	**13000**	**2200**	**2800**	**13000**	**3800**
Lead	**7.3**	1.9 U	1.6 U	1.5 U	2.1 U	1.4 U	1.8 U	2.6 U	1.2 U	**45**	1.1 U	0.75 U	2.5 U	**2.2 J**
Magnesium	**910**	**270 J**	**240 J**	**160 J**	**150 J**	**130 J**	**71 J**	18 U	15 U	**1400**	**170 J**	**150 J**	**200 J**	**370 J**
Manganese	**110**	**47**	**76**	**52**	**76**	**71**	**110**	**14**	**7.1**	**160**	**38**	**52**	**110**	**810**
Nickel	**5.3 J**	**2.3 J**	**1.7 J**	**2.4 J**	**1.7 J**	**1.7 J**	**1.3 J**	0.65 U	0.53 U	**9.0 J**	**1.3 J**	**1.5 J**	**4.0 J**	**4.5 J**
Potassium	320 U	340 U	340 U	320 U	360 U	360 U	380 U	400 U	330 U	390 U	370 U	340 U	340 U	330 U
Selenium	0.92 U	0.97 U	0.98 U	0.92 U	1.0 U	1.0 U	1.1 U	1.1 U	0.95 U	1.1 U	1.1 U	0.96 U	0.97 U	0.93 U
Silver	0.31 U	0.33 U	0.33 U	0.31 U	0.35 U	0.35 U	0.37 U	0.39 U	0.32 U	0.37 U	0.36 U	0.33 U	0.33 U	0.31 U
Sodium	**150 J**	**43 J**	36 U	34 U	38 U	38 U	**45 J**	**62 J**	35 U	**270 J**	39 U	36 U	36 U	34 U
Thallium	0.85 U	0.89 U	0.90 U	0.85 U	0.95 U	0.95 U	1.0 U	1.1 U	**0.87 J**	**1.2 J**	0.98 U	0.89 U	0.89 U	0.85 U
Vanadium	**12 J**	**2.5 J**	**2.4 J**	**3.3 J**	**3.0 J**	**3.0 J**	**4.3 J**	**8.9 J**	**3.1 J**	**20 J**	2.6 U	2.4 U	**15 J**	**4.0 J**
Zinc	**14 J**	**5.9 J**	**4.8 J**	**5.3 J**	**4.4 J**	**4.3 J**	**4.4 J**	**3.6 J**	**3.4 J**	**28 J**	**4.5 J**	3.4 U	**12 J**	**9.0 J**
Mercury by Method 7471, mg/kg														
Mercury	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.012 U	0.012 U	0.011 U	**0.082**	0.011 U	0.011 U	0.011 U	0.011 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.6-2 Summary of Analytical Results for Septic Tank Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Sample Name:	STB-01-Z1	STB-01-Z2	STB-01-Z3	STB-01-Z4	STB-01-Z5	STB-01-Z5-FD	STB-01-Z6	STB-01-Z7	STB-01-Z8	STB-02-Z1	STB-02-Z2	STB-02-Z3	STB-02-Z4	STB-02-Z5
Depth:	6 - 7 ft	13 - 14 ft	21 - 22 ft	27 - 28 ft	36 - 37 ft	36 - 37 ft	44 - 45 ft	52 - 53 ft	63 - 64 ft	7 - 8 ft	14 - 15 ft	22 - 23 ft	29 - 30 ft	39 - 40 ft
Date:	09/29/14	09/29/14	09/30/14	09/30/14	09/30/14	09/30/14	09/30/14	09/30/14	09/30/14	10/03/14	10/03/14	10/03/14	10/03/14	10/03/14
Analyte														
Volatile Organics by Method 8260, µg/kg														
1,1,1-Trichloroethane	**1.5 J**	0.44 U	0.37 U	0.38 U	0.40 U	0.40 U	**2.9 J**	0.42 U	0.44 U	**74 J**	0.39 U	0.39 U	**1.8 J**	0.42 U
1,1,2,2-Tetrachloroethane	0.39 U	0.41 U	0.35 U	0.35 U	0.38 U	0.37 U	0.35 U	0.39 U	0.41 U	0.5 UJ	0.36 U	0.36 U	0.39 U	0.39 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.6 U	1.7 U	1.5 U	1.5 U	1.6 U	1.6 U	1.5 U	1.6 U	1.7 U	2.1 UJ	1.5 U	1.5 U	1.6 U	1.6 U
1,1,2-Trichloroethane	0.56 U	0.58 U	0.5 U	0.51 U	0.54 U	0.53 U	0.51 U	0.56 U	0.58 U	0.71 UJ	0.52 U	0.52 U	0.56 U	0.56 U
1,1-Dichloroethane	0.38 U	0.40 U	0.34 U	0.35 U	0.37 U	0.36 U	**1.2 J**	0.38 U	0.40 U	**6.9 J**	0.35 U	0.35 U	0.38 U	0.38 U
1,1-Dichloroethene	1.6 U	1.6 U	1.4 U	1.4 U	1.5 U	1.5 U	1.4 U	1.6 U	1.6 U	2 UJ	1.5 U	1.5 U	1.6 U	1.6 U
1,2,3-Trichlorobenzene	0.43 U	0.45 U	0.39 U	0.39 U	0.42 U	0.41 U	0.39 U	0.43 U	0.45 U	0.55 UJ	0.4 U	0.4 U	0.43 U	0.43 U
1,2,4-Trichlorobenzene	0.41 U	0.43 U	0.37 U	0.37 U	0.4 U	0.39 U	0.38 U	0.42 U	0.43 U	0.53 UJ	0.38 U	0.38 U	0.41 U	0.41 U
1,2-Dibromo-3-Chloropropane	1.4 U	1.5 U	1.3 U	1.3 U	1.4 U	1.3 U	1.3 U	1.4 U	1.5 U	1.8 UJ	1.3 U	1.3 U	1.4 U	1.4 U
1,2-Dibromoethane (Ethylene Dibromide)	0.68 U	0.71 U	0.61 U	0.62 U	0.65 U	0.65 U	0.62 U	0.68 U	0.71 U	0.87 UJ	0.63 U	0.63 U	0.68 U	0.68 U
1,2-Dichlorobenzene	**0.44 J**	0.29 U	0.25 U	0.25 U	0.26 U	0.26 U	0.25 U	0.28 U	0.29 U	**4.4 J**	0.25 U	0.25 U	0.27 U	0.27 U
1,2-Dichloroethane	0.85 U	0.88 U	0.75 U	0.76 U	0.81 U	0.8 U	0.77 U	0.85 U	0.88 U	1.1 UJ	0.78 U	0.78 U	0.84 U	0.84 U
1,2-Dichloropropane	0.37 U	0.39 U	0.33 U	0.34 U	0.36 U	0.36 U	0.34 U	0.37 U	0.39 U	0.48 UJ	0.35 U	0.35 U	0.37 U	0.37 U
1,3-Dichlorobenzene	**0.45 J**	0.28 U	0.24 U	0.25 U	0.26 U	0.26 U	0.25 U	0.27 U	0.29 U	**2.4 J**	0.25 U	0.25 U	0.27 U	0.27 U
1,4-Dichlorobenzene	0.59 U	0.61 U	0.52 U	0.53 U	0.56 U	0.56 U	0.53 U	0.59 U	0.61 U	**1.5 J**	0.54 U	0.54 U	0.58 U	0.58 U
1,4-Dioxane (P-Dioxane)	35 U	36 U	31 U	32 U	33 U	33 U	32 U	35 U	37 U	44 UJ	32 U	32 U	35 U	35 U
2-Hexanone	1.7 U	1.8 U	1.5 U	1.6 U	1.7 U	1.6 U	1.6 U	1.7 U	1.8 U	2.2 UJ	1.6 U	1.6 U	1.7 U	1.7 U
Acetone	**25**	**28**	**7.7 J**	**13 J**	**11 J**	**12 J**	**24**	**8.4 J**	**9.7 J**	**110 J**	**13 J**	**12 J**	**10 J**	**14 J**
Benzene	0.25 U	0.26 U	0.22 U	0.22 U	0.24 U	0.23 U	0.22 U	0.25 U	0.26 U	0.31 UJ	0.23 U	0.23 U	0.25 U	0.25 U
Bromochloromethane	0.8 U	0.83 U	0.72 U	0.73 U	0.77 U	0.76 U	0.73 U	0.81 U	0.84 U	1 UJ	0.74 U	0.74 U	0.8 U	0.8 U
Bromodichloromethane	0.25 U	0.26 U	0.22 U	0.22 U	0.24 U	0.24 U	0.22 U	0.25 U	0.26 U	0.32 UJ	0.23 U	0.23 U	0.25 U	0.25 U
Bromoform	0.36 U	0.37 U	0.32 U	0.32 U	0.34 U	0.34 U	0.32 U	0.36 U	0.37 U	0.45 UJ	0.33 U	0.33 U	0.35 U	0.36 U
Bromomethane	1.1 U	1.1 U	0.96 U	0.97 U	1 U	1 U	0.97 U	1.1 U	1.1 U	1.4 UJ	0.99 U	0.99 U	1.1 U	1.1 U
Carbon Disulfide	0.67 U	0.69 U	0.60 U	0.60 U	0.64 U	0.64 U	0.6 U	0.67 U	0.70 U	0.85 UJ	0.62 U	0.62 U	0.66 U	0.67 U
Carbon Tetrachloride	0.50 U	0.52 U	0.45 U	0.45 U	0.48 U	0.48 U	0.45 U	0.50 U	0.52 U	0.64 UJ	0.46 U	0.46 U	0.50 U	0.50 U
Chlorobenzene	0.37 U	0.39 U	0.33 U	0.34 U	0.36 U	0.35 U	0.34 U	0.37 U	0.39 U	0.47 UJ	0.34 U	0.35 U	0.37 U	0.37 U
Chloroethane	0.5 U	0.52 U	0.45 U	0.45 U	0.48 U	0.48 U	0.46 U	0.51 U	0.53 U	0.64 UJ	0.46 U	0.47 U	0.5 U	0.5 U
Chloroform	0.37 U	0.38 U	0.33 U	0.33 U	0.35 U	0.35 U	0.33 U	0.37 U	0.38 U	0.47 UJ	0.34 U	0.34 U	0.36 U	0.37 U
Chloromethane	0.63 U	0.66 U	0.56 U	0.57 U	0.61 U	0.6 U	0.57 U	0.64 U	0.66 U	0.81 UJ	0.59 U	0.59 U	0.63 U	0.63 U
Cis-1,2-Dichloroethylene	**0.65 J**	0.61 U	0.52 U	0.53 U	0.56 U	0.55 U	**6.5**	**0.86 J**	0.61 U	**94 J**	0.54 U	0.54 U	**3.5 J**	**1.1 J**
Cis-1,3-Dichloropropene	0.58 U	0.6 U	0.52 U	0.52 U	0.56 U	0.55 U	0.53 U	0.58 U	0.61 U	0.74 UJ	0.54 U	0.54 U	0.58 U	0.58 U
Cyclohexane	0.35 U	0.37 U	0.32 U	0.32 U	0.34 U	0.34 U	0.32 U	0.36 U	0.37 U	0.45 UJ	0.33 U	0.33 U	0.35 U	0.35 U
Dibromochloromethane	0.4 U	0.41 U	0.35 U	0.36 U	0.38 U	0.38 U	0.36 U	0.4 U	0.41 U	0.5 UJ	0.37 U	0.37 U	0.39 U	0.39 U
Dichlorodifluoromethane	1.3 U	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U	1.6 UJ	1.2 U	1.2 U	1.3 U	1.3 U
Ethylbenzene	0.29 U	0.30 U	0.26 U	0.26 U	0.28 U	0.28 U	0.26 U	0.29 U	0.31 U	0.37 UJ	0.27 U	0.27 U	0.29 U	0.29 U
Isopropylbenzene (Cumene)	0.25 U	0.26 U	0.22 U	0.23 U	0.24 U	0.24 U	0.23 U	0.25 U	0.26 U	0.32 UJ	0.23 U	0.23 U	0.25 U	0.25 U
m,p-Xylene	0.56 U	0.58 U	0.49 U	0.5 U	0.53 U	0.53 U	0.5 U	0.56 U	0.58 U	0.71 UJ	0.51 U	0.51 U	0.55 U	0.55 U
Methyl Acetate	1.3 U	1.4 U	**2.5 J**	1.2 U	1.3 U	1.3 U	1.2 U	1.4 U	1.4 U	1.7 UJ	1.2 U	1.2 U	1.3 U	1.3 U
Methyl Ethyl Ketone	1.9 U	1.9 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.9 U	2.0 U	2.4 UJ	1.7 U	1.7 U	1.9 U	1.9 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.71 U	0.74 U	0.64 U	0.65 U	0.68 U	0.68 U	0.65 U	0.72 U	0.75 U	0.91 UJ	0.66 U	0.66 U	0.71 U	0.71 U
Methylcyclohexane	0.25 U	0.26 U	0.23 U	0.23 U	0.24 U	0.24 U	0.23 U	0.25 U	0.27 U	0.32 UJ	0.23 U	0.24 U	0.25 U	0.25 U
Methylene Chloride	1.5 U	1.6 U	1.4 U	1.4 U	1.5 U	1.5 U	1.4 U	1.5 U	1.6 U	2.0 UJ	1.4 U	1.4 U	1.5 U	1.5 U
O-Xylene (1,2-Dimethylbenzene)	0.33 U	0.34 U	0.29 U	0.3 U	0.31 U	0.31 U	0.3 U	0.33 U	0.34 U	0.42 UJ	0.3 U	0.3 U	0.33 U	0.33 U
Styrene	0.34 U	0.35 U	0.30 U	0.31 U	0.32 U	0.32 U	0.31 U	0.34 U	0.35 U	**1.3 J**	0.31 U	0.31 U	0.34 U	0.34 U
Tert-Butyl Methyl Ether	0.46 U	0.48 U	0.41 U	0.42 U	0.45 U	0.44 U	0.42 U	0.47 U	0.49 U	0.59 UJ	0.43 U	0.43 U	0.46 U	0.46 U
Tetrachloroethylene	**13**	0.33 U	0.28 U	0.28 U	0.30 U	0.30 U	**1.0 J**	**0.89 J**	0.33 U	**2100**	0.29 U	**0.74 J**	**9.8**	0.31 U
Toluene	**1.0 J**	0.71 U	0.61 U	0.62 U	0.66 U	0.65 U	0.62 U	0.69 U	0.71 U	**3.3 J**	0.63 U	0.63 U	0.68 U	0.68 U
Trans-1,2-Dichloroethene	0.92 U	0.96 U	0.82 U	0.83 U	0.88 U	0.87 U	0.83 U	0.92 U	0.96 U	1.2 UJ	0.85 U	0.85 U	0.91 U	0.92 U
Trans-1,3-Dichloropropene	0.34 U	0.35 U	0.3 U	0.31 U	0.33 U	0.32 U	0.31 U	0.34 U	0.36 U	0.43 UJ	0.31 U	0.32 U	0.34 U	0.34 U
Trichloroethylene	**1.8 J**	0.39 U	0.33 U	0.34 U	0.36 U	0.36 U	**0.98 J**	0.38 U	0.39 U	**540**	0.35 U	0.35 U	**2.1 J**	0.37 U
Trichlorofluoromethane	0.49 U	0.51 U	0.43 U	0.44 U	0.47 U	0.46 U	0.44 U	0.49 U	0.51 U	0.62 UJ	0.45 U	0.45 U	0.48 U	0.49 U
Vinyl Chloride	0.42 U	0.43 U	0.37 U	0.38 U	0.4 U	0.4 U	0.38 U	0.42 U	0.44 U	0.53 UJ	0.39 U	0.39 U	0.42 U	0.42 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.6-2 Summary of Analytical Results for Septic Tank Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name: STB-02-Z6 Depth: 45 - 46 ft Date: 10/03/14	STB-02-Z7 52 - 53 ft 10/03/14	STB-02-Z8 62 - 63 ft 10/03/14	STB-03-Z2 12 - 13 ft 10/03/14	STB-03-Z2-FD 12 - 13 ft 10/03/14	STB-03-Z3A 18 - 19 ft 10/03/14	STB-03-Z3B 22 - 23 ft 10/03/14
Thorium Isotopes by Method A-01-R, pCi/g							
Thorium-228	**0.136 J**	**0.646**	**0.382 J**	**0.181 J**	**0.161 J**	**0.18 J**	**0.212 J**
Thorium-230	**0.129 J**	**0.553**	**0.224**	**0.315**	**0.226**	**0.129 J**	**0.320**
Thorium-232	**0.0649**	**0.391**	**0.280 J**	**0.0926**	**0.134 J**	**0.118**	0.0539 U
Uranium Isotopes by Method A-01-R, pCi/g							
Uranium-234	**0.109**	**0.321**	**0.162**	**0.176**	**0.119**	**0.0972**	**0.255**
Uranium-235	0.0476 U	0.0505 U	0.0505 U	0.0342 U	0.0306 U	0.0363 U	0.0323 U
Uranium-238	**0.071**	**0.307**	**0.191 J**	**0.0800**	**0.0858 J**	**0.145**	**0.125**
Uranium Isotopes by Method 6020, mg/kg							
Uranium-234	--	--	--	--	--	--	--
Uranium-235	--	--	--	--	--	--	--
Uranium-236	--	--	--	--	--	--	--
Uranium-238	--	--	--	--	--	--	--
Radium Isotopes and TICs by Method GA-01-R, pCi/g							
Actinium-228	--	**0.784**	--	--	--	**0.316**	--
Beryllium-7	--	--	--	--	--	--	--
Bismuth-212	--	--	--	--	--	--	--
Bismuth-214	--	**0.489**	**0.288**	**0.233**	**0.318**	**0.280**	**0.180**
Lead-210	--	--	--	--	--	--	--
Lead-212	**0.160**	**0.699**	**0.312**	--	**0.328**	--	**0.154**
Lead-214	--	**0.65**	**0.417**	--	**0.251**	**0.245**	--
Potassium-40	1.14 U	**4.38**	1.08 UJ	**7.11**	0.952 UJ	**5.09**	**5.33**
Protactinium-234	--	--	--	--	--	--	--
Radium-226	0.180 U	**0.489**	**0.288**	**0.233 J**	**0.318**	**0.280**	**0.180 J**
Radium-228	0.236 U	**0.784**	**0.224**	0.170 U	**0.282**	**0.316**	0.164 U
Thallium-208	--	**0.220**	--	--	--	--	--
Thorium-234	--	--	--	--	--	--	--
Uranium-235	--	--	--	--	--	--	--
Metals by Method 6010, mg/kg							
Aluminum	**570**	**930**	**640**	**1600**	**570**	**1200**	**830**
Antimony	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Arsenic	1.2 U	**1.2 J**	**1.2 J**	1.1 U	1.0 U	1.1 U	**1.1 J**
Barium	**3.1 J**	**5.2 J**	**5.8 J**	**11 J**	**5.2 J**	**6.3 J**	**5.7 J**
Beryllium	0.38 U	0.37 U	0.34 U	0.35 U	0.33 U	0.34 U	0.33 U
Cadmium	0.17 U	0.17 U	0.15 U	0.16 U	0.15 U	0.16 U	0.15 U
Calcium	34 U	**82 J**	30 U	**270 J**	30 U	**100 J**	**72 J**
Chromium, Total	**4.2 J**	**5.8 J**	**2.8 J**	**4.8 J**	**2.5 J**	**3.4 J**	**3.1 J**
Cobalt	**1.1 J**	**2.0 J**	0.65 U	**2.1 J**	0.64 U	**1.3 J**	**1.5 J**
Copper	1.2 U	**2.8 J**	1.1 U	**2.2 J**	**1.2 J**	**1.8 J**	**2.0 J**
Iron	**4500**	**4400**	**1600**	**3700**	**1500**	**2700**	**3900**
Lead	0.70 U	2.4 U	2.2 U	1.8 U	1.5 U	1.4 U	1.3 U
Magnesium	**27 J**	**23 J**	**16 J**	**370 J**	14 U	**190 J**	**160 J**
Manganese	**110**	**36**	**8.2**	**130**	**7.9**	**55**	**130**
Nickel	**1.5 J**	**1.0 J**	**1.3 J**	**3.0 J**	**1.3 J**	**1.8 J**	**2.3 J**
Potassium	360 U	360 U	330 U	340 U	320 U	330 U	320 U
Selenium	1.0 U	1.0 U	0.93 U	0.96 U	**1.6 J**	0.95 U	0.90 U
Silver	0.35 U	0.35 U	0.31 U	0.33 U	0.31 U	0.32 U	0.31 U
Sodium	38 U	38 U	34 U	**90 J**	34 U	**49 J**	33 U
Thallium	0.95 U	0.94 U	0.85 U	0.88 U	0.84 U	0.87 U	0.83 U
Vanadium	2.5 U	**8.3 J**	**3.5 J**	**4.6 J**	**2.2 J**	**2.3 J**	**4.0 J**
Zinc	**5 J**	**5.2 J**	**3.8 J**	**5.8 J**	3.1 U	**5.2 J**	**4.5 J**
Mercury by Method 7471, mg/kg							
Mercury	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.0099 U

Key at end of table.

Table 3.6-2 Summary of Analytical Results for Septic Tank Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Sample Name: / Depth: / Date: / Analyte	STB-02-Z6 45 - 46 ft 10/03/14	STB-02-Z7 52 - 53 ft 10/03/14	STB-02-Z8 62 - 63 ft 10/03/14	STB-03-Z2 12 - 13 ft 10/03/14	STB-03-Z2-FD 12 - 13 ft 10/03/14	STB-03-Z3A 18 - 19 ft 10/03/14	STB-03-Z3B 22 - 23 ft 10/03/14
Volatile Organics by Method 8260, µg/kg							
1,1,1-Trichloroethane	0.36 U	**0.35 J**	0.44 U	0.36 U	0.45 U	0.35 U	0.47 U
1,1,2,2-Tetrachloroethane	0.33 U	0.32 U	0.41 U	0.34 U	0.41 U	0.33 U	0.44 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.4 U	1.3 U	1.7 U	1.4 U	1.7 U	1.4 U	1.8 U
1,1,2-Trichloroethane	0.48 U	0.45 U	0.59 U	0.48 U	0.59 U	0.47 U	0.63 U
1,1-Dichloroethane	0.33 U	0.31 U	0.40 U	0.33 U	0.40 U	0.32 U	0.43 U
1,1-Dichloroethene	1.3 U	1.3 U	1.7 U	1.3 U	1.7 U	1.3 U	1.8 U
1,2,3-Trichlorobenzene	0.37 U	0.35 U	0.46 U	0.37 U	0.46 U	0.36 U	0.49 U
1,2,4-Trichlorobenzene	0.35 U	0.34 U	0.44 U	0.36 U	0.44 U	0.35 U	0.47 U
1,2-Dibromo-3-Chloropropane	1.2 U	1.1 U	1.5 U	1.2 U	1.5 U	1.2 U	1.6 U
1,2-Dibromoethane (Ethylene Dibromide)	0.58 U	0.55 U	0.72 U	0.59 U	0.72 U	0.57 U	0.77 U
1,2-Dichlorobenzene	0.24 U	0.22 U	0.29 U	0.24 U	0.29 U	0.23 U	0.31 U
1,2-Dichloroethane	0.72 U	0.69 U	0.89 U	0.73 U	0.9 U	0.71 U	0.95 U
1,2-Dichloropropane	0.32 U	0.3 U	0.4 U	0.32 U	0.4 U	0.31 U	0.42 U
1,3-Dichlorobenzene	0.23 U	0.22 U	0.29 U	0.23 U	0.29 U	0.23 U	0.31 U
1,4-Dichlorobenzene	0.50 U	0.47 U	0.62 U	0.5 U	0.62 U	0.49 U	0.66 U
1,4-Dioxane (P-Dioxane)	30 U	28 U	37 U	30 U	37 U	29 U	39 U
2-Hexanone	1.5 U	1.4 U	1.8 U	1.5 U	1.8 U	1.4 U	1.9 U
Acetone	**6.3 J**	**7.7 J**	**7.1 J**	**12 J**	6.7 U	**5.5 J**	**8.1 J**
Benzene	0.21 U	0.2 U	0.26 U	0.21 U	0.26 U	0.21 U	0.28 U
Bromochloromethane	0.69 U	0.65 U	0.85 U	0.69 U	0.85 U	0.67 U	0.9 U
Bromodichloromethane	0.21 U	0.20 U	0.26 U	0.21 U	0.26 U	0.21 U	0.28 U
Bromoform	0.31 U	0.29 U	0.38 U	0.31 U	0.38 U	0.3 U	0.4 U
Bromomethane	0.92 U	0.87 U	1.1 U	0.92 U	1.1 U	0.9 U	1.2 U
Carbon Disulfide	0.57 U	0.54 U	0.71 U	0.57 U	0.71 U	0.56 U	0.75 U
Carbon Tetrachloride	0.43 U	0.41 U	0.53 U	0.43 U	0.53 U	0.42 U	0.56 U
Chlorobenzene	0.32 U	0.3 U	0.39 U	0.32 U	0.39 U	0.31 U	0.42 U
Chloroethane	0.43 U	0.41 U	0.53 U	0.43 U	0.53 U	0.42 U	0.57 U
Chloroform	0.31 U	0.30 U	0.39 U	0.31 U	0.39 U	0.31 U	0.41 U
Chloromethane	0.54 U	0.51 U	0.67 U	0.54 U	0.67 U	0.53 U	0.71 U
Cis-1,2-Dichloroethylene	0.50 U	0.47 U	0.62 U	0.50 U	0.62 U	0.49 U	0.65 U
Cis-1,3-Dichloropropene	0.5 U	0.47 U	0.61 U	0.5 U	0.61 U	0.48 U	0.65 U
Cyclohexane	0.3 U	0.29 U	0.37 U	0.3 U	0.37 U	0.3 U	0.4 U
Dibromochloromethane	0.34 U	0.32 U	0.42 U	0.34 U	0.42 U	0.33 U	0.45 U
Dichlorodifluoromethane	1.1 U	1 U	1.4 U	1.1 U	1.4 U	1.1 U	1.4 U
Ethylbenzene	0.25 U	0.24 U	0.31 U	0.25 U	0.31 U	0.24 U	0.33 U
Isopropylbenzene (Cumene)	0.22 U	0.2 U	0.27 U	0.22 U	0.27 U	0.21 U	0.28 U
m,p-Xylene	0.47 U	0.45 U	0.59 U	0.48 U	0.59 U	0.46 U	0.62 U
Methyl Acetate	1.2 U	1.1 U	1.4 U	1.2 U	1.4 U	1.1 U	1.5 U
Methyl Ethyl Ketone	1.6 U	1.5 U	2.0 U	1.6 U	2.0 U	1.6 U	2.1 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.61 U	0.58 U	0.76 U	0.61 U	0.76 U	0.6 U	0.8 U
Methylcyclohexane	0.22 U	0.21 U	0.27 U	0.22 U	0.27 U	0.21 U	0.28 U
Methylene Chloride	1.3 U	1.2 U	1.6 U	1.3 U	1.6 U	1.3 U	1.7 U
O-Xylene (1,2-Dimethylbenzene)	0.28 U	0.27 U	0.35 U	0.28 U	0.35 U	0.27 U	0.37 U
Styrene	0.29 U	0.27 U	0.36 U	0.29 U	0.36 U	0.28 U	0.38 U
Tert-Butyl Methyl Ether	0.4 U	0.38 U	0.49 U	0.4 U	0.49 U	0.39 U	0.52 U
Tetrachloroethylene	0.27 U	**2.2 J**	0.33 U	**0.43 J**	0.33 U	0.26 U	0.35 U
Toluene	0.58 U	0.55 U	0.72 U	0.59 U	0.72 U	0.57 U	0.77 U
Trans-1,2-Dichloroethene	0.79 U	0.75 U	0.97 U	0.79 U	0.97 U	0.77 U	1 U
Trans-1,3-Dichloropropene	0.29 U	0.28 U	0.36 U	0.29 U	0.36 U	0.28 U	0.38 U
Trichloroethylene	0.32 U	0.30 U	0.40 U	0.32 U	0.40 U	0.31 U	0.42 U
Trichlorofluoromethane	0.42 U	0.4 U	0.52 U	0.42 U	0.52 U	0.41 U	0.55 U
Vinyl Chloride	0.36 U	0.34 U	0.44 U	0.36 U	0.44 U	0.35 U	0.47 U

Key at end of table.

Source: Ecology and Environment, 2016

Table 3.6-2 Summary of Analytical Results for Septic Tank Soil Samples
Sylvania Corning FUSRAP Site, Hicksville, New York

Analyte	Sample Name:	Depth:	Date:

Key:

Qualifiers

J = Estimated value

J- = Estimated value with low bias

U = Not detected (method detection limit shown)

UJ = Not detected/estimated detection limit

UR = Not detected/result is rejected

Other

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

pCi/g = Picocuries per gram

-- = Analyte not analyzed for

"-FD" denotes field duplicate sample

Bold values denote positive hits.

Key at end of table.

Source: Ecology and Environment, 2016

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4 System Audits

Audits are summarized in Table 4-1 and included in Appendix C.

Table 4-1 Summary of System Audits

Audit Dates	Company	Scope of Audit and Summary of Findings
03/31/2016	LBG	Quality Control Inspection during drilling/vertical profiling in 2016. Only minor deficiencies were noted none of which would affect the quality or interpretation of the data. For example, for quick turn-around samples, one corrective action was to have field managers send a picture of the chain-of-custody to the field team leader to review for accuracy and completeness prior to sending to lab.
04/12/2016	LBG	Field Audit during monitoring well sampling in 2016. The one minor deficiency noted was that one sampler was not wearing steel-toed boots or safety glasses.

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5 Data Completeness and QA/QC Problems

This section summarizes the degree to which the analytical systems met or failed the data quality objectives (DQOs) listed in the QAPP. A discussion is provided for each phase of fieldwork.

5.1 VP Data Completeness

5.1.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.1-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.1 and below. Data points that were qualified as estimated are considered usable for the purposes of this project. A total of 100% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.1-1 Summary of Data Completeness for VP Samples

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	R	Total	Rejected
Groundwater	D5174	11	2	8		0	21	0%
	SW6010B	66	97	100	1	0	264	0%
	SW7470	4	1	7		0	12	0%
	SW8260B	22	17	584	1	0	624	0%
	SW8260C	350	266	10584	88	0	11288	0%
	Totals	**453**	**383**	**11283**	**90**	**0**	**12209**	**0%**

5.1.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Field duplicate sample precision for a minority of the analytes was not within QC acceptance criteria. Field duplicate sampling procedures do not appear to be a concern.

- Low levels of VOCs were commonly detected in drill water samples. TCE was detected in drill water, which initiated a work stoppage and investigation into the source of contamination. The memorandum Sylvania Corning FUSRAP – Drill Water TCE Summary dated October 7, 2014 (revised January 12, 2015) details the investigation of the source of TCE. The drill water contaminants did not affect data usability. Associated sample results were qualified as noted on the DRMs.

5.2 Groundwater Data Completeness

5.2.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.2-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.1. Data points that were qualified as estimated are considered usable for the purposes of this project. Results for 44 samples were rejected and 99.59% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.2-1 Summary of Data Completeness for MW Samples

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	UR	Total	Rejected
Water	A-01-R		1	9	2		12	0%
	D5174	60		66	1		127	0%
	SW6010	15	109	44			168	0%
	SW7470		1	1			2	0%
	SW8260B	401	444	9265	194	44	10348	0.43
	Totals	**476**	**555**	**9385**	**197**	**44**	**10657**	**0.41%**

5.2.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Sample results for bromoform, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene were “UR” qualified as rejected non-detect due to internal standard failures in samples MW-206-470-SP15, MW-210-280-SP15, MW-10-SP15, MW-11-SP15, PW-06-07-SP15, MW-210-280-SP15, and MW-210-380-SP15.
- Several samples were diluted for VOCs and metals analyses due to matrix effects and/or to bring analyte concentrations within the calibration range. Comparability may be affected.

- Internal standard responses for Method 8260 SIM were outside of QC limits; one sample result was qualified with "J" as estimated.

5.3 Concrete, Asphalt Waste, Surface Soil, and DR-Z Sludge Data Completeness

5.3.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.3-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.2. These data were not validated, but were verified and reviewed, as discussed in Section 1.2. Data points that were qualified as estimated are considered usable for the purposes of this project. No sample results were rejected and 100% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.3-1 Summary of Data Completeness for Concrete Asphalt Waste, Surface Soil, and DR-Z Sludge Samples

Sample Matrix	Lab Method ID	Not Qualified[1]	J[2]	U	UJ[3]	UR	Total	Rejected
Concrete, Asphalt Waste, Surface Soil, and DR-Z Sludge	A-01-R	32		4		0	36	0%
	GA-01-R	48		2		0	50	0%
	SW6010	43	58	24	7	0	132	0%
	SW7471	1	3	2		0	6	0%
	SW8081A			35	7	0	42	0%
	SW8082			30	5	0	35	0%
	SW8151A			9	3	0	12	0%
	SW8260B		1	58	1	0	60	0%
	SW8270D			60	12	0	72	0%
	SW9012			5	1	0	6	0%
	SW9034	1		5		0	6	0%
	SW9045D	6				0	6	0%
	SW9095B			5		0	5	0%
	Totals	**131**	**62**	**239**	**36**	**0**	**468**	**0%**

Notes:
1 Includes not qualified and D qualifiers.
2 Includes DJ and JD qualifiers
3 Includes UH, UHQ, and UQ qualifiers

5.3.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- There was insufficient sample volume to perform PCBs or paint filter liquids analyses on the DR-Z sludge sample.
- Several samples were diluted for metals analyses to bring analyte concentrations within the calibration range. Comparability may be affected.
- There was insufficient sample volume of DR-Z sludge to perform radium-226 by gamma spectroscopy using the preferred geometry, and the turnaround time did not allow for ingrowth, which caused spectral interference and an elevated MDC; therefore, the sample result should be considered to have a high bias.

5.4 CSIA Data Completeness

5.4.1 Data Completeness

The overall completeness of the data for this phase is summarized in "Verification of CSIA Data" in Appendix A. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.3. Data points that were qualified as estimated are considered usable for the purposes of this project. No sample results were rejected and 100% of the data are usable. The completeness goals for the project were met based on this percentage.

5.4.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected.

5.5 Building 70 Waste Drain Investigation Data Completeness

5.5.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.5-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.4. Data points that were qualified as estimated are considered usable for the purposes of this project. Results for 203 samples were rejected and 95.4% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.5-1 Summary of Data Completeness for Building 70 Waste Drain Investigation Samples

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	UR	Total	Rejected
Sludge, Soil, and Water	A-01-R	148	5	44	1		198	0%
	D5174	9		1			10	0%
	GA-01-R	181	2	49	2		234	0%
	SW6010	503	156	308	2	1	970	0.1%
	SW6020A	66	14	58	1		139	0.43
	SW7470	2	2	4			8	0%
	SW7471	16	7	3		6	32	19%
	SW8260B	1124	75	1198	238	196	2831	7%
	SW9315	1		4			5	0%
	SW9320	1		4			5	0%
	Totals	**2051**	**261**	**1673**	**244**	**203**	**4432**	**4.6%**

5.5.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Internal standards were outside control limits for several samples by Method 8260. The detected results for samples DRYH-H-SG1, DRYH-H-SG2, DRYH-H-SG3 (reanalysis), DRYH-H-SG1, DRYH-H-SG2, DRYH-I-SG1, and DRY-H-J-SG3 were qualified “J” as estimated and the non-detect results were qualified “UR” as rejected non-detect.
- The laboratory did not log in sample DRYH-G-Z8 for VOCs analysis; therefore, VOC results are not available for this sample.
- Thallium recovery was below control limits in the PDS and 0% for the MS/MSD; results were qualified with “UR” as rejected for sample DRYH-G-WEST-1.
- Several samples were re-extracted and analyzed outside of hold time for mercury by Method 7471 due to loss of data by the laboratory after a failure of instrument software; detected sample results were qualified with “J“ as estimated with a low bias and non-detects were qualified with “UR” and rejected.
- Several samples were diluted due to an oily, viscous matrix after digestion for metals analysis by Methods 6010 and 6020; elevated reporting limits were provided, which may impact data comparability.
- Six samples were analyzed at a medium level by Method 8260 due to high concentrations of target analytes and sample matrix effects; elevated reporting limits were reported, which may impact data comparability.

5.6 Septic Tank Data Completeness

5.6.1 Data Completeness

The overall completeness of the data for this phase is summarized on Table 5.6-1. All samples were collected and analyzed as planned, with the exceptions noted in Section 1.5. Data points that were qualified as estimated are considered usable for the purposes of this project. No sample results were rejected and 100% of the data are usable. The completeness goals for the project were met based on this percentage.

Table 5.6-1 Summary of Data Completeness for Septic Tank Samples

Sample Matrix	Lab Method ID	Not Qualified	J	U	UJ	UR	Total	Rejected
Soil and Sludge	A-01-R	148	26	47	1	0	222	0%
	A-01-R	143	4	45	4	0	196	0%
	D5174	262	211	283	14	0	770	0%
	SW6010	23	5	5	1	0	34	0%
	SW7470	11	1	23		0	35	0%
	SW8260B	902	68	1358	122	0	2450	0%
	Totals	**1489**	**315**	**1761**	**142**	**0**	**3707**	**0%**

5.6.2 QC Summary and Recommended Changes

Field Sampling Problems

No problems were noted with the sampling procedures.

Analytical Method Problems

No problems were noted with the analytical methods used for the samples collected except for:

- Overall, field duplicate precision was good. RPD acceptance criteria were exceeded for thorium and uranium isotopes analyzed by Method A-01-R, potassium-40 and radium-228 analyzed by Method Ga-01-R for field duplicate sample pairs STB-02-Z8 and STB-01-Z5, and PCE, chromium, and iron for field duplicate sample pair STS-01-FA13.
- Low levels of VOCs were detected in method blanks and one of the trip blanks by Method 8260; metals were detected in method and calibration blanks by Method 6010; thorium isotopes were detected in method blanks by Method A-01-R; and radium-226 was detected in a method blank by Method Ga-01-R.
- Surrogate recoveries were outside control limits for three samples by Method 8260; results in associated samples were qualified with “J” as estimated for detected results or “UJ” as estimated non-detect.

- Surrogate recoveries were outside control limits for several samples by Method 8260; results in associated samples were qualified with "J" as estimated for detected results or "UJ" as estimated non-detect.
- Several samples were analyzed at a medium level by Method 8260 due to high concentrations of target analytes; elevated reporting limits were reported, which may impact data comparability.
- Several samples were diluted due to a yellow colored matrix after digestion, interfering analytes, and high concentrations of target compounds for metals analysis by Method 6010; elevated reporting limits were provided, which may impact data comparability.
- Recoveries for some of the metals were outside control limits by Method 6010 in several MS/MSDs.

Associated sample results were qualified as noted on the DUSRs.

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6 PARCC Summary

6.1 PARCC Parameters

Sampling and analysis were performed using methods and techniques designed to optimize and evaluate precision, accuracy, representativeness, completeness, and comparability (PARCC; the primary data quality indicators) in the data. Meeting PARCC objectives was optimized by following the work plans; using quality laboratories; and management oversight of the work. Instances of questionable QC performance were evaluated and the findings presented in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems. Additional details can be found in the DUSRs included in Appendix A. The PARCC parameters are defined as follows:

- **Precision.** Precision was evaluated through the use of field and analytical duplicate samples.
- **Accuracy.** Accuracy was evaluated through the use of analytical standards, QC samples such as spikes and LCSs, and blank samples.
- **Representativeness.** Representativeness of the data was evaluated through the use of field and analytical duplicate samples, and laboratory and field blanks.
- **Completeness.** The analytical completeness, i.e., the percentage of obtained measurements that are judged to be valid and usable (excludes data that are qualified with R or UR).
- **Comparability.** Comparability of the data was evaluated with field and analytical QC samples; the use of consistent contract-required detection limits and ensuring that the laboratories met them; and by management oversight, which determined that the work was performed consistently with previous techniques.

The following sections summarize the PARCC parameters and data usability for each sample event.

6.2 Data Usability

6.2.1 Vertical Profile Sampling

All PARCC parameters met the objectives for usability except as noted below. Quality control results that did not meet PARCC objectives are discussed in detail

in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems.

Precision and representativeness were generally acceptable. Field duplicates overall exhibited acceptable reproducibility and laboratory and field blanks were predominantly free of contamination that would impact sample results (see also accuracy discussion below). There were instances where poor precision was noted for some analytes for the field duplicates and the results were qualified with "J" as estimated, but there was no impact to data usability or potential concerns with the sampling methodology. The precision between MS and MSD and LCS and LCSD results was generally acceptable. The precision between calibration and verification standards and serial dilutions was usually within quality control limits. The RPDs for some analytes for MS/MSDs were outside acceptance criteria; the associated detected sample results were qualified with "J" as estimated.

Accuracy was generally acceptable. Laboratory spike recoveries were typically within acceptance criteria and field and laboratory blanks exhibited minimal contamination. Low levels of VOCs and metals were detected in method blanks and in several rinsate blanks. Uranium was detected in one rinsate blank. The associated sample results were "U" qualified based on the level of blank contamination versus the amount present in the project sample. Surrogate recoveries and internal standard responses were generally acceptable. Several analyte recoveries were outside acceptance criteria in LCSs and MS/MSDs; associated sample results were qualified with "J" as estimated, "UJ" as estimated non-detect, or not qualified at all as discussed in Section 2.1.2.

Low levels of VOCs were commonly detected in drill water samples. TCE was detected in drill water, which initiated a work stoppage and investigation into the source of contamination. The memorandum Sylvania Corning FUSRAP – Drill Water TCE Summary dated October 7, 2014 (revised January 12, 2015) details the investigation of the source of TCE. The drill water contaminants did not affect data usability.

Laboratory control sample recoveries were generally good, with a few exceptions of LCS and MS/MSD recoveries outside control limits for a few VOCs and metals, which resulted in some of the associated sample results being qualified "J" as estimated or "UJ" and estimated non-detect. Calibration %D was exceeded for PCE for one analytical batch analyzed by Method SW8260. The detected analytes associated with the failures were qualified with "J" as estimated.

Several samples were diluted for VOCs and metals analyses due to matrix effects and/or to bring analyte concentrations within the calibration range. Representativeness and comparability may be affected.

Completeness of the results was acceptable as noted on Table 5.1-1. No sample results were rejected. The overall completeness of data was 100%.

6.2.2 Groundwater Sampling

All PARCC parameters met the objectives for usability except as noted below. Quality control results that did not meet PARCC objectives are discussed in detail in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems.

Precision and representativeness were generally acceptable. Field duplicates overall exhibited acceptable reproducibility and laboratory and field blanks were predominantly free of contamination that would impact sample results (see also accuracy discussion below). Acetone results were qualified with "J" as estimated for the field duplicate sample pair for sample MW-225-330-SP16 due to poor precision, but there was no impact on data usability or potential concerns with the sampling methodology. The precision between MS and MSD and LCS and LCSD results was generally acceptable. The precision between calibration and verification standards and serial dilutions was usually within quality control limits. Several calibration verification standards exhibited %D above acceptance criteria; therefore, the associated sample results were qualified with "J" as estimated or "UJ" as estimated non-detect.

Accuracy was generally acceptable. Laboratory spike recoveries were typically within acceptance criteria and field and laboratory blanks exhibited minimal contamination. Low levels of VOCs were detected in trip blanks and rinsate blanks. The associated sample results were "U" qualified based on the level of blank contamination versus the amount present in the project sample. Surrogate recoveries and internal standard responses were generally acceptable except Method 8260 SIM internal standard recoveries were outside acceptance criteria; therefore, one sample result was qualified with "J" as estimated. Surrogate recoveries were above control limits for several samples by Method 8260; therefore, detected compounds in associated samples were qualified with "J" as estimated. LCS recoveries were generally good. No qualifications were required for non-detected analytes in the associated samples with LCS recoveries that exceeded acceptance criteria. In several of the SDGs, the continuing calibration results exceeded the percent difference from the initial calibration. For several analytical batches by Method 8260, RRFs for poor performing and other analytes were below quality control limits. The analytes associated with the failures were qualified "J" if detected or "UJ" if non-detect. MS/MSD recoveries were above control limits for several VOCs and metals; therefore, detected results for associated samples were qualified with "J" as estimated and non-detects were not qualified.

Comparability of results was acceptable as most data was usable and valid. Serial dilution results for calcium for one batch were outside control limits; calcium results for two samples were qualified with "J" as estimated. Several samples were diluted for VOCs and metals analyses due to matrix effects and/or to bring analyte concentrations within the calibration range. Comparability may be affected.

Completeness of the results was acceptable as noted on Table 5.2-1. Most of the results were acceptable and valid for an overall completeness of data at 99.59%.

6.2.3 Concrete, Asphalt Waste, Surface Soil, and DR-Z Sludge Sampling

All PARCC parameters met the objectives for usability except as noted below. Quality control results that did not meet PARCC objectives are discussed in detail in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems.

Precision and Representativeness were generally acceptable. Field duplicates overall exhibited acceptable reproducibility and laboratory and field blanks were predominantly free of contamination that would impact sample results (see also accuracy discussion below). The precision between MS and MSD and LCS and LCSD results was generally acceptable. The precision between calibration and verification standards and serial dilutions was usually within quality control limits. Several calibration verification standards exhibited %D above acceptance criteria; therefore, the associated sample results were qualified with "J" as estimated or "UJ" as estimated non-detect.

Accuracy was generally acceptable. Laboratory spike (LCS/LCSD, MS/MSD, internal standard, and surrogate) recoveries were typically within acceptance criteria and field and laboratory blanks exhibited minimal contamination. There was insufficient sample volume of DR-Z sludge to perform radium-226 analysis by gamma spectroscopy using the preferred geometry and the turnaround time did not allow for ingrowth, which caused spectral interference and an elevated MDC; therefore, the sample result should be considered to have a high bias. For TCLP analysis by Method 8260, RRFs for poor performing and other analytes were below quality control limits; detected results for associated samples were qualified with "J" as estimated. The analytes associated with the failures were qualified "J" if detected or "UJ" if non-detect.

Comparability of results was acceptable as most data was usable and valid. Several samples were diluted for metals analyses to bring analyte concentrations within the calibration range. Comparability may be affected.

Completeness of the results was acceptable as noted on Table 5.3-1. There was insufficient sample volume to perform PCBs or paint filter liquids analyses on the DR-Z sludge sample, resulting in a completeness of data at 99.95%. All of the results for the analyses performed were acceptable and valid.

6.2.4 CSIA Sampling

All PARCC parameters met the objectives for usability except as noted below. Quality control results that did not meet PARCC objectives are discussed in detail in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems.

The overall PARCC review of the data for this phase is summarized in "Verification of CSIA Data" in Appendix A.

Precision and representativeness were generally acceptable. Field duplicates overall exhibited acceptable reproducibility and laboratory and field blanks were predominantly free of contamination that would impact sample results (see also accuracy discussion below). The precision between MS and MSD and LCS and LCSD results was generally acceptable. The precision between calibration and verification standards and serial dilutions was usually within quality control limits.

Accuracy was generally acceptable. Laboratory spike (LCS/LCSD, MS/MSD, internal standard, and surrogate) recoveries were typically within acceptance criteria and field and laboratory blanks exhibited minimal contamination.

Completeness of the results was acceptable. All of the results were acceptable and valid for an overall completeness of data at 100%.

6.2.5 Building 70 Waste Drain Investigation Sampling

All PARCC parameters met the objectives for usability except as noted below. Quality control results that did not meet PARCC objectives are discussed in detail in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems.

Precision and representativeness were generally acceptable. Field duplicates overall exhibited acceptable reproducibility and laboratory and field blanks were predominantly free of contamination that would impact sample results (see also accuracy discussion below). RPD acceptance criteria were exceeded for potassium-40 and iron for the field duplicate sample pair for DRYH-G-Z6; for aluminum and copper for the field duplicate sample pair for DRY-E-B1-23-Z3; and for the uranium-238 results for the field duplicate sample pair for DRY H-H-L1. Results were qualified with “J” as estimated for detected results or “UJ” as estimated non-detect. There was no overall impact to data usability or potential concerns with the sampling methodology. The precision between MS and MSD and LCS and LCSD results was generally acceptable. The precision between calibration and verification standards and serial dilutions was usually within quality control limits.

Accuracy was generally acceptable. Laboratory spike (LCS/LCSD, MS/MSD, internal standard, and surrogate) recoveries were typically within acceptance criteria and field and laboratory blanks exhibited minimal contamination. Several metals were detected in many of the method and calibration blanks at low levels by Method 6010. Uranium was detected in a method blank by Method ASTM D-5174, and thorium isotopes were detected in a method blank by Method A-01-R. Low levels of VOCs were detected in trip blanks and rinsate blanks and low levels of metals were detected in two rinsate blanks. The associated sample results were “U” qualified based on the level of blank contamination versus the amount present in the project sample. Surrogate recoveries and internal standard responses were generally acceptable except surrogate recoveries were outside control lim-

its for several samples by Method 8260; results in associated samples were qualified with "J" as estimated for detected results or "UJ" as estimated non-detect. LCS recoveries were generally good. LCS and MS/MSD recoveries were outside control limits for a few VOCs; associated sample results were qualified with "J" as estimated for detected results or "UJ" as estimated non-detect. Internal standards were outside control limits for several samples by Method 8260. The detected results for samples DRYH-H-SG1, DRYH-H-SG2, DRYH-H-SG3 (reanalysis), DRYH-H-SG1, DRYH-H-SG2, DRYH-I-SG1, and DRY-H-J-SG3 were qualified "J" as estimated and the non-detect results were qualified "UR" as rejected non-detect. Thallium recovery was below control limits in the PDS and 0% for the MS/MSD; therefore, results were qualified with "UR" as rejected for sample DRYH-G-WEST-1. Recoveries for some of the metals were outside control limits by Method 6010 in several MS/MSDs and PDSs and by Methods 6020 and A-01-R for MS/MSDs; detected results for associated samples were qualified with "J" as estimated

Comparability of results was acceptable as most data was usable and valid. Six samples were analyzed at a medium level by Method 8260 due to high concentrations of target analytes and sample matrix effects; elevated reporting limits were reported, which may impact data comparability. Several samples were diluted due to an oily, viscous matrix after digestion for metals analysis by Methods 6010 and 6020; elevated reporting limits were provided, which may impact data comparability. Several samples were re-extracted and analyzed outside of hold time for mercury by Method 7471 due to loss of data by the laboratory after a failure of instrument software; detected sample results were qualified with "J" as estimated with a low bias and non-detects were qualified with "UR" and rejected.

Completeness of the results was acceptable as noted on Table 5.5-1. The laboratory did not log in sample DRYH-G-Z8 for VOCs analysis; therefore, VOC results are not available for this sample, Most of the results were acceptable and valid for an overall completeness of data at 94.3%.

6.2.6 Septic Tank Sampling

All PARCC parameters met the objectives for usability except as noted below. Quality control results that did not meet PARCC objectives are discussed in detail in Section 2: Data Analysis and Validation and Section 5: Data Completeness and QA/QC Problems.

Precision and representativeness were generally acceptable. Field duplicates overall exhibited acceptable reproducibility and laboratory and field blanks were predominantly free of contamination that would impact sample results (see also accuracy discussion below). RPD acceptance criteria were exceeded for thorium and uranium isotopes analyzed by Method A-01-R and potassium-40 and radium-228 analyzed by Method Ga-01-R for field duplicate sample pairs STB-02-Z8 and STB-01-Z5; and for PCE, chromium, and iron for field duplicate sample pair STS-01-FA13. Results were qualified with "J" as estimated for detected results or "UJ" as estimated non-detect. There was no overall impact to data usability or

potential concerns with the sampling methodology. The precision between MS and MSD and LCS and LCSD results was generally acceptable. The precision between calibration and verification standards and serial dilutions was usually within quality control limits.

Accuracy was generally acceptable. Laboratory spike (LCS/LCSD, MS/MSD, internal standard, and surrogate) recoveries were typically within acceptance criteria, and field and laboratory blanks exhibited minimal contamination. Low levels of VOCs were detected in method blanks and one of the trip blanks by Method 8260; metals were detected in method and calibration blanks by Method 6010; thorium isotopes were detected in method blanks by Method A-01-R; and radium-226 was detected in a method blank by Method Ga-01-R. The associated sample results were "U" qualified based on the level of blank contamination versus the amount present in the project sample. Surrogate recoveries and internal standard responses were generally acceptable except surrogate recoveries were outside control limits for three samples by Method 8260; results in associated samples were qualified with "J" as estimated for detected results or "UJ" as estimated non-detect. Overall, the LCS recoveries were generally good. Recoveries for some of the metals were outside control limits by Method 6010 in several MS/MSDs; therefore, detected results for associated samples were qualified with "J" as estimated

Comparability of results was acceptable as most data was usable and valid. Several samples were analyzed at a medium level by Method 8260 due to high concentrations of target analytes; elevated reporting limits were reported, which may impact data comparability. Several samples were diluted due to a yellow colored matrix after digestion, interfering analytes, and high concentrations of target compounds for metals analysis by Method 6010; elevated reporting limits were provided, which may impact data comparability.

Completeness of the results was acceptable as noted on Table 5.6-1. All of the results were acceptable and valid for an overall completeness of data at 100%.

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7 References

The Louis Berger Group, Inc. (LBG), 2011a, Work Plan, Health and Safety Plan, and Quality Assurance Project Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

The Louis Berger Group, Inc. (LBG), 2011b, Quality Control Plan, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

The Louis Berger Group, Inc. (LBG), 2013, Work Plan Amendment Memorandum, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

The Louis Berger Group, Inc. (LBG), 2014, Work Plan Amendment #2 Memorandum, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

The Louis Berger Group, Inc. (LBG), 2015, Work Plan Amendment #3 Memorandum, Off-Site Groundwater Characterization and Feasibility Study for the Sylvania Corning FUSRAP Site, Hicksville, New York.

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A Data Review Memoranda and Data Usablity Summary Reports

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Appendix A
Verification of CSIA Data

The isotopic data were not validated but were assessed for accuracy and precision before proceeding with the isotopic signature evaluation. VOC precision and sensitivity were assessed by reviewing field quality control samples: such as VOC Trip Blank, VOC Rinse Blank for soils, and field duplicates. (Note that these data sets did not have an external data indicator of accuracy.) The results of the data verification concluded that the data were not impacted by field sampling or handling techniques. The VOC Trip Blank and VOC Rinse Blank collected in August 2013 had non-detected concentrations for PCE and TCE. The field duplicate samples collected from 2009 to 2013 were compared to the parent samples to assess the sampling and laboratory precision (refer to Figure 1a and to Figure 1b). Field duplicates for TCE, PCE, and Total VOC provided reproducible results within 15 percent; note the regression lines in Figures 1A and 1B had slopes greater than 0.88 (with regression coefficients (R^2) greater than 0.97).

For the isotope results, the laboratory blank samples reported non-detected concentrations for the PCE and TCE isotopic ratios. The field duplicates for the isotopic data were also compared to parent samples; however, comparison was limited to three matched pairs. Figure 2 shows PCE isotopic carbon signature (δC13) and the isotopic chlorine signature (δCl37) between parents and duplicate samples relative to the 1:1 line. Similarly, Figure 3 shows TCE isotopic ratio of δC13 and δCl37 between the parent and duplicate samples. Duplicate samples showed a percent difference less than 16 percent (refer to Table 1 for values).

It should be noted that in addition to analyzing the isotopic ratio in the groundwater samples, Microseeps reported the TCE and PCE concentrations. These VOC data from Microseeps supplements the 2013 routine groundwater monitoring samples that were analyzed by Test America. As an independent check on accuracy, the TCE and PCE concentrations from samples analyzed by Microseeps and TestAmerica were compared (refer to Figure 4). The left panel of Figure 4 shows a scatter plot of TCE concentrations while the right panel shows a scatter plot of PCE concentrations. The TCE and PCE concentrations from both laboratories are comparable. For example, TCE concentrations for samples analyzed by Microseeps on average are approximately 13 percent higher than the samples analyzed by TestAmerica. The PCE concentrations from both laboratories are in closer agreement, with a regression line slope of 1.04 and a regression coefficient of 0.99.

The conclusion of the data verification is that the isotopic and VOC concentration data are not impacted by field sampling and handling. A review of the laboratory data packages confirms that the laboratory followed standard operating procedures and that the laboratory performance criteria were met.

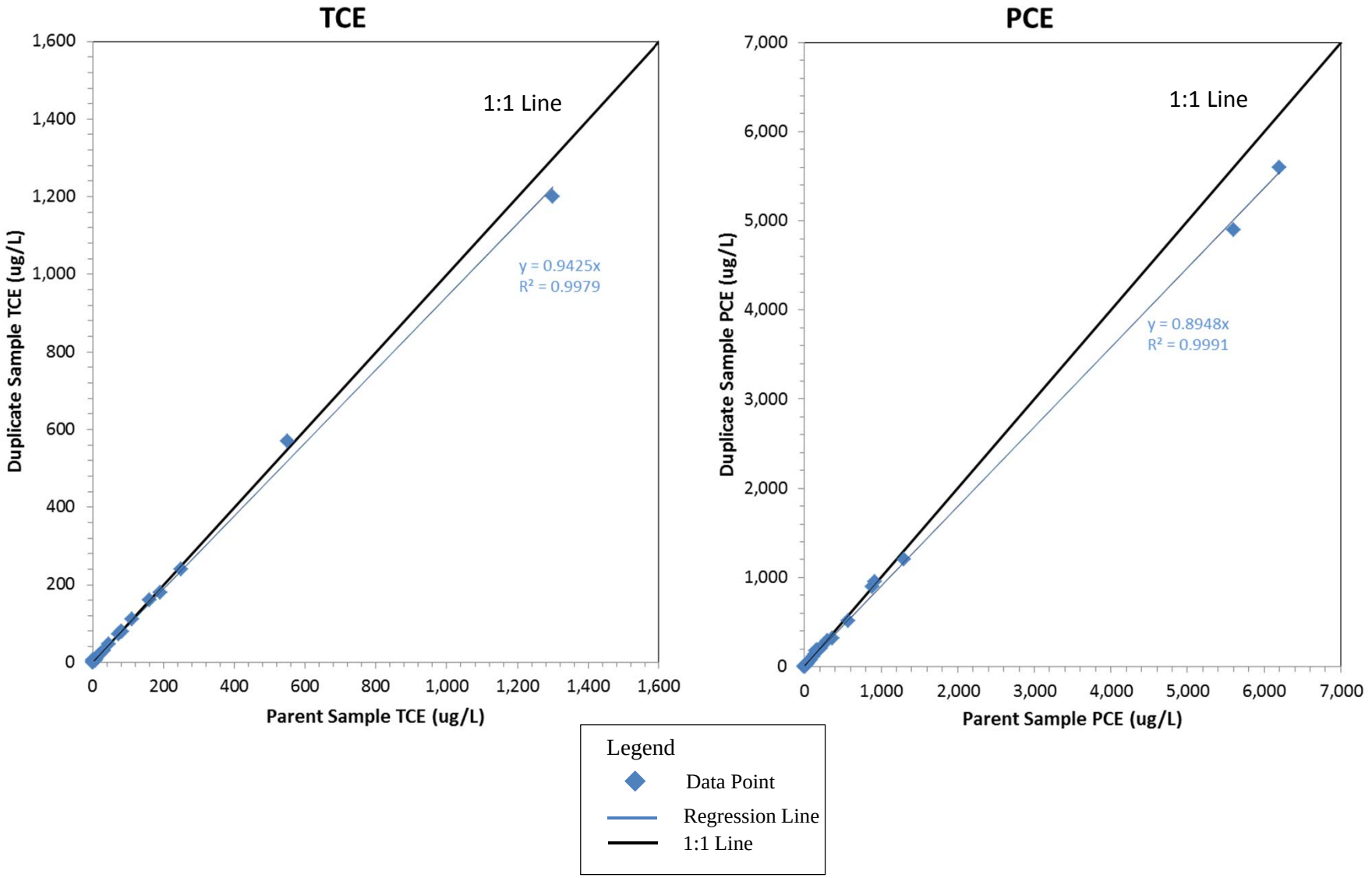
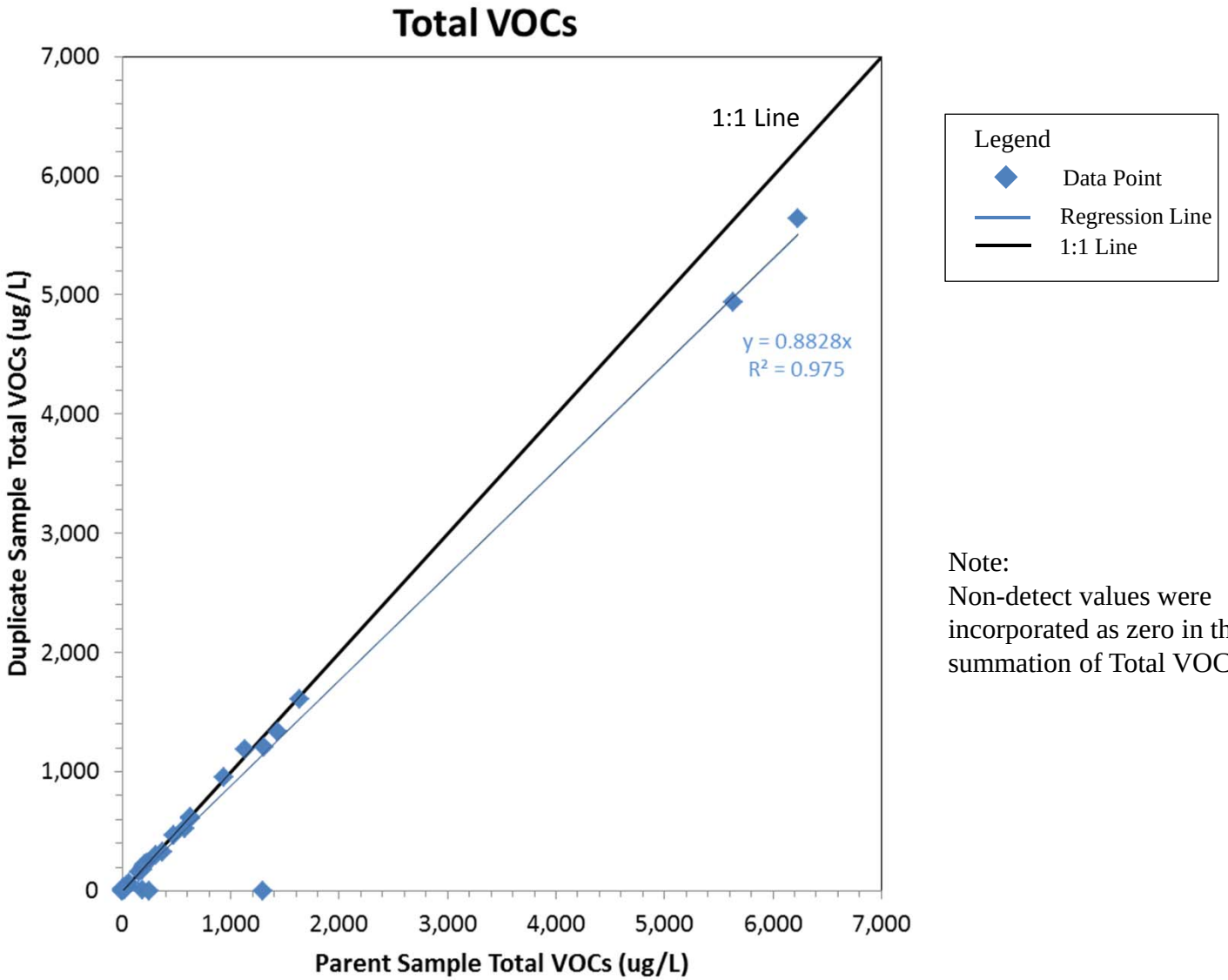


Figure 1a – TCE and PCE Parent and Field Duplicate Samples Comparison



Note:
Non-detect values were incorporated as zero in the summation of Total VOCs

Figure 1b – Total VOCs Parent and Field Duplicate Samples Comparison

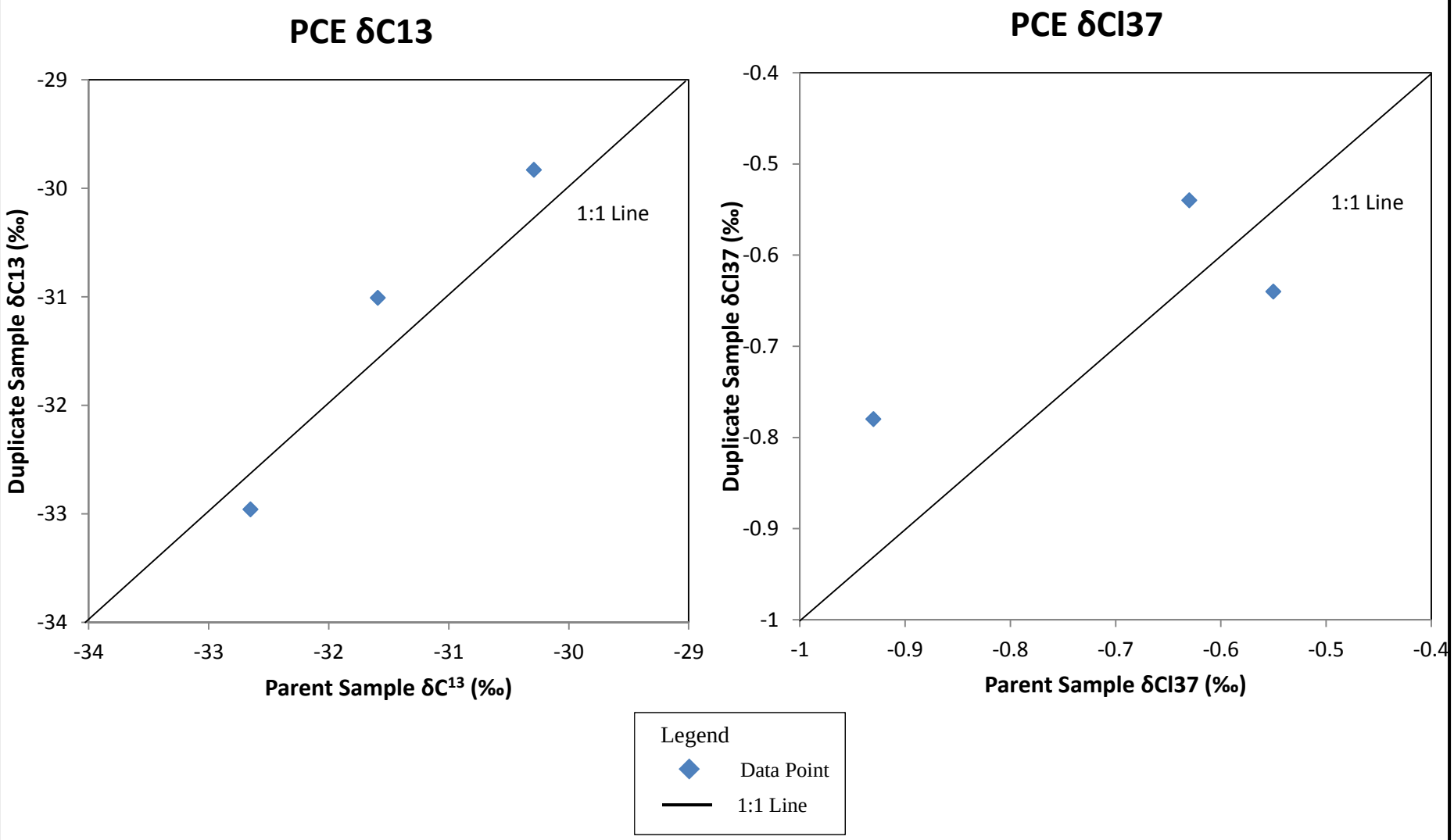


Figure 2 – PCE Isotopic Signature Parent and Duplicate Samples Comparison

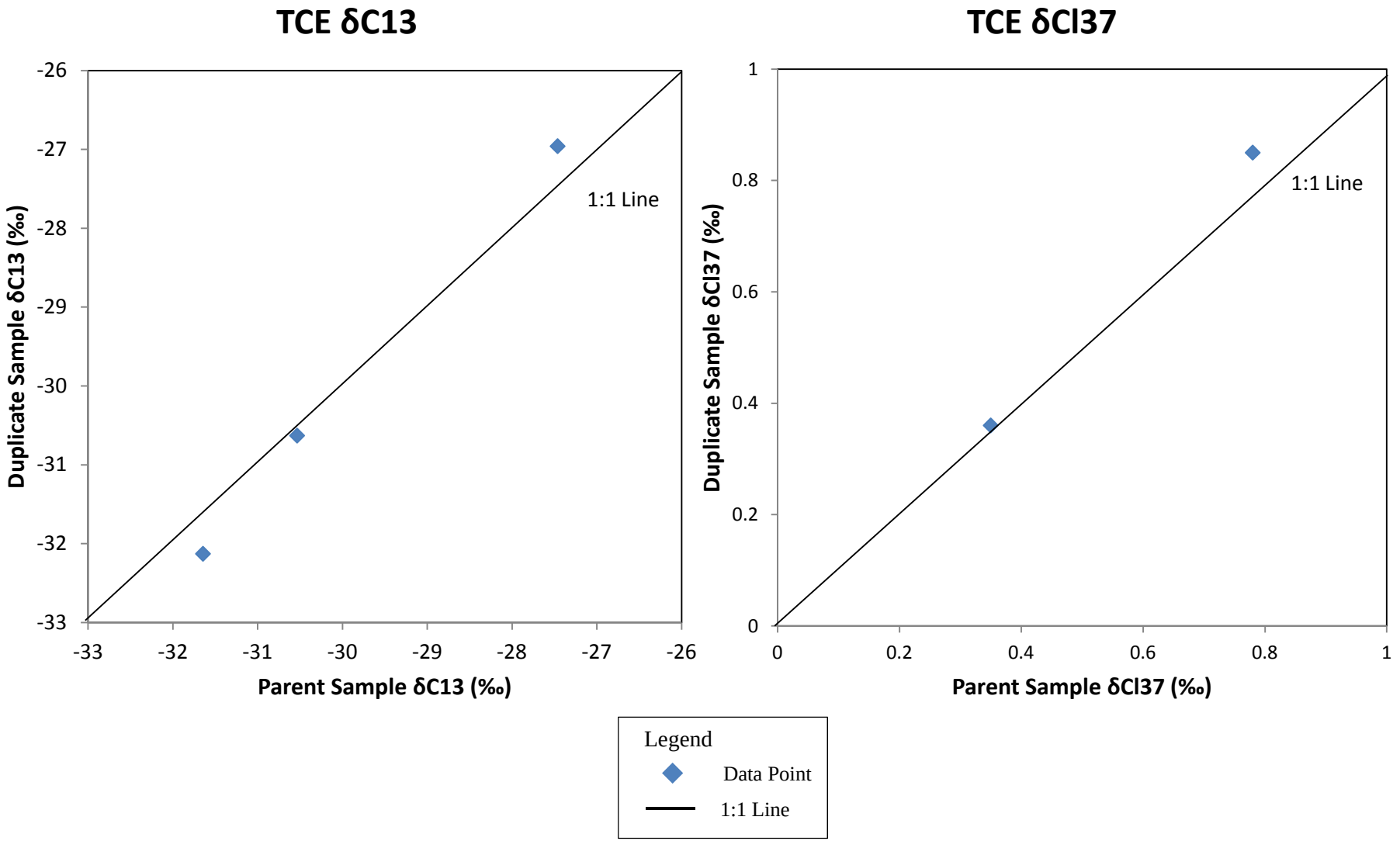


Figure 3 – TCE Isotopic Signature Parent and Duplicate Samples Comparison

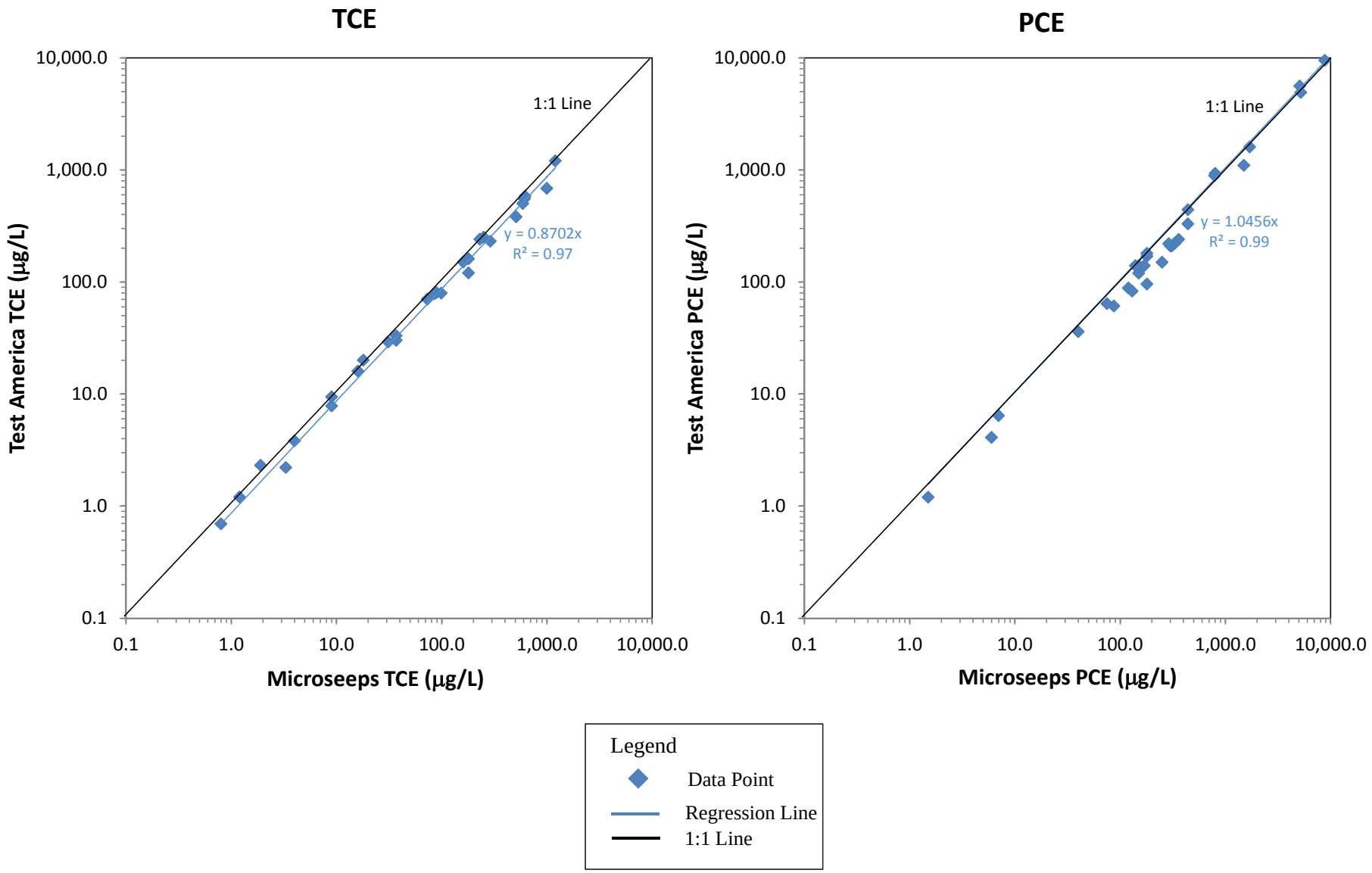


Figure 4 – Comparison of PCE and TCE Analyzed by Microseeps and Test America

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-16944 and 160-16967
Date Completed: 05 May 2016	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. The sample year for RB01 and MW-401-SP16 on COC was 2015 and sample label year was 2016; 2016 date was used for login. TRIPBLANK-SP16 did not have a sample date on COC or label; shipped date was used for log in. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 395494.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct?	Yes.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes. The report and EDD for SDG 160-16944-1 were revised due to initial volume errors for Method 8260_SIM for 1, 4-dioxane for samples S-1-325-SP16 (160-16944-2), MW-220-325-SP16 (160-16944-16), and MW-215-395-SP16 (160-16944-17). Initial volume on instrument was incorrectly reported as 2 microliters instead of 5 milliliters, which caused the calculated results to be extremely (falsely) high; corrected results are reported herein.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-16944 and 160-16967
Date Completed: 05 May 2016	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. Acetone and chloroform were detected in the rinsate blank.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. The chloroform result for sample MWP-110-440-SP16 was qualified with a U for rinsate blank contamination.
Surrogate for method blanks and LCS within limits? *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes.
MS/MSD within QC criteria? See Table 3 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	Yes.
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-16944 and 160-16967
Date Completed: 05 May 2016	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.* See Table 6.	Yes. Several samples were diluted for analysis by SW8260B due to high concentrations of target analytes.
Do field duplicate results show good precision for all compounds? See Table 7	No. Acetone results were qualified with J as estimated for the field duplicate sample pair for sample MW-225-330-SP16 due to poor precision.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Yes.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes.

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Date Completed: 05 May 2016	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. The following compounds (known as poor performers for Method 8260) did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batches 246272 and 246258: Acetone, Methyl acetate, 2- Butanone, 4- Methyl-2- pentanone and 2- Hexanone. A low level CCV was analyzed at the reporting limit (1ug/L) and the affected analytes were detected for both batches. Target analytes detected above the reporting limit were qualified with J as estimated and analytes below the reporting limit were qualified with UJ as estimated.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Compliance Review Total Uranium by KPA Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 2. *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	No.
Were any analytes flagged for blank contamination? See Table 2A. *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	No.

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Date Completed: 05 May 2016	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Total Uranium by KPA Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria (70-130% recovery)? *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes.
Do field duplicate results show good precision for all isotopes? *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	Yes.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to confirm quenching; only one result is reported per sample.
Were background and continuing calibration checks performed daily?	Yes.
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies found in spectra? *If found check spectra and calculations; qualify per USACE guidance.*	No.
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

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Summary of Potential Impacts on Data Usability
Major Concerns
Initial volume error for three samples for analysis of 1,4-dioxane by Method 8260_SIM caused results to be reported that were falsely extremely high. Upon request the laboratory reviewed the report and analyses, made the volume corrections, and issued a revised report and EDD; correct results are reported and discussed herein.
Minor Concerns
SW8260B: ● Sample result qualified for RB contamination ● Several sample results qualified for low response factors for poor performing compounds ● Elevated reporting limits provided for some analytes due to dilution required because of high concentrations of analytes. ● Compound qualified for field duplicate precision. SW6010B: ● Elevated reporting limit provided for nickel due to dilution required because of high concentration of salts.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
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Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-16944-1	WG	MW-215-395-SP16	160-16944-17	04/14/2016			
160-16944-1	WG	MW-216-510-SP16	160-16944-11	04/13/2016			
160-16944-1	WG	MW-217-490-SP16	160-16944-14	04/14/2016		MS/MSD	
160-16944-1	WG	MW-219-560-SP16	160-16944-7	04/13/2016			
160-16944-1	WG	MW-220-325-SP16	160-16944-16	04/14/2016			
160-16944-1	WG	MW-221-320-SP16	160-16944-12	04/13/2016			
160-16944-1	WG	MW-222-340-SP16	160-16944-10	04/13/2016			
160-16967-1	WG	MW-223-580-SP16	160-16967-1	04/15/2016		MS/MSD	
160-16944-1	WG	MW-224-330-SP16	160-16944-13	04/13/2016			
160-16944-1	WG	MW-225-330-SP16	160-16944-15	04/14/2016			
160-16944-1	WG	MW-400-SP16	160-16944-6	04/12/2016			
160-16944-1	WG	MW-401-SP16	160-16944-19	04/14/2016			
160-16944-1	WG	MW-58-75-SP16	160-16944-1	04/12/2016			
160-16944-1	WG	MW-59-75-SP16	160-16944-4	04/12/2016			
160-16944-1	WG	MWP-110-355-SP16	160-16944-8	04/13/2016			
160-16944-1	WG	MWP-110-440-SP16	160-16944-9	04/13/2016			
160-16944-1	WQ	RB01	160-16944-18	04/13/2016			
160-16944-1	WG	S-1-325-SP16	160-16944-2	04/12/2016			
160-16944-1	WG	S-1-450-SP16	160-16944-3	04/12/2016			
160-16944-1	WQ	TRIPBLANK-SP16	160-16944-20	04/14/2016			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-16944-1	WG	SW6010B	Metals (ICP), Nickel	3	N
160-16944-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	18	N
160-16944-1	WG	SW8260B-SIM	Volatile Organics by GC/MS SIM (1,4-Dioxane)	18	N
160-16944-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	2	TB/RB
160-16944-1	WQ	SW8260B-SIM	Volatile Organics by GC/MS SIM (1,4-Dioxane)	2	TB/RB
160-16944-1 (GEL SDG 395494)	WG	D5174	Total Uranium by KPA	4	N
160-16967-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	1	N
160-16967-1	WG	SW8260B-SIM	Volatile Organics by GC/MS SIM (1,4-Dioxane)	1	N

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	RB01	RB	Acetone	2.1		ug/l	0.34	2.0
SW8260B	RB01	RB	Chloroform	0.18	J	ug/l	0.10	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	RB01	WG	Chloroform	0.18	0.26	JD	ug/l	MWP-110-440-SP16	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits
None.

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits
None

Table 5 - List of LCS Recoveries outside Control Limits
None.

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-215-395-SP16	160-16944-17	SW8260B	WG	Sample diluted 5X for Trichloroethylene (TCE) concentration exceeding the calibration curve. Only TCE reported from dilution.
MW-221-320-SP16	160-16944-12	SW8260B	WG	Initial analysis run at 5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 50X for Cis-1,2-Dichloroethylene, Tetrachloroethylene (PCE), and Trichloroethylene (TCE) concentration exceeding the calibration curve. Only Cis-1,2-Dichloroethylene, PCE, and TCE reported from 50X dilution.

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Sample ID	Lab ID	Method	Sample Type	Action
MW-223-580-SP16	160-16967-1	SW8260B	WG	Sample diluted 5X for Trichloroethylene (TCE) concentration exceeding the calibration curve. Only TCE reported from dilution.
MW-219-560-SP16	160-16944-7	SW8260B	WG	Initial analysis run at 10X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 100X for Trichloroethylene (TCE) concentration exceeding the calibration curve. Only TCE reported from 100X dilution.
MW-220-325-SP16	160-16944-16	SW8260B	WG	Initial analysis run at 10X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 100X for Tetrachloroethylene (PCE) and Trichloroethylene (TCE) concentrations exceeding the calibration curve. Only PCE, and TCE reported from 100X dilution.
MW-58-75-SP16	160-16944-1	SW6010B	WG	Initial analysis run at 10X dilution due to sample matrix high salt content. Elevated reporting limits provided.
MW-222-340-SP16	160-16944-10	SW8260B	WG	Initial analysis run at 2.5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 25X for 1,2-Dichlorobenzene, Cis-1,2-Dichloroethylene, Tetrachloroethylene (PCE), and Trichloroethylene (TCE) concentrations exceeding the calibration curve. Only 1,2-Dichlorobenzene, Cis-1,2-Dichloroethylene, PCE, and TCE reported from 25X dilution.
MW-225-330-SP16	160-16944-15	SW8260B	WG	Initial analysis run at 2.5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 25X for Tetrachloroethylene (PCE) concentration exceeding the calibration curve. Only PCE reported from 25X dilution.
MW-401-SP16	160-16944-19	SW8260B	WG	Initial analysis run at 2.5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 25X for Tetrachloroethylene (PCE) concentration exceeding the calibration curve. Only PCE reported from 25X dilution.
MW-58-75-SP16	160-16944-1	SW8260B	WG	Initial analysis run at 2.5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 25X for Tetrachloroethylene (PCE) concentration exceeding the calibration curve. Only PCE reported from 25X dilution.
MWP-110-355-SP16	160-16944-8	SW8260B	WG	Initial analysis run at 2.5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 25X for Tetrachloroethylene (PCE) and Trichloroethylene (TCE) concentrations exceeding the calibration curve. Only PCE and TCE reported from 25X dilution.
MWP-110-440-SP16	160-16944-9	SW8260B	WG	Initial analysis run at 2.5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 25X for Tetrachloroethylene (PCE) concentration exceeding the calibration curve. Only PCE reported from 25X dilution.

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Sample ID	Lab ID	Method	Sample Type	Action
S-1-450-SP16	160-16944-3	SW8260B	WG	Initial analysis run at 2.5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 25X for Tetrachloroethylene (PCE) concentration exceeding the calibration curve. Only PCE reported from 25X dilution.
MW-224-330-SP16	160-16944-13	SW8260B	WG	Initial analysis run at 200X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 2000X for Tetrachloroethylene (PCE) concentration exceeding the calibration curve. Only PCE reported from 25X dilution.
MW-224-330-SP16	160-16944-13	SW8260B SIM	WG	SIM analysis for 1,4-dioxane run at 20X dilution due to extremely high concentration of non-target analytes. Elevated reporting limits provided.
MW-215-395-SP16	160-16944-17	SW8260B	WG	Initial analysis run at 1X dilution. Diluted 5X for Trichloroethylene (TCE) concentration exceeding the calibration curve. Only TCE reported from 5X dilution.
MW-221-320-SP16	160-16944-12	SW8260B	WG	Initial analysis run at 5X dilution. Elevated reporting limits provided for non-detect analytes. Diluted 50X for Cis-1,2-Dichloroethylene, Tetrachloroethylene (PCE), and Trichloroethylene (TCE) concentrations exceeding the calibration curve. Only Cis-1,2-Dichloroethylene, PCE, and TCE reported from 50X dilution.
MW-223-580-SP16	160-16967-1	SW8260B	WG	Initial analysis run at 1X dilution. Diluted 5X for Tetrachloroethylene (PCE) and Trichloroethylene (TCE) concentration exceeding the calibration curve. Only PCE and TCE reported from 5X dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-59-75-SP16	MW-400-SP16	RPD	RPD Rating	Sample Qual
SW8260B	Acetone	ug/l	WG	0.34	TRG	3.0	4.2	33.3%	Good	None
SW8260B	Tetrachloroethylene (PCE)	ug/l	WG	0.18	TRG	3.5	3.3	5.9%	Good	None

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Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-225-330-SP16	MW-401-SP16	RPD	RPD Rating	Sample Qual
SW8260B	1,1,1-Trichloroethane	ug/l	WG	0.17	TRG	1.6	1.8	11.8%	Good	None
SW8260B	1,1-Dichloroethane	ug/l	WG	0.17	TRG	0.86	0.82	4.8%	Good	None
SW8260B	1,1-Dichloroethene	ug/l	WG	0.21	TRG	3.2	3.3	3.1%	Good	None
SW8260B	1,4-Dioxane (P-Dioxane)	ug/l	WG	1.2	TRG	1.4	ND	NC	--	--
SW8260B	Acetone	ug/l	WG	0.86	TRG	5.0	12	82.4%	Poor	J Flag
SW8260B	Chloroform	ug/l	WG	0.26	TRG	3.0	3.0	0.0%	Good	None
SW8260B	Cis-1,2-Dichloroethylene	ug/l	WG	0.22	TRG	19	20	5.1%	Good	None
SW8260B	Methyl tert-Butyl Ether (MTBE)	ug/l	WG	0.29	TRG	0.56	0.56	0.0%	Good	None
SW8260B	Tetrachloroethylene (PCE)	ug/l	WG	4.5	TRG	480	460	4.3%	Good	None
SW8260B	Toluene	ug/l	WG	0.18	TRG	1.1	1.2	8.7%	Good	None
SW8260B	Trichloroethylene (TCE)	ug/l	WG	0.63	TRG	44	45	2.2%	Good	None

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Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-5300-1
Date Completed: 22 October 2015	Data Validation Chemist: J. Z. Christopher; Lynne Parker
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	The COC was not included in the Laboratory Report. A revised report was issued that included the COC.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No. The samples were received in good condition at a temperature of 1.3℃. There was no indication from the laboratory that the samples were frozen.
Frequency of Field QC Samples Correct?	A trip blank was included with the sample set. No other field QC was provided.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	A MS/MSD was not collected with the sample set. Insufficient sample volume was provided for the laboratory to perform a MS/MSD analysis for volatiles. A LCS/LCSD analysis was performed instead. A MS/MSD was performed for metals analysis.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-5300-1
Date Completed: 22 October 2015	Data Validation Chemist: J. Z. Christopher; Lynne Parker
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2.	Yes. SW8260: 2-Butanone (MEK) and Acetone were detected in the trip blank (TB04). Acetone was detected in the method blank associated with medium level soil analysis. 1,2,3-Trichlorobenzene was detected in the method blank associated with the trip blank. SW6010: Lead was detected in the continuing calibration blank CCB 160-106765/12.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	SW8260: Acetone results were U qualified in samples STS-B01-Z1 and STS-B01-Z2, and 2-butanone was U qualified in STS-B01-Z1 due to positive detections in the trip blank.
Surrogate for method blanks and LCS within limits? See Table 3. -- *Organic Methods Only*	No. SW8260: The surrogate recoveries for Toluene-d8 and 4-Bromofluorobenzene were recovered high in the low level analysis of both soil samples. The analysis was repeated by the laboratory with similar results; therefore, matrix interference is likely present. The positive detections in the samples were qualified J as estimated.
Surrogate for samples and MS/MSD within limits? See Table 3. -- *Organic Methods Only* Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Insufficient sample volume was provided to perform a MS/MSD analysis for volatiles.
MS/MSD within QC criteria? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	SW8260B: Insufficient sample volume was provided to perform a MS/MSD analysis. SW6010: Several analytes were outside of acceptance criteria in the MS/MSD of STS-B01-Z1. The results were qualified J/UJ as estimated. The laboratory analyzed the batch PDS on sample STS-B01-Z2 instead of STS-B01-Z1. The recoveries were all greater than 30% and less than 200%; therefore qualification was made solely on matrix spike recovery.

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Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5. *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. SW8260B: 1,2,3-trichlorobenzene was recovered high in LCS 160-101161/2-A for medium level analysis. The analyte was not reported for medium level samples. Chloroethane was recovered low in LCSD 160-11161/3 for medium level analysis, and also exhibited poor precision between the LCS and LCSD. The analyte was not reported for medium level samples
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. SW8260B: The samples were analyzed at medium level due to target concentrations exceeding the calibration curve. Toluene was reported at elevated detection limits in sample STS-B01-Z2. SW6010: The samples were diluted due to high concentrations of target compounds and interfering analytes. Elevated reporting limits provided.
Do field duplicate results show good precision for all compounds? See Table 7.	Field duplicate samples were not included with this SDG.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	No. The internal standard 1,4-dichlorobenzene-d4 exhibited area counts less than the lower limit in samples STS-B01-Z1 and STS-B01-Z2 by low level. The low level sample results were qualified J/UJ as estimated. The positive detections were already J qualified as due to surrogate failures.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

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Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone (0.0695) and methyl acetate (0.0228) exhibited relative response factors (RRF) less than the laboratory minimum in batch 100341. Acetone (0.0369), methyl acetate (0.0164), 1,4-dioxane (0.0010) and 2-butanone (0.0604) exhibited relative response factors (RRF) less than the laboratory minimum in batch 103615. The analytes are poor performers and per EPA SOP USEPA-540-R-08-01, a RRF >0.010 (>0.0050 for 1,4-dioxane) is acceptable. No qualification of the data was made
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	1,4-Dioxane exhibited a %D of 22.7% in ICV 160-103615/9. EPA SOP USEPA-540-R-08-01 allows up to 50% D for 1,4-dioxane; therefore, no qualification of the data was made.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. Dichlorodifluoromethane exhibited a %D of 54.5%, 1,4-dioxane exhibited a %D of 20.7%, and trichlorofluoromethane exhibited a %D of 20.2% in CCV 160-101222/3. EPA SOP USEPA-540-R-08-01 allows up to 40% D for these poor performing compounds. The CCV is associated with medium level analysis and the analytes were not reported. No qualification of data required.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone (0.0751) and methyl acetate (0.0240) exhibited relative response factors (RRF) less than the laboratory minimum in batch CCV 160-101222/3. Acetone (0.0360) and methyl acetate (0.0188) exhibited relative response factors (RRF) less than the laboratory minimum in batch CCV 160-103774/3. The analytes are poor performers and per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
CVAA	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	No. Thallium was recovered high in CRI 160-102838/7. The analyte was not detected in the samples; therefore, no qualification of the data was made.
ICP	ICB/CCB detections <2X MDL?	Yes.

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Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-5300-1
Date Completed: 22 October 2015	Data Validation Chemist: J. Z. Christopher; Lynne Parker
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Compliance Review Radiochemical Analyses Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2. *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	Yes. A-01-R: Thorium-228 and Thorium-230 were detected above the MDC and 2-sigma uncertainty and below ½ the PQL in the method blank for thorium analysis by alpha spectroscopy.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	No. A-01-R: The NAD test was applied per the USACE guidance for Thorium-228 and Thorium-230 for both samples and no qualification of the sample results was required.
LCS within QC criteria (70-130% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes.

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Date Completed: 22 October 2015	Data Validation Chemist: J. Z. Christopher; Lynne Parker
Date Performed:	Data Validation Review:

Compliance Review Radiochemical Analyses Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision for all isotopes? See Table 7. *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	N/A. No field duplicate was included with this SDG.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No.
Were background and continuing calibration checks performed daily?	Yes.
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies found in spectra? *If found check spectra and calculations; qualify per USACE guidance.*	No.
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

Compliance Review Radiochemical Analyses Approval by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
Gamma Spec	Was the soil matrix density comparable to the calibration standard density? (70-130%) *If not comparable, qualify results with J.*	Yes. Sample densities were 107% and 103% of the calibration standard density.

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Date Completed: 22 October 2015	Data Validation Chemist: J. Z. Christopher; Lynne Parker
Date Performed:	Data Validation Review:

Compliance Review Radiochemical Analyses Approval by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
Gamma Spec	Were the samples prepared in sealed containers and subjected to a 21-day ingrowth period prior to analysis? *If not, qualify results with J.*	Yes. Ingrowth was from 1/29 to 2/19/14.
Alpha Spec	Were background and continuing calibration checks (pulsers) performed daily?	Yes. Pulsers were acceptable.
Alpha Spec	Were tracer yields within limits (QAPP: 50-100%, lab 30-110%)? *If recoveries were outside laboratory derived limits, but within default limits of 20-150%, flag associated results as estimated (J) after corrective actions; otherwise R. If recoveries are <20%: flag as rejected (R) and >150% rejected (R).*	Yes.
Alpha Spec	If recoveries were outside control limits, were adequate quantities of tracers used and were calculations correct? *Evaluate entire SDG for systematic errors and qualify if needed*	Yes. All tracer recoveries were within limits.
Alpha Spec	MS/MSD within QC criteria for Alpha Spectroscopy (70-130% recovery, RPD ± 35)? *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	N/A. MS/MSD are optional for alpha spec and were not performed for this SDG.

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Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-5300-1
Date Completed: 22 October 2015	Data Validation Chemist: J. Z. Christopher; Lynne Parker
Date Performed:	Data Validation Review:

Summary of Potential Impacts on Data Usability
SW8260 • Acetone and 2-butanone are common laboratory contaminants and were U qualified as non-detect in the samples due to positive trip blank detections. • Surrogates toluene and 4-Bromofluorobenzene were recovered high in the soil samples. The positive detections were qualified J as estimated. • The internal standard 1,4-dichlorobenzene was less than 50% of the area response of the initial calibration in both soil samples. The positive detections were already J qualified due to surrogate failures. The non-detect results were qualified UJ as estimated. SW6010 • Sample results were qualified J/UJ in the STS-B01-Z1 due to matrix spike recoveries outside of control limits.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-5300-1
Date Completed: 22 October 2015	Data Validation Chemist: J. Z. Christopher; Lynne Parker
Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-5300-1	SO	STS-B01-Z1	160-5300-1	1/24/14 08:25			
160-5300-1	SO	STS-B01-Z2	160-5300-2	1/24/14 08:53			
160-5300-1	WQ	TB04	160-5300-3	1/24/14 00:00			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-5300-1	SO	A-01-R	Isotopic Thorium, (Alpha Spectrometry)	2	N
160-5300-1	SO	A-01-R	Isotopic Uranium, (Alpha Spectrometry)	2	N
160-5300-1	SO	GA-01-R	Radium-226, (Gamma Spectrometry)	2	N
160-5300-1	SO	6010C	Metals (ICP)	2	N
160-5300-1	SO	7471B	Mercury (CVAA)	2	N
160-5300-1	SO/WQ	8260B	Volatile Organic Compounds (GC/MS)	3	N/TB

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-5300-1
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Date Performed:	Data Validation Review:

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TB04	TB	2-Butanone (MEK)	0.65	J	ug/l	0.52	5
SW8260B	TB04	TB	Acetone	4		ug/l	0.34	2
A-01-R	MB 160-102078/1-A	MB	Thorium-228	0.07018		pCi/g	0.0486	1.00
A-01-R	MB 160-102078/1-A	MB	Thorium-230	0.06306		pCi/g	0.0276	1.00
SW8260B	MB 160-101161/1-A	MB	Acetone	552	J	ug/kg	85	1000
SW8260B	MB 160-103774/2	MB	1,2,3-Trichlorobenzene	0.116	J	ug/l	0.087	2
SW6010	CCB-160-106765/12	CCB	Lead	2.50	J	ug/l	1.5	10

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TB04	SO	2-Butanone (MEK)	0.65	3.7	J	ug/kg	STS-B01-Z1	U Flag
SW8260B	TB04	SO	Acetone	4	26		ug/kg	STS-B01-Z1	U Flag
SW8260B	TB04	SO	2-Butanone (MEK)	0.65	6.8	J	ug/kg	STS-B01-Z2	None
SW8260B	TB04	SO	Acetone	4	31		ug/kg	STS-B01-Z2	U Flag

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Date Performed:	Data Validation Review:

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B – Low Level	STS-B01-Z1	SO	4-Bromofluorobenzene (Surr)	170	85	120	1	J Flag Positive Detections
SW8260B – Low Level	STS-B01-Z1	SO	Toluene-d8 (Surr)	144	85	115	1	J Flag Positive Detections
SW8260B – Low Level	STS-B01-Z2	SO	4-Bromofluorobenzene (Surr)	157	85	120	1	J Flag Positive Detections
SW8260B – Low Level	STS-B01-Z2	SO	Toluene-d8 (Surr)	121	85	115	1	J Flag Positive Detections

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW6010B	STS-B01-Z1	SO	Antimony	ND	53.7	51	49	10	80	120	UJ Flag
SW6010B	STS-B01-Z1	SO	Aluminum	11000	1070	387	318	10	80	120	4X
SW6010B	STS-B01-Z1	SO	Calcium	2500	1070	108	163	10	80	120	J Flag
SW6010B	STS-B01-Z1	SO	Iron	14000	1070	156	57	10	80	120	4X
SW6010B	STS-B01-Z1	SO	Magnesium	1100	1070	124	117	10	80	120	J Flag
SW6010B	STS-B01-Z1	SO	Manganese	190	107	132	150	10	80	120	J Flag
SW6010B	STS-B01-Z1	SO	Sodium	ND	1070	135	139	10	80	120	None
SW6010B	STS-B01-Z1	SO	Thallium	ND	21.5	126	121	10	80	120	None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	Unit	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-101161/2-A	LCS	1,2,3-Trichlorobenzene	ug/kg	139	104	60	135	None: Not

Method	Sample ID	Sample Type	Analyte	Unit	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
									Reported
SW8260B	LCSD 160-101161/3-A	LCSD	Chloroethane	ug/kg	47	28	40	155	None: Not Reported

Method	Parent Sample	Analyte	Unit	RPD	RPD Limit	Qualifier
SW8260B	LCSD 160-101161/3-A	Chloroethane	ug/kg	50	30	None: Not Reported

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
STS-B01-Z1	160-5300-1	SW6010A	SO	Sample diluted by 10X due to high concentrations of target and interfering analytes. Elevated reporting limits provided.
STS-B01-Z2	160-5300-2	SW6010A	SO	Sample diluted by 10X due to high concentrations of target and interfering analytes. Elevated reporting limits provided.
STS-B01-Z1	160-5300-1	SW8260B	SO	Samples analyzed at medium level due to target analytes exceeding the calibration curve. Only the exceeding analytes are reported at medium level.
STS-B01-Z2	160-5300-2	SW8260B	SO	Samples analyzed at medium level due to target analytes exceeding the calibration curve. Toluene was reported with elevated reporting limits.

Table 7 – Summary of Field Duplicate Results

None.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-5300-1
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Date Performed:	Data Validation Review:

Key:

AP	=	Acid Phenol
BN	=	Base Neutral
CCV	=	Continuing calibration verification
COC	=	Chain-of-custody
CVAA	=	Cold Vapor Automatic Absorption
GC	=	Gas Chromatography
GC/MS	=	Gas Chromatography/Mass Spectrometry
ICP	=	Inductively Coupled Plasma Argon Spectrometry
ICS	=	Interference check standard
ICV	=	Initial calibration verification
NA	=	Not Applicable
LCS	=	Laboratory Control Sample
MS/MSD	=	Matrix Spike/Matrix Spike Duplicate
QAPP	=	Quality Assurance Project Plan
QC	=	Quality Control
SD	=	Serial Dilution
SVOCs	=	Semivolatile Organic Compounds
TIC	=	Tentatively Identified Compound
VOCs	=	Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-10950
Date Completed: 09 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 369370.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes. Note: The samples designated for metals and KPA analyses do not require temperature preservation and were shipped in a separate cooler without ice (this cooler was 19.0 deg. C upon receipt).
Frequency of Field QC Samples Correct?	Yes.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-10950
Date Completed: 09 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. SW8260B: 2-Butanone (MEK) and Acetone were detected in Trip Blank 01, Trip Blank 02, and Trip Blank 03.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. SW8260B: Results for 2-butanone, and acetone were U qualified as non-detect in several samples due to positive detections in Trip Blanks 01, 02, and 03. If the sample result was less than the PQL, the MDL was elevated to the sample result; however, if the sample result was greater than the PQL, then the PQL was elevated to the sample result.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	No. SW8260B: Recoveries for 4-Bromofluorobenzene and Toluene-d8 were above criteria for MB 160-180337/8. Detected results in the batch were qualified with J as estimated; see below and Table 3.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No. SW8260B: Recoveries for 4-Bromofluorobenzene and Toluene-d8 were above criteria for samples in batch 180337; detected analytes for samples were qualified with a J as estimated.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No. SW8260B: Recovery for 1,2-Dibromoethane (EDB) was above criteria for the MS for sample MW-49S-SP15; however, the MSD and RPD were within criteria and EDB was not detected in the parent sample; therefore no qualifiers were added.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
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Date Completed: 09 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. SW8260B: Samples MW-203-160-SP15, MW-203-360-SP15, MW-22S-SP15, MW-24S-SP15, MW-28S-SP15, MW-29S-SP15, and MW-39S-SP15 were diluted due to high concentrations of analytes. Elevated reporting limits are provided as applicable. Only one result is reported per analyte per sample.
Do field duplicate results show good precision for all compounds? See Table 7	Yes.

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	No.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-10950
Date Completed: 09 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7.	Yes.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to check for quenching; only one result is reported per sample. No qualifiers were added.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0248), methyl acetate(0.0141), 2-butanone(0.0302), 4-Methyl-2-pentanone (MIBK) (0.0939) and 2-hexanone(0.0651), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-10950
Date Completed: 09 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. Dichlorodifluoromethane(24.3) exceeded the % D in CCV 160-179421/13. Dichlorodifluoromethane is a poor performer; therefore, per EPA SOP USEPA-540-R-08-01, a % D <40% is acceptable. No qualification of the data was made.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0250), methyl acetate(0.0154), 2-butanone(0.0286), and 2-hexanone(0.0617), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
SW8260B • Elevated reporting limits provided for several sample results due to dilution. • 2-Butanone and acetone were U qualified as non-detect in several samples due to positive detections in Trip Blank 01, Trip Blank 02, and Trip Blank 03. • High surrogate recoveries in Batch 180337 method blank and samples caused detected results to be qualified with J as estimated.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-10950
Date Completed: 09 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-10950-1	WG	MW-16D-SP15	160-10950-8	3/17/2015			
160-10950-1	WG	MW-16S-SP15	160-10950-9	3/17/2015			
160-10950-1	WG	MW-19D-SP15	160-10950-10	3/17/2015			
160-10950-1	WG	MW-19S-SP15	160-10950-11	3/17/2015			
160-10950-1	WG	MW-203-160-SP15	160-10950-37	3/18/2015			
160-10950-1	WG	MW-203-360-SP15	160-10950-38	3/18/2015			
160-10950-1	WG	MW-203-440-SP15	160-10950-39	3/18/2015			
160-10950-1	WG	MW-21D-SP15	160-10950-1	3/16/2015			
160-10950-1	WG	MW-21I-SP15	160-10950-2	3/16/2015			
160-10950-1	WG	MW-21S-SP15	160-10950-12	3/17/2015			
160-10950-1	WG	MW-22D-SP15	160-10950-33	3/18/2015		MS/MSD	
160-10950-1	WG	MW-22I-SP15	160-10950-13	3/17/2015			
160-10950-1	WG	MW-22S-SP15	160-10950-14	3/17/2015			
160-10950-1	WG	MW-23D-SP15	160-10950-15	3/17/2015		MS/MSD	
160-10950-1	WG	MW-24DD-SP15	160-10950-43	3/18/2015			
160-10950-1	WG	MW-24S-SP15	160-10950-34	3/18/2015			
160-10950-1	WG	MW-25D-SP15	160-10950-3	3/16/2015			
160-10950-1	WG	MW-25I-SP15	160-10950-4	3/16/2015			
160-10950-1	WG	MW-26D-SP15	160-10950-16	3/17/2015			
160-10950-1	WG	MW-27DD-SP15	160-10950-17	3/17/2015			
160-10950-1	WG	MW-27D-SP15	160-10950-18	3/17/2015			
160-10950-1	WG	MW-27S-SP15	160-10950-19	3/17/2015			
160-10950-1	WG	MW-28D-SP15	160-10950-20	3/17/2015			
160-10950-1	WG	MW-28I-SP15	160-10950-21	3/17/2015			
160-10950-1	WG	MW-28S-SP15	160-10950-22	3/17/2015			
160-10950-1	WG	MW-29S-SP15	160-10950-23	3/17/2015			
160-10950-1	WG	MW-30D-SP15	160-10950-5	3/16/2015		MS/MSD	
160-10950-1	WG	MW-30I-SP15	160-10950-24	3/17/2015			
160-10950-1	WG	MW-30S-SP15	160-10950-6	3/16/2015			
160-10950-1	WG	MW-31D-SP15	160-10950-7	3/16/2015			
160-10950-1	WG	MW-31I-SP15	160-10950-25	3/17/2015		MS/MSD	
160-10950-1	WG	MW-32D-SP15	160-10950-26	3/17/2015			
160-10950-1	WG	MW-39S-SP15	160-10950-27	3/17/2015			
160-10950-1	WG	MW-49S-SP15	160-10950-35	3/18/2015		MS/MSD	
160-10950-1	WG	MW-50I-SP15	160-10950-28	3/17/2015			
160-10950-1	WG	MW-51I-SP15	160-10950-36	3/18/2015			
160-10950-1	WG	MW-900-SP15	160-10950-29	3/17/2015			

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Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-10950-1	WG	MW-901-SP15	160-10950-30	3/17/2015			
160-10950-1	WG	MW-902-SP15	160-10950-31	3/18/2015			
160-10950-1	WG	MW-903-SP15	160-10950-32	3/18/2015			
160-10950-1	WQ	TRIP BLANK 01	160-10950-40	3/17/2015			
160-10950-1	WQ	TRIP BLANK 02	160-10950-41	3/17/2015			
160-10950-1	WQ	TRIP BLANK 03	160-10950-42	3/18/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-10950-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	40	N/FD
160-10950-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	3	TB
160-10950-1	WG	SW6010B	Metals (ICP), Nickel	40	N/FD
160-10950-1 (GEL SDG 369370)	WG	D5174	Total Uranium by KPA	40	N/FD

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TRIP BLANK 01	TB	2-Butanone (MEK)	1.3	J	ug/l	0.52	5
SW8260B	TRIP BLANK 01	TB	Acetone	10		ug/l	0.34	2
SW8260B	TRIP BLANK 02	TB	2-Butanone (MEK)	1.8	J	ug/l	0.52	5
SW8260B	TRIP BLANK 02	TB	Acetone	9.3		ug/l	0.34	2
SW8260B	TRIP BLANK 03	TB	2-Butanone (MEK)	1.9	J	ug/l	0.52	5
SW8260B	TRIP BLANK 03	TB	Acetone	9.9		ug/l	0.34	2

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	1.7	J	ug/l	MW-16D-SP15	U Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	5.5		ug/l	MW-16S-SP15	U Flag
SW8260B	TRIP BLANK 03	WG	2-Butanone (MEK)	1.9	0.55	JQ	ug/l	MW-203-360-SP15	U Flag
SW8260B	TRIP BLANK 03	WG	Acetone	9.9	5.7		ug/l	MW-203-360-SP15	U Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	3.7		ug/l	MW-21S-SP15	U Flag
SW8260B	TRIP BLANK 03	WG	Acetone	9.9	2.4		ug/l	MW-22D-SP15	U Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	2.1		ug/l	MW-22I-SP15	U Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	3		ug/l	MW-23D-SP15	U Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	2.6		ug/l	MW-27D-SP15	U Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	1.9	J	ug/l	MW-27S-SP15	U Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	1.8	J	ug/l	MW-28I-SP15	U Flag
SW8260B	TRIP BLANK 01	WG	Acetone	10	2.8		ug/l	MW-30D-SP15	U Flag
SW8260B	TRIP BLANK 01	WG	Acetone	10	2.1		ug/l	MW-31D-SP15	U Flag

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 02	WG	Acetone	9.3	2		ug/l	MW-32D-SP15	U Flag
SW8260B	TRIP BLANK 03	WG	Acetone	9.9	1	J	ug/l	MW-51I-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MB 160-180337/8	MB	4-Bromofluorobenzene (Surr)	129	75	120	1	None
SW8260B	MW-203-160-SP15	WG	4-Bromofluorobenzene (Surr)	132	75	120	1	J
SW8260B	MW-203-160-SP15	WG	4-Bromofluorobenzene (Surr)	129	75	120	2	J
SW8260B	MW-203-360-SP15	WG	4-Bromofluorobenzene (Surr)	128	75	120	1	J
SW8260B	MW-203-360-SP15	WG	4-Bromofluorobenzene (Surr)	130	75	120	10	J
SW8260B	MW-203-440-SP15	WG	4-Bromofluorobenzene (Surr)	129	75	120	1	J
SW8260B	MW-24DD-SP15	WG	4-Bromofluorobenzene (Surr)	129	75	120	1	J
SW8260B	MW-24S-SP15	WG	4-Bromofluorobenzene (Surr)	133	75	120	25	J
SW8260B	MW-24S-SP15	WG	4-Bromofluorobenzene (Surr)	131	75	120	5	J
SW8260B	MW-49S-SP15	WG	4-Bromofluorobenzene (Surr)	128	75	120	1	J
SW8260B	MW-51I-SP15	WG	4-Bromofluorobenzene (Surr)	130	75	120	1	J
SW8260B	TRIP BLANK 01	TB	4-Bromofluorobenzene (Surr)	129	75	120	1	J
SW8260B	TRIP BLANK 02	TB	4-Bromofluorobenzene (Surr)	131	75	120	1	J
SW8260B	TRIP BLANK 03	TB	4-Bromofluorobenzene (Surr)	132	75	120	1	J
SW8260B	MB 160-180337/8	MB	Toluene-d8 (Surr)	121	85	120	1	None
SW8260B	MW-24DD-SP15	WG	Toluene-d8 (Surr)	122	85	120	1	J
SW8260B	MW-51I-SP15	WG	Toluene-d8 (Surr)	122	85	120	1	J
SW8260B	TRIP BLANK 01	TB	Toluene-d8 (Surr)	122	85	120	1	J
SW8260B	TRIP BLANK 03	TB	Toluene-d8 (Surr)	122	85	120	1	J

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Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	MW-49S-SP15	MS/MSD	1,2-Dibromoethane (EDB)	0.13	10.0	124	118	1	80	120	None

Table 5 - List of LCS Recoveries outside Control Limits

None.

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-203-160-SP15	160-10950-37	SW8260B	WG	Sample was initially analyzed at 1X dilution. The sample was diluted by 2X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-203-360-SP15	160-10950-38	SW8260B	WG	Sample was initially analyzed at 1X dilution. The sample was diluted by 10X to bring Trichloroethene (TCE) within the calibration curve. Only TCE is reported from the dilution.
MW-22S-SP15	160-10950-14	SW8260B	WG	Sample was initially analyzed at 100X dilution to bring Trichloroethene (TCE) within the calibration curve. Elevated reporting limits provided (except for 1,4-dioxane, which was analyzed at a 1X dilution).
MW-22S-SP15	160-10950-14	SW8260B	WG	Sample was initially analyzed at 100X dilution. The sample was diluted by 1000X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-24S-SP15	160-10950-34	SW8260B	WG	Sample was initially analyzed at 5X dilution to bring Trichloroethene (TCE) within the calibration curve. Elevated reporting limits provided (except for 1,4-dioxane, which was analyzed at a 1X dilution).
MW-24S-SP15	160-10950-34	SW8260B	WG	Sample was initially analyzed at 5X dilution. The sample was diluted by 25X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.

Sample ID	Lab ID	Method	Sample Type	Action
MW-28S-SP15	160-10950-22	SW8260B	WG	Sample was initially analyzed at 1X dilution. The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-29S-SP15	160-10950-23	SW8260B	WG	Sample was initially analyzed at 1X dilution. The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-39S-SP15	160-10950-27	SW8260B	WG	Sample was initially analyzed at 10X dilution to bring 1,1,1-Trichloroethane and Trichloroethene (TCE) within the calibration curve. Elevated reporting limits provided (except for 1,4-dioxane, which was analyzed at a 1X dilution).
MW-39S-SP15	160-10950-27	SW8260B	WG	Sample was initially analyzed at 10X dilution. The sample was diluted by 100X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-22S-SP15	369370014 (160-10950-14)	D5174	WG	Sample diluted 100X due to high total uranium concentration.
MW-24S-SP15	369370034 (160-10950-34)	D5174	WG	Sample diluted 1,000X due to high total uranium concentration.
MW-28D-SP15	369370020 (160-10950-20)	D5174	WG	Sample diluted 10X due to sample quenching.
MW-50I-SP15	369370028 (160-10950-28)	D5174	WG	Sample diluted 10X due to high total uranium concentration.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-26D-SP15	MW-900-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	0.872	0.822	5.9%	Good	None
SW6010	Nickel	ug/l	Water	40	A	5.5	5.3	3.7%	Good	None

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Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-16D-SP15	MW-901-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	0.0708	0.0799	12.1%	Good	None
SW6010	Nickel	ug/l	Water	40	A	3.4	3.1	9.23%	Good	None
SW8260B	1,1,1-Trichloroethane	ug/l	Water	1	A	0.71	0.75	5.48%	Good	None
SW8260B	1,1-Dichloroethane	ug/l	Water	1	A	0.81	0.79	2.50%	Good	None
SW8260B	1,1-Dichloroethene	ug/l	Water	1	A	0.67	0.69	2.94%	Good	None
SW8260B	Chloroform	ug/l	Water	1	A	0.41	0.42	2.41%	Good	None
SW8260B	Tetrachloroethene	ug/l	Water	1	A	0.84	0.92	9.09%	Good	None
SW8260B	Trichloroethene	ug/l	Water	1	A	0.57	0.59	3.45%	Good	None
SW8260B	Trichlorofluoromethane	ug/l	Water	1	A	1.50	1.70	12.5%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-203-440-SP15	MW-902-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	ND	ND	NC	--	--
SW6010	Nickel	ug/l	Water	40	A	3.8	3.0	23.5%	Good	None
SW8260B	Trichloroethene	ug/l	Water	1	A	0.53	ND	NC	--	--

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-49S-SP15	MW-903-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	0.991	0.757	26.8%	Good	None
SW6010	Nickel	ug/l	Water	40	A	5.7	5.8	1.74%	Good	None

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Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

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The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. Sample MW-905-SP15 was sent with the sample set, but not included on the COC. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 369359.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	The cooler temperatures were noted at 1.4°C and 1.7°C at receipt. The samples were noted to be received in good condition and not frozen.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was collected for the samples MW-20S-SP15. Samples MW-25S-SP15 and MW-208-540-SP15 were used for laboratory QC. One field duplicate was collected: MW-55S-SP15 (MW-905-SP15). Sample MW-55S-SP15 was included in SDG 160-11013-1. A trip blank was provided in each cooler with samples for VOC analysis.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

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Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. Acetone and 2-butanone were detected in Trip Blank 04 and Trip Blank 05.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. Acetone was U qualified in the following samples due to trip blank detections: MW-202-495-SP15, MW-208-350-SP15, MW-208-540-SP15, MW-26S-SP15, and MW-905-SP15.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	No. The surrogate recoveries of toluene-d8 and p-bromofluorobenzene were above the upper control limit in MB 160-180642/8. No qualification of the data was made.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No. The recovery of p-bromofluorobenzene was above the upper control limit in the following samples: MW-14D-SP15, MW-18S-SP15, MW-20I-SP15, MW-20S-SP15, MW-25S-SP15, and MW-41S-SP15. The recovery of toluene-d8 was above the upper control limit in the following sample: MW-202-380-SP15. Analyte detections in the samples were J qualified as estimated. No qualification was made on non-detect results. The samples were not reanalyzed and there was no evidence of matrix effects from the chromatograms.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	No. Cyclohexane was recovered high in the MS/MSD of MW-20S-SP15. The associated LCSD was non-compliant. Cyclohexane is a poor performer per EPA SOP USEPA-540-R-08-01. The results were non-detect in the parent sample; therefore, no qualification of the data was made.

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Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. Cyclohexane was recovered high in LCSD 160-180642. The analyte is a poor performer per EPA SOP USEPA-540-R-08-01. The results were non-detect in the associated samples; therefore, no qualification of the data was made.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. MW-202-380-SP15 was initially analyzed at a dilution. Elevated reporting limits are provided. The following samples were diluted due to target analytes exceeding the calibration curve: MW-43S-SP15, MW-208-350, and MW-202-380-SP15. Only the target analytes were reported from the dilution.
Do field duplicate results show good precision for all compounds? See Table 7	Yes.

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	Yes. Uranium was detected in a method blank above the PQL; however, the sample results were all greater than ten times the blank concentration; no results were qualified.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.

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Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	No. MS/MSD recoveries were above criteria for sample MW-20S-SP15; however, the sample concentration was more than five times the spike amount; therefore, no qualifiers were required.
Do field duplicate results show good precision? See Table 7.	Yes.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a dilution and/or post-spike to check for quenching; only one result is reported per sample. Several samples with low uranium concentrations were reprepped and reanalyzed due to method blank contamination in the initial batch. No qualifiers were required.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

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Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0241), methyl acetate(0.0151), 2-butanone(0.0327), 2-hexanone(0.0643), and 4-methyl-2-pentanone(0.0947) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSZ. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0246), methyl acetate(0.0160), 2-butanone(0.0324), 2-hexanone(0.0651) and 4-methyl-2-pentanone(0.0969) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-180642/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. Acetone(0.0240), methyl acetate(0.0150), 2-butanone(0.0307), 2-hexanone(0.0603) and 4-methyl-2-pentanone(0.0934) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-181005/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2918) was less than the laboratory minimum of 0.300 in CCV 160-181005/4; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.

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Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Summary of Potential Impacts on Data Usability

Major Concerns

None.

Minor Concerns

- Elevated reporting limits provided for sample MW-202-380SP15 due to initial analysis at a dilution.
- Positive detections in the following samples were J qualified as estimated due to elevated surrogate recoveries: MW-14D-SP15, MW-18S-SP15, MW-20I-SP15, MW-20S-SP15, MW-25S-SP15, MW-41S-SP15, and MW-202-350-SP15.
- Sample results for acetone was U qualified as non-detect in samples MW-202-495-SP15, MW-208-350-SP15, MW-208-540-SP15, MW-26S-SP15, and MW-905-SP15 due to trip blank detections.

Tables

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Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-10990-1	WG	MW-13D-SP15	160-10990-1	03/18/2015	MS/MSD		
160-10990-1	WG	MW-13S-SP15	160-10990-2	03/18/2015			
160-10990-1	WG	MW-14DD-SP15	160-10990-4	03/18/2015			
160-10990-1	WG	MW-14D-SP15	160-10990-3	03/18/2015			
160-10990-1	WG	MW-14S-SP15	160-10990-5	03/18/2015			
160-10990-1	WG	MW-18I-SP15	160-10990-6	03/18/2015			
160-10990-1	WG	MW-18S-SP15	160-10990-7	03/18/2015			
160-10990-1	WG	MW-202-220-SP15	160-10990-14	03/19/2015			
160-10990-1	WG	MW-202-380-SP15	160-10990-15	03/18/2015			
160-10990-1	WG	MW-202-495-SP15	160-10990-16	03/18/2015			
160-10990-1	WG	MW-207-250-SP15	160-10990-17	03/19/2015			
160-10990-1	WG	MW-207-320-SP15	160-10990-18	03/19/2015			
160-10990-1	WG	MW-208-350-SP15	160-10990-19	03/19/2015			
160-10990-1	WG	MW-208-540-SP15	160-10990-20	03/19/2015	MS/MSD		
160-10990-1	WG	MW-20I-SP15	160-10990-8	03/19/2015			
160-10990-1	WG	MW-20S-SP15	160-10990-9	03/19/2015		MS/MSD	
160-10990-1	WG	MW-25S-SP15	160-10990-10	03/19/2015	MS/MSD		
160-10990-1	WG	MW-26S-SP15	160-10990-11	03/19/2015			
160-10990-1	WG	MW-41S-SP15	160-10990-12	03/19/2015			
160-10990-1	WG	MW-43S-SP15	160-10990-13	03/19/2015			
160-10990-1	WG	MW-905-SP15	160-10990-23	03/19/2015			
160-10990-1	WQ	TRIP BLANK 04	160-10990-21	03/19/2015			
160-10990-1	WQ	TRIP BLANK 05	160-10990-22	03/19/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-10990-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	21	N/FD
160-10990-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	2	TB
160-10990-1	WG	SW6010B	Metals (ICP), Nickel	16	N/FD
160-10990-1 (GEL SDG 369359)	WG	D5174	Total Uranium by KPA	16	N/FD

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
D5174	MB_1203286877	MB	Uranium, Total	0.156		ug/l	0.0633	0.100
SW8260B	TRIP BLANK 04	TB	METHYL ETHYL KETONE (2-BUTANONE)	1.3	J	ug/l	0.52	5.0
SW8260B	TRIP BLANK 04	TB	ACETONE	9.7		ug/l	0.34	2.0
SW8260B	TRIP BLANK 05	TB	METHYL ETHYL KETONE (2-BUTANONE)	1.4	J	ug/l	0.52	5.0
SW8260B	TRIP BLANK 05	TB	ACETONE	9.5		ug/l	0.34	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 04	WG	ACETONE	9.7	1.9	J	ug/l	MW-202-495-SP15	U Flag
SW8260B	TRIP BLANK 04	WG	ACETONE	9.7	2.1		ug/l	MW-208-350-SP15	U Flag
SW8260B	TRIP BLANK 04	WG	ACETONE	9.7	1.8	J	ug/l	MW-208-540-SP15	U Flag
SW8260B	TRIP BLANK 04	WG	ACETONE	9.7	1.9	J	ug/l	MW-26S-SP15	U Flag
SW8260B	TRIP BLANK 04	WG	ACETONE	9.7	1.1	J	ug/l	MW-905-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MW-14D-SP15	WG	p-Bromofluorobenzene	122	75	120	1	
SW8260B	MW-18S-SP15	WG	p-Bromofluorobenzene	122	75	120	1	
SW8260B	MW-202-380-SP15	WG	TOLUENE-D8	121	85	120	5	
SW8260B	MW-20I-SP15	WG	p-Bromofluorobenzene	123	75	120	1	
SW8260B	MW-20S-SP15	WG	p-Bromofluorobenzene	123	75	120	1	

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MW-25S-SP15	WG	p-Bromofluorobenzene	122	75	120	1	
SW8260B	MW-41S-SP15	WG	p-Bromofluorobenzene	121	75	120	1	
SW8260B	MB 160-180642/8	WQ	p-Bromofluorobenzene	124	75	120	1	
SW8260B	MB 160-180642/8	WQ	TOLUENE-D8	123	85	120	1	

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
D5174	MW-20S-SP15 (160-10990-9)	WG	Uranium, Total	21,700	25	38,800	28,400	10,000	75	125	None
SW8260B	MW-20S-SP15	MS/MSD	CYCLOHEXANE	ND	10.0	122	117	1	85	115	None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCSD 160-180642/6	LCSD	CYCLOHEXANE	107	121	85	115	None

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-18I-SP15	369359006 (160-10990-6)	D5174	WG	Sample diluted 100X due to high total uranium concentration and/or to check for quenching.
MW-18S-SP15	369359007 (160-10990-7)	D5174	WG	Sample diluted 10,000X due to high total uranium concentration and to check for quenching.
MW-207-250-SP15	369359014 (160-10990-17)	D5174	WG	Sample diluted 10X due to high total uranium concentration and to check for quenching.

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Sample ID	Lab ID	Method	Sample Type	Action
MW-20I-SP15	369359008 (160-10990-8)	D5174	WG	Sample diluted 10X due to high total uranium concentration and to check for quenching.
MW-20S-SP15	369359009 (160-10990-9)	D5174	WG	Sample diluted 10,000X due to high total uranium concentration and to check for quenching.
MW-25S-SP15	369359010 (160-10990-10)	D5174	WG	Sample diluted 10X due to high total uranium concentration and to check for quenching.
MW-26S-SP15	369359011 (160-10990-11)	D5174	WG	Sample diluted 10X due to high total uranium concentration and to check for quenching.
MW-41S-SP15	369359012 (160-10990-12)	D5174	WG	Sample diluted 100X due to high total uranium concentration and to check for quenching.
MW-43S-SP15	369359013 (160-10990-13)	D5174	WG	Sample diluted 10X due to high total uranium concentration and to check for quenching.
MW-13D-SP15	369359001 (160-10990-1)	D5174	WG	Sample reprepped and reanalyzed due to method blank contamination.
MW-13S-SP15	369359002 (160-10990-2)	D5174	WG	Sample reprepped and reanalyzed due to method blank contamination.
MW-14D-SP15	369359003 (160-10990-3)	D5174	WG	Sample reprepped and reanalyzed due to method blank contamination.
MW-14DD-SP15	369359004 (160-10990-4)	D5174	WG	Sample reprepped and reanalyzed due to method blank contamination.
MW-14S-SP15	369359005 (160-10990-5)	D5174	WG	Sample reprepped and reanalyzed due to method blank contamination.
MW-207-320-SP15	369359015 (160-10990-18)	D5174	WG	Sample reprepped and reanalyzed due to method blank contamination.
MW-905-SP15	369359016 (160-10990-23)	D5174	WG	Sample reprepped and reanalyzed due to method blank contamination.

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Sample ID	Lab ID	Method	Sample Type	Action
MW-43S-SP15	160-10990-13	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-202-380-SP15	160-10990-15	SW8260B	WG	Sample was initially analyzed at 5X dilution. Elevated reporting limits provided. The sample was diluted by 50X to bring Trichloroethylene (TCE) within the calibration curve. Only TCE is reported from the dilution.
MW-208-350-SP15	160-10990-19	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) and Trichloroethylene (TCE) within the calibration curve. Only PCE and TCE are reported from the dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-55SD-SP15 (SDG 160-11013)	MW-905-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	ND	ND	NC	--	--
SW6010B	Nickel	ug/l	WG	40	A	2.9	2.8	3.5%	Good	None
SW8260B	CHLOROFORM	ug/l	WG	1.0	A	2.2	2.2	0.0%	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard

ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

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The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 369649.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No. One cooler was noted to be received at 18.0°C. The field team separated the samples into coolers for VOA and Metals analysis. The samples for Ni and U analysis were not shipped with ice, which is acceptable. The cooler with samples for VOC analysis was shipped on ice and received at 1.6°C. The samples were noted to be received in good condition and not frozen.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was not collected for the sample delivery group. Samples MW-52D-SP15, MW-55S-SP15, and MW-907-SP15 were used for laboratory QC. Two field duplicates were collected: MW-207-170-SP15 (MW-906-SP15) and MW-335-SP15 (MW-907-SP15). A trip blank was provided in each cooler with samples for VOC analysis.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

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Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. Acetone and 2-butanone were detected in Trip Blank 07.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. Acetone was U qualified as non-detect in MW-207-170-SP15, and 2-butanone was U qualified in MW-52D-SP15.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	No. 1,1,2,2-tetrachloroethane was recovered high in the MS/MSD of MW-55S-SP15. The associated LCS recovery was non-compliant. The results were already qualified UJ for calibration failures.

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Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits in the LCS associated with batch 181486/6. The sample results were non-detect, and qualified UJ due to calibration failures.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples MW-53S-SP15, MW-907-SP15, MW-207-170=SP15, MW-906-SP15, W-19-150-SP15, and MW-33S-SP15 were initially analyzed at a dilution. Elevated reporting limits are provided. The following samples were diluted due to target analytes exceeding the calibration curve: MW-33D-SP15, MW-52D-SP15, W-20-160-SP15, MW-53S-SP15, MW-907-SP15, MW-207-170=SP15, MW-906-SP15, W-19-150-SP15, and MW-33S-SP15. Only the target analytes were reported from the dilution.
Do field duplicate results show good precision for all compounds? See Table 7	Yes.

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	No.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.

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Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7.	Yes.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a dilution and/or post-spike to check for quenching; only one result is reported per sample. No qualifiers were required.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

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Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0221), methyl acetate(0.0137), 2-butanone(0.0328), and 2-hexanone(0.0700), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSM. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2331) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSM; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	No. Dichlorodifluoromethane exhibited a %D of 41.7% for ICV 160-181014/6. This exceeds the EPA SOP USEPA-540-R-08-01 criteria of 40% for a poor performer. The associated results were non-detect; therefore, they were qualified UJ as estimated non-detect.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. 1,1,2,2-tetrachloroethane exhibited a %D of 28.6% in CCV 160-181486/5. The analyte was not detected in any of the samples; therefore, they were qualified UJ as estimated non-detect. 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene exhibited a %D's of 36.2%, 23.8%, and 27.0% respectively in CCV 160-181945/5. EPA SOP USEPA-540-R-08-01 allows %D up to 25%; therefore, the associated results for 1,1,2,2-tetrachloroethane and 1,2,3-trichlorobenzene were qualified UJ as estimated non-detect.

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Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0239), methyl acetate(0.0128), 2-butanone(0.0290), 2-hexanone(0.0634) and 4-methyl-2-pentanone(0.0957) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-181486/5. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. Acetone(0.0244), methyl acetate(0.0146), 2-butanone(0.0315), 2-hexanone(0.0637) and 4-methyl-2-pentanone(0.0994) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-181945/5. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
• Sample results for 1,1,2,2-tetrachloroethane, 1,2,3-trichlorobenzene, and dichlorodifluoromethane were UJ qualified due to calibration failures. • Elevated reporting limits provided for samples MW-53S-SP15, MW-907-SP15, MW-207-170=SP15, MW-906-SP15, W-19-150-SP15, and MW-33S-SP15 due to initial analysis at a dilution.

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Summary of Potential Impacts on Data Usability
• Sample results for acetone was U qualified as non-detect in sample MW-207-170-SP15 and 2-butanone was U qualified in sample MW-52D-SP15..

Tables

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Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11013-1	WG	MW-207-170-SP15	160-11013-6	03/19/2015			
160-11013-1	WG	MW-33D-SP15	160-11013-14	03/23/2015			
160-11013-1	WG	MW-33S-SP15	160-11013-13	03/23/2015			
160-11013-1	WG	MW-34D-SP15	160-11013-1	03/19/2015	MS/MSD		
160-11013-1	WG	MW-34S-SP15	160-11013-2	03/19/2015			
160-11013-1	WG	MW-42I-SP15	160-11013-3	03/19/2015			
160-11013-1	WG	MW-52D-SP15	160-11013-4	03/19/2015	MS/MSD		
160-11013-1	WG	MW-53S-SP15	160-11013-15	03/23/2015			
160-11013-1	WG	MW-55S-SP15	160-11013-5	03/19/2015	MS/MSD		
160-11013-1	WG	MW-906-SP15	160-11013-7	03/19/2015			
160-11013-1	WG	MW-907-SP15	160-11013-17	03/23/2015	MS/MSD		
160-11013-1	WG	PW-02-05-SP15	160-11013-16	03/23/2015			
160-11013-1	WQ	TRIP BLANK 07	160-11013-12	03/19/2015			
160-11013-1	WG	W-19-110-SP15	160-11013-10	03/23/2015			
160-11013-1	WG	W-19-150-SP15	160-11013-11	03/23/2015			
160-11013-1	WG	W-20-120-SP15	160-11013-8	03/23/2015			
160-11013-1	WG	W-20-160-SP15	160-11013-9	03/23/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11013-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	16	N/FD
160-11013-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-11013-1	WG	SW6010B	Metals (ICP), Nickel	12	N/FD
160-11013-1 (GEL SDG 369649)	WG	D5174	Total Uranium by KPA	12	N/FD

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TRIP BLANK 07	TB	METHYL ETHYL KETONE (2-BUTANONE)	1.0	J	ug/l	0.52	5.0
SW8260B	TRIP BLANK 07	TB	ACETONE	9.6		ug/l	0.34	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination
None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 07	WG	ACETONE	9.6	8.0	D	ug/l	MW-207-170-SP15	U Flag
SW8260B	TRIP BLANK 07	WG	METHYL ETHYL KETONE (2-BUTANONE)	1.0	0.86	J	ug/l	MW-52D-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits
None

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	MW-55S-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	10.0	152	145	1	65	130	

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-181486/6	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	133	118	65	130	

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Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-33S-SP15	369649008 (160-11013-13)	D5174	WG	Sample diluted 100X due to high total uranium concentration and/or to check for quenching.
MW-42I-SP15	369649003 (160-11013-3)	D5174	WG	Sample diluted 100X due to high total uranium concentration and/or to check for quenching.
MW-53S-SP15	369649010 (160-11013-15)	D5174	WG	Sample diluted 10X due to high total uranium concentration and to check for quenching.
MW-907-SP15	369649012 (160-11013-17)	D5174	WG	Sample diluted 100X due to high total uranium concentration and/or to check for quenching.
MW-33D-SP15	160-11013-14	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-53S-SP15	160-11013-15	SW8260B	WG	Sample was initially analyzed at 50X dilution. Elevated reporting limits provided. The sample was diluted by 500X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-907-SP15	160-11013-17	SW8260B	WG	Sample was initially analyzed at 50X dilution. Elevated reporting limits provided. The sample was diluted by 500X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-52D-SP15	160-11013-4	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-207-170-SP15	160-11013-6	SW8260B	WG	Sample was initially analyzed at 2X dilution. Elevated reporting limits provided. The sample was diluted by 20X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-906-SP15	160-11013-7	SW8260B	WG	Sample was initially analyzed at 2X dilution. Elevated reporting limits provided. The sample was diluted by 20X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
W-20-160-SP15	160-11013-9	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) and 1,2-dichlorobenzene within the calibration curve. Only the exceeding analytes are reported from the dilution.
W-19-150-SP15	160-11013-11	SW8260B	WG	Sample was initially analyzed at 10X dilution. Elevated reporting limits provided. The sample was diluted by 100X to bring Tetrachloroethylene (PCE) within the calibration

Sample ID	Lab ID	Method	Sample Type	Action
				curve. Only PCE is reported from the dilution.
MW-33S-SP15	160-11013-13	SW8260B	WG	Sample was initially analyzed at 50X dilution. Elevated reporting limits provided. The sample was diluted by 500X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-207-170-SP15	MW-906-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	ND	ND	NC	--	--
SW8260B	NICKEL	ug/l	WG	40	A	8.5	8.0	6.1%	Good	None
SW8260B	CHLOROFORM	ug/l	WG	2.0	A	ND	0.21	NC	--	--
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/l	WG	2.0	A	1.3	1.5	14.3%	Good	None
SW8260B	Tetrachloroethylene (PCE)	ug/l	WG	20	A	370	380	2.7%	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/l	WG	2.0	A	2.4	2.7	11.8%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-33S-SP15	MW-907-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	114	110	3.57	Good	None
SW6010B	Nickel	ug/l	WG	40	A	16	16	0.0%	Good	None
SW8260B	Tetrachloroethylene (PCE)	ug/l	WG	500	A	6400	6200	3.2%	Good	None

Key:

AP = Acid Phenol

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BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

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The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 369673.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	The cooler temperature was 0.8°C at receipt. The samples were noted to be received in good condition and not frozen.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was collected for the samples W-24-260-SP15 and W-17-130-SP15. One field duplicate was collected: MW-12-SP15 (MW-908-SP15). A trip blank was provided in each cooler with samples for VOC analysis.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

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Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. 2-Butanone, acetone, and carbon disulfide were detected in Trip Blank 08.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. Sample results for acetone and carbon disulfide were U qualified as non-detect in sample W-25-150-SP15.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No. Dibromofluoromethane was recovered high in the dilution analysis of MW-12-SP15; therefore the sample results for PCE were qualified J as e Dibromofluoromethane was recovered high in the analysis of W-24-260-SP15; therefore the positive sample detections were qualified J as estimated.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	No. 1,1,2,2-tetrachloroethane was recovered high in the MS/MSD of W-17-130-SP15 and W-24-260-SP15. The results were already qualified UJ for calibration failures. Trans-1,3-dichloropropene was recovered high in the MS/MSD of W-17-130-SP15. The results were non-detect; therefore, no qualification of the data was made.

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Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits in the LCS and LCSD's associated with batches 182094. The sample results were non-detect, and qualified UJ due to calibration failures. Methyl acetate was recovered high in the LCS associated with batch 182094. The analyte is a poor performer and not detected in the samples. No qualification of the data was made.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples W-14-130-SP15, MW-908-SP15, and MW-12-SP15 were initially analyzed at a dilution. Elevated reporting limits are provided. The following samples were diluted due to target analytes exceeding the calibration curve: MW-44S-SP15, W-23-110-SP15, W-14-130-SP15, MW-908-SP15, and MW-12-SP15. Only the target analytes were reported from the dilution.
Do field duplicate results show good precision for all compounds? See Table 7	Yes.

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	No.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.

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Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7.	Yes.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a dilution and/or post-spike to check for quenching; only one result is reported per sample. No qualifiers were required.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

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Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0221), methyl acetate(0.0137), 2-butanone(0.0328), and 2-hexanone(0.0700), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSM. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2331) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSM; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made. Acetone(0.0224), methyl acetate(0.0131), 2-butanone(0.0354), and 2-hexanone(0.0654), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSZ. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2040) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSZ; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	No. Dichlorodifluoromethane exhibited a %D of 41.7% for ICV 160-181014/6. This exceeds the EPA SOP USEPA-540-R-08-01 criteria of 40% for a poor performer. The associated results were non-detect; therefore, they were qualified UJ as estimated non-detect.

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Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene exhibited a %D's of 36.2%, 23.8%, and 27.0% respectively in CCV 160-181945/5. EPA SOP USEPA-540-R-08-01 allows %D up to 25%; therefore, the associated results for 1,1,2,2-tetrachloroethane and 1,2,3-trichlorobenzene were qualified UJ as estimated non-detect. 1,1,2,2-tetrachloroethane exhibited a %D of 65.3% in CCV 160-182094/4. The analyte was not detected in any of the samples; therefore, they were qualified UJ as estimated non-detect. Cyclohexane exhibited a %D of 23.1% in CCV 160-182094/4. Per EPA SOP USEPA-540-R-08-01 a %D up to 25% is acceptable. No qualification of the data was made.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0244), methyl acetate(0.0146), 2-butanone(0.0315), 2-hexanone(0.0637) and 4-methyl-2-pentanone(0.0994) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-181945/5. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. Acetone(0.0241), methyl acetate(0.0152), 2-butanone(0.0329), 2-hexanone(0.0680) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-182094/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

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Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
• Sample results for 1,1,2,2-tetrachloroethane, 1,2,3-trichlorobenzene and dichlorodifluoromethane were UJ qualified due to calibration failures. • Elevated reporting limits provided for samples W-14-130-SP15, MW-908-SP15, and MW-12-SP15 due to initial analysis at a dilution. • Sample results for acetone and carbon disulfide were U qualified as non-detect in sample W-25-150-SP15. • Positive detections in samples MW-12-SP15 and W-24-260-SP15 were J qualified as estimated due to high recoveries of the surrogate dibromofluoromethane.

Tables

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Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11036-1	WG	MW-12-SP15	160-11036-4	03/24/2015			
160-11036-1	WG	MW-20D-SP15	160-11036-13	03/24/2015			
160-11036-1	WG	MW-23I-SP15	160-11036-11	03/24/2015			
160-11036-1	WG	MW-23S-SP15	160-11036-12	03/24/2015			
160-11036-1	WG	MW-44S-SP15	160-11036-10	03/24/2015			
160-11036-1	WG	MW-908-SP15	160-11036-8	03/24/2015			
160-11036-1	WG	TRIP BLANK 08	160-11036-3	03/23/2015			
160-11036-1	WG	W-17-130-SP15	160-11036-7	03/24/2015		MS/MSD	
160-11036-1	WG	W-23-110-SP15	160-11036-1	03/23/2015			
160-11036-1	WG	W-24-260-SP15	160-11036-2	03/23/2015		MS/MSD	
160-11036-1	WG	W-25-150-SP15	160-11036-5	03/24/2015			
160-11036-1	WG	W-25-188-SP15	160-11036-6	03/24/2015			
160-11036-1	WQ	W-34-285-SP15	160-11036-9	03/24/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11036-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	12	N/FD
160-11036-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-11036-1	WG	SW6010B	Metals (ICP), Nickel	12	N/FD
160-11036-1 (GEL SDG 369673)	WG	D5174	Total Uranium by KPA	7	N/FD

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TRIP BLANK 08	TB	METHYL ETHYL KETONE (2-BUTANONE)	1.3	J	ug/l	0.52	5.0
SW8260B	TRIP BLANK 08	TB	ACETONE	8.8		ug/l	0.34	2.0
SW8260B	TRIP BLANK 08	TB	CARBON DISULFIDE	0.34	J	ug/l	0.051	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination
None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 08	TB	ACETONE	8.8	3.1		ug/l	W-25-150-SP15	U Flag
SW8260B	TRIP BLANK 08	TB	CARBON DISULFIDE	0.34	0.50	J	ug/l	W-25-150-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MW-12-SP15	WG	DIBROMOFLUOROMETHANE	116	85	115	25	J Flag
SW8260B	W-24-260-SP15	WG	DIBROMOFLUOROMETHANE	117	85	115	1	J Flag

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	W-17-130-SP15	WG	1,1,2,2-TETRACHLOROETHANE	ND	25.0	193	206	2.5	65	130	None
SW8260B	W-17-130-SP15	WG	TRANS-1,3-DICHLOROPROPENE	ND	25.0	151	148	2.5	55	140	None
SW8260B	W-24-260-SP15	WG	1,1,2,2-TETRACHLOROETHANE	ND	10.0	151	164	1	65	130	None

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Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-182094/5	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	159	152	65	130	None
SW8260B	LCS 160-182094/5	LCS/LCSD	METHYL ACETATE	126	122	66	121	None

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-23S-SP15	369673006 (160-11036-12)	D5174	WG	Sample diluted 10X due to high total uranium concentration and/or to check for quenching.
MW-44S-SP15	369673004 (160-11036-10)	D5174	WG	Sample diluted 10X due to high total uranium concentration and/or to check for quenching.
W-17-130-SP15	160-11036-7	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-908-SP15	160-11036-8	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-44S-SP15	160-11036-10	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
W-23-110-SP15	160-11036-1	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-12-SP15	160-11036-4	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.

Table 7 – Summary of Field Duplicate Results

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11036
Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-12-SP15	MW-908-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	ND	ND	NC	--	--
SW6010B	NICKEL	ug/L	WG	40	A	16	13	20.7%	Good	None
SW8260B	Tetrachloroethylene (PCE)	ug/L	WG	25	A	610	660	7.9%	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	WG	2.5	A	2.9	2.7	7.1%	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11068
Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 369742.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	The cooler temperature was 1.8°C at receipt. The samples were noted to be received in good condition and not frozen.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was not collected for the sample delivery group. Samples W-03-112-SP15 and W-26-270-SP15 were used for laboratory QC. Three field duplicates were collected: W-37-385-SP15 (MW-909-SP15), W-18-150-SP15 (MW-910-SP15), and W-06-79-SP15 (MW-911-SP15). A trip blank was provided in each cooler with samples for VOC analysis. A rinsate blank was included in the sample delivery group.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11068
Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. 2-Butanone and acetone were detected in the Trip Blank 09 and rinsate blank RB01-SP15.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. 2-Butanone and acetone were U qualified as non-detect in the rinsate blank RB01-SP15. Acetone was U qualified as non-detect in MW-910-SP15, W-14-150-SP15, and W-31-95-SP15 due to trip blank detections.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits in the MS/MSD of W-26-270-SP15. The LCS/LCSD for the analyte was also non-compliant. The sample results for the analyte were UJ qualified for CCV failures.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11068
Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits LCS and LCSD's associated with batches 182094 and 182182. The sample results were non-detect, and qualified UJ due to CCV failures. Methyl acetate was recovered high in the LCS associated with batch 182094. The analyte is a poor performer and not detected in the samples. No qualification of the data was made.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples W-16-148-SP15 and W-37-325-SP15, analyzed initially at a dilution. Elevated reporting limits are provided. The following samples were diluted due to target analytes exceeding the calibration curve: W-18-150-SP15, W-37-385-SP15, MW-909-SP15, MW-910-SP15, W-01-75-SP15, W-16-148-SP15 and W-37-325-SP15. Only the target analytes were reported from the dilution.
Do field duplicate results show good precision for all compounds? See Table 7	Yes.

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	No.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11068
Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7.	Yes.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to check for quenching; only one result is reported per sample. No qualifiers were required.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11068
Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0257), methyl acetate(0.0131), 2-butanone(0.0320), and 2-hexanone(0.0674), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSM. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.1689) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSM; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made. Acetone(0.0224), methyl acetate(0.0131), 2-butanone(0.0354), and 2-hexanone(0.0654), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSZ. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2040) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSZ; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	No. 1,1,2,2-tetrachloroethane exhibited a % D of 59.5% in ICV 160-182107/14. The sample results were qualified UJ due to CCV failures.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. 1,1,2,2-tetrachloroethane exhibited a %D of 41.1% in CCV 160-182182/5 and a %D of 65.3% in CCV 160-182094/4. The analyte was not detected in any of the samples; therefore, they were qualified UJ as estimated non-detect. Cyclohexane exhibited a %D of 23.1% in CCV 160-182094/4. Per EPA SOP USEPA-540-R-08-01 a %D up to 25% is acceptable. No qualification of the data was made.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
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Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0240), methyl acetate(0.0141), 2-butanone(0.0322), and 2-hexanone(0.0678) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-182182/5. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2404) was less than the laboratory minimum of 0.300 CCV 160-182182/5; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made. Acetone(0.0241), methyl acetate(0.0152), 2-butanone(0.0329), 2-hexanone(0.0680) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-182094/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
• Sample results for 1,1,2,2-tetrachloroethane were UJ qualified due to CCV failures. • Elevated reporting limits provided for samples W-16-148-SP15 and W-37-325-SP15 due to

Summary of Potential Impacts on Data Usability

initial analysis at a dilution.

- Sample results for acetone were U qualified as non-detect in samples MW-910-SP15, W-14-150-SP18, and W-31-95-SP15.

- Sample results for 2-butanone and 2-hexanone were U qualified as non-detect in the rinsate blank RB01-SP15. Similar detections for the analytes were in both the trip blank and rinsate blanks. They were likely contaminants present in the water source that was used for both sample preparations.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
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Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11068-1	WG	MW-909-SP15	160-11068-12	03/25/2015			
160-11068-1	WG	MW-910-SP15	160-11068-13	03/25/2015			
160-11068-1	WG	MW-911-SP15	160-11068-19	03/25/2015			
160-11068-1	WQ	RB01-SP15	160-11068-14	03/25/2015			
160-11068-1	WW	TRIP BLANK 09	160-11068-15	03/24/2015			
160-11068-1	WG	W-01-120-SP15	160-11068-21	03/25/2015			
160-11068-1	WG	W-01-75-SP15	160-11068-18	03/25/2015			
160-11068-1	WG	W-03-112-SP15	160-11068-1	03/24/2015	MS/MSD		
160-11068-1	WG	W-03-72-SP15	160-11068-2	03/24/2015			
160-11068-1	WG	W-05-78-SP15	160-11068-3	03/25/2015			
160-11068-1	WG	W-06-79-SP15	160-11068-17	03/25/2015			
160-11068-1	WG	W-14-150-SP15	160-11068-20	03/25/2015			
160-11068-1	WQ	W-16-148-SP15	160-11068-5	03/25/2015			
160-11068-1	WG	W-18-150-SP15	160-11068-6	03/25/2015			
160-11068-1	WG	W-22-95-SP15	160-11068-4	03/25/2015			
160-11068-1	WG	W-26-270-SP15	160-11068-7	03/25/2015	MS/MSD		
160-11068-1	WG	W-27-240-SP15	160-11068-16	03/25/2015			
160-11068-1	WG	W-30-285-SP15	160-11068-8	03/25/2015			
160-11068-1	WG	W-31-95-SP15	160-11068-9	03/25/2015			
160-11068-1	WG	W-37-325-SP15	160-11068-10	03/24/2015			
160-11068-1	WG	W-37-385-SP15	160-11068-11	03/25/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11068-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	19	N/FD
160-11068-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-11068-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	RB
160-11068-1	WG	SW6010B	Metals (ICP), Nickel	11	N/FD
160-11068-1	WQ	SW6010B	Metals (ICP), Nickel	1	RB
160-11068-1 (GEL SDG 369742)	WG	D5174	Total Uranium by KPA	11	N/FD
160-11068-1 (GEL SDG 369742)	WQ	D5174	Total Uranium by KPA	1	RB

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	RB01-SP15	RB	METHYL ETHYL KETONE (2-BUTANONE)	1.1	J	ug/l	0.52	5.0
SW8260B	RB01-SP15	RB	ACETONE	7.2		ug/l	0.34	2.0
SW8260B	TRIP BLANK 09	TB	METHYL ETHYL KETONE (2-BUTANONE)	1.2	J	ug/l	0.52	5.0
SW8260B	TRIP BLANK 09	TB	ACETONE	8.9		ug/l	0.34	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination
None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 09	TB	METHYL ETHYL KETONE (2-BUTANONE)	1.2	1.1	J	ug/l	RB01-SP15	U Flag
SW8260B	TRIP BLANK 09	TB	ACETONE	8.9	7.2		ug/l	RB01-SP15	U Flag
SW8260B	TRIP BLANK 09	TB	ACETONE	8.9	2.2		ug/l	MW-910-SP15	U Flag
SW8260B	TRIP BLANK 09	TB	ACETONE	8.9	1.9	J	ug/l	W-14-150-SP15	U Flag
SW8260B	TRIP BLANK 09	TB	ACETONE	8.9	1.9	J	ug/l	W-31-95-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits
None

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	W-26-270-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	10.0	205	205	1	65	130	

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Date Performed:	Data Validation Review:

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-182094/5	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	159	152	65	130	
SW8260B	LCS 160-182094/5	LCS/LCSD	METHYL ACETATE	126	122	66	121	
SW8260B	LCS 160-182182/6	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	167	151	65	130	

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
W-16-148-SP15	160-11068-5	SW8260B	WG	Sample was initially analyzed at 10X dilution. Elevated reporting limits provided. The sample was diluted by 100X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
W-18-150-SP15	160-11068-6	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) and cis-1,2-dichloroethylene within the calibration curve. Only PCE and cis-1,2-DCE are reported from the dilution.
W-37-325-SP15	160-11068-10	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Tetrachloroethylene (PCE), cis-1,2-dichloroethylene, and chloroform within the calibration curve. Only the exceeding analytes are reported from the dilution.
W-37-385-SP15	160-11068-11	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE), trichloroethylene (TCE), chloroform, and 1,1-dichloroethene within the calibration curve. Only the exceeding analytes are reported from the dilution.
MW-909-SP15	160-11068-12	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE), trichloroethylene (TCE), chloroform, and 1,1-dichloroethene within the calibration curve. Only the exceeding analytes are reported from the dilution.
MW-910-SP15	160-11068-13	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) and cis-1,2-dichloroethylene within the calibration curve. Only PCE and cis-1,2-DCE are reported from the dilution.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11068
Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Sample ID	Lab ID	Method	Sample Type	Action
W-01-75-SP15	160-11068-18	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) and trichloroethylene (TCE) within the calibration curve. Only the exceeding analytes are reported from the dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	W-37-385-SP15	MW-909-SP15	RPD	RPD Rating	Sample Qual
SW8260B	1,1,1-TRICHLOROETHANE	ug/L	WG	1.0	A	19	18	5.4%	Good	None
SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	WG	1.0	A	11	10	9.5%	Good	None
SW8260B	1,1,2-TRICHLOROETHANE	ug/L	WG	1.0	A	0.84	0.88	4.7%	Good	None
SW8260B	1,1-DICHLOROETHENE	ug/L	WG	10	A	57	52	9.2%	Good	None
SW8260B	1,2-DICHLOROPROPANE	ug/L	WG	1.0	A	0.43	0.38	12.3%	Good	None
SW8260B	1,4-DIOXANE (P-DIOXANE)	ug/L	WG	5.0	A	30	31	3.3%	Good	None
SW8260B	CARBON DISULFIDE	ug/L	WG	2.0	A	ND	0.31	NC	--	--
SW8260B	CARBON TETRACHLORIDE	ug/L	WG	1.0	A	6.0	5.9	1.7%	Good	None
SW8260B	CHLOROFORM	ug/L	WG	10	A	87	87	0.0%	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	WG	1.0	A	3.3	3.2	3.1%	Good	None
SW8260B	CYCLOHEXANE	ug/L	WG	1.0	A	3.3	ND	NC	--	--
SW8260B	Tetrachloroethylene (PCE)	ug/L	WG	10	A	79	78	1.3%	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	WG	10	A	97	97	0.0%	Good	None
SW8260B	TRICHLOROFLUOROMETHANE	ug/L	WG	1.0	A	2.5	2.3	8.3%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	W-18-150-SP15	MW-910-SP15	RPD	RPD Rating	Sample Qual
SW8260B	1,1-DICHLOROETHENE	ug/L	WG	1.0	A	3.4	3.4	0.0%	Good	None
SW8260B	1,2-DICHLOROBENZENE	ug/L	WG	1.0	A	0.35	0.35	0.0%	Good	None
SW8260B	1,4-DIOXANE (P-DIOXANE)	ug/L	WG	5.0	A	ND	1.5	NC	--	--
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	WG	5.0	A	80	74	7.8%	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11068
Date Completed: 05 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Method	Analyte	Unit	Matrix	PQL	Anal Type	W-18-150-SP15	MW-910-SP15	RPD	RPD Rating	Sample Qual
SW8260B	TERT-BUTYL METHYL ETHER	ug/L	WG	2.0	A	ND	0.20	NC	--	--
SW8260B	Tetrachloroethylene (PCE)	ug/L	WG	5.0	A	94	79	17.3%	Good	None
SW8260B	TRANS-1,2-DICHLOROETHENE	ug/L	WG	1.0	A	1.5	ND	NC	--	--
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	WG	1.0	A	28	28	0.0%	Good	None
SW8260B	VINYL CHLORIDE	ug/L	WG	2.0	A	36	36	0.0%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	W-06-79-SP15	MW-911-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	ND	ND	NC	--	--
SW6010B	Nickel	ug/l	Water	40	A	2.7	ND	NC	--	--

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution

SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11082
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. One of the container labels did not match the sample name on the COC. The sample was logged in per the COC. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 369745.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No. One cooler was noted to be received at 19.0°C. The field team separated the samples into coolers for VOA and Metals analysis. The samples for Ni and U analysis were not shipped with ice, which is acceptable. The cooler with samples for VOC analysis was shipped on ice and received at 2.1°C.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was collected for sample W-08-71-SP15. Two field duplicates were collected; samples PW-02-06-SP15 (MW-912-SP15) and MW-201-220-SP15 (MW-913-SP15). A trip blank was provided in each cooler with samples for VOC analysis. A rinsate blank was performed and included with the sample delivery group.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.

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Date Performed:	Data Validation Review:

Completeness Review - General Sample and Batch Information - See Attachment	
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. Acetone and 2-butanone were detected in Trip blank 10 and rinsate blank RB02-SP15.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. Acetone and 2-butanone results were U qualified as non-detect in the rinsate blank RB02-SP15. Acetone was U qualified as non-detect in sample PW-02-06-SP15 due to trip blank detections.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No. Dibromofluoromethane was recovered high in sample MW-3-SP15. Tetrachloroethylene (PCE) TRICHLOROETHYLENE (TCE) were detected in the sample and qualified J as estimated. The sample was not re-analyzed and there were no indications of matrix effects from the chromatogram.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11082
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits in the MS/MSD of MW-912-SP15 and W-08-71-SP15. The LCS/LCSD for the analyte was also non-compliant. The sample results for the analyte were UJ qualified for CCV failures. Cyclohexane was recovered high in the MS/MSD of MW-08-71-SP15. The analytes is a poor performer and was not detected in the parent sample. No qualification of the data was made. 2-Butanone exhibited poor precision between the MS and MSD in sample MW-912-SP15. 2-Butanone is a poor performer and the individual recoveries were acceptable; therefore, no qualification of the data was made.
LCS within QC criteria? See Table 453 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits LCS and LCSD's associated with batches 182464, 182486 and 182654. The sample results were non-detect, and qualified UJ due to CCV failures. Methyl acetate was recovered above the control limit in the LCS associated with batch 182464. Cyclohexane and methylcyclohexane were recovered above the control limits in the LCSD associated with batch 182654. The analytes a poor performers, and they were not detected in the samples. No qualification of the data was made.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. The following samples were diluted due to target analytes exceeding the calibration curve: MW-4-SP15, MW-9-SP15, W-12-120-SP15, W-27-285-SP15, PW-02-07-SP15, and W-32-110-SP15. Only the target analyte is reported from the dilution.
Do field duplicate results show good precision for all compounds? See Table 7	Yes.

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Date Performed:	Data Validation Review:

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	No.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7.	Yes.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Sample W-02-70-SP15 matrix was orange in color and caused interference during analysis. The sample was wet ashed, treated in a muffle furnace, diluted 10X, and treated with a post-spike due to matrix effects and quenching, resulting in an elevated detection limit; the result was qualified with a UJ as not detected above the MDC, which is considered estimated or uncertain. Several samples were re-analyzed with a post-spike to check for quenching; only one result is reported per sample. No qualifiers were required.

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Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0257), methyl acetate(0.0131), 2-butanone(0.0320), and 2-hexanone(0.0674), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSM. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.1689) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSM; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made. Acetone(0.0224), methyl acetate(0.0131), 2-butanone(0.0354), and 2-hexanone(0.0654), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSZ. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2040) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSZ; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	No. 1,1,2,2-tetrachloroethane exhibited a % D of 59.5% in ICV 160-182107/14. The sample results were qualified UJ due to CCV failures.

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Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. 1,1,2,2-tetrachloroethane exhibited a % D of 87.6% in CCV 160-182486/6. The analyte was not detected in any of the samples; therefore, they were qualified UJ as estimated non-detect. 1,1,2,2-tetrachloroethane exhibited a % D of 87.6% and methyl acetate exhibited a %D of 23.6 in CCV 160-182464/4. The analytes were not detected in any of the samples. Methyl acetate is a poor performer; therefore, the analyte is allowed a %D up to 40% per EPA SOP USEPA-540-R-08-01. Sample results for 1,1,2,2-tetrachloroethane were qualified UJ as estimated non-detect. 1,1,2,2-tetrachloroethane exhibited a % D of 66.4% in CCV 160-182654/4. The analyte was not detected in any of the samples; therefore, they were qualified UJ as estimated non-detect.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0249), methyl acetate(0.0135), 2-butanone(0.0298), and 2-hexanone(0.0724) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-182486/6. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. Acetone(0.0260), methyl acetate(0.0162), 2-butanone(0.0389), and 2-hexanone(0.0750) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-182464/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. Acetone(0.0225), methyl acetate(0.0145), 2-butanone(0.0327), and 2-hexanone(0.0694) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-182464/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.

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Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Summary of Potential Impacts on Data Usability

Major Concerns

None.

Minor Concerns

D5174

- Sample W-02-70-SP15 was wet ashed, treated in a muffle furnace, diluted 10X, and treated with a post-spike due to matrix effects and quenching, resulting in an elevated detection limit; the result was qualified with a UJ.

SW8260B

- Sample results for 1,1,2,2-tetrachloroethane were UJ qualified due to CCV failures.
- Sample results for acetone were U qualified as non-detect in sample PW-02-06-SP15 due to trip blank detections..
- Sample results for TCE and PCE were J qualified as estimated in sample MW-3-SP15 due to surrogate failures.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
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Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11082-1	WG	MW-201-220-SP15	160-11082-13	03/26/2015			
160-11082-1	WG	MW-3-SP15	160-11082-1	03/26/2015	MS/MSD		
160-11082-1	WG	MW-4-SP15	160-11082-2	03/26/2015			
160-11082-1	WG	MW-8-SP15	160-11082-3	03/26/2015			
160-11082-1	WG	MW-912-SP15	160-11082-14	03/26/2015	MS/MSD		
160-11082-1	WG	MW-913-SP15	160-11082-15	03/26/2015			
160-11082-1	WG	MW-9-SP15	160-11082-4	03/26/2015			
160-11082-1	WG	PW-02-06-SP15	160-11082-11	03/26/2015			
160-11082-1	WG	PW-02-07-SP15	160-11082-12	03/26/2015			
160-11082-1	WG	PW-02-07-SP15-F	160-11082-20	03/26/2015			
160-11082-1	WG	PW-02-07-SP15-U	160-11082-19	03/26/2015			
160-11082-1	WQ	RB02-SP15	160-11082-16	03/26/2015			
160-11082-1	WQ	TRIP BLANK 10	160-11082-17	03/26/2015			
160-11082-1	WG	W-02-70-SP15	160-11082-5	03/26/2015			
160-11082-1	WG	W-08-71-SP15	160-11082-6	03/26/2015		MS/MSD	
160-11082-1	WG	W-10-71-SP15	160-11082-7	03/26/2015			
160-11082-1	WG	W-12-120-SP15	160-11082-8	03/26/2015			
160-11082-1	WG	W-12-70-SP15	160-11082-9	03/26/2015			
160-11082-1	WG	W-27-285-SP15	160-11082-10	03/26/2015			
160-11082-1	WG	W-32-110-SP15	160-11082-18	03/26/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11082-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	18	N/FD
160-11082-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-11082-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	RB
160-11082-1	WG	SW6010B	Metals (ICP), Nickel	16	N/FD
160-11082-1	WQ	SW6010B	Metals (ICP), Nickel	1	RB
160-11082-1 (GEL SDG 369745)	WG	D5174	Total Uranium by KPA	16	N/FD
160-11082-1 (GEL SDG 369745)	WQ	D5174	Total Uranium by KPA	1	RB

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	RB02-SP15	RB	METHYL ETHYL KETONE (2-BUTANONE)	1.3	J	ug/l	0.52	5.0
SW8260B	RB02-SP15	RB	ACETONE	8.0		ug/l	0.34	2.0
SW8260B	TRIP BLANK 10	TB	METHYL ETHYL KETONE (2-BUTANONE)	0.86	J	ug/l	0.52	5.0
SW8260B	TRIP BLANK 10	TB	ACETONE	9.6		ug/l	0.34	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 10	WQ	METHYL ETHYL KETONE (2-BUTANONE)	0.86	1.3	J	ug/l	RB02-SP15	U Flag
SW8260B	TRIP BLANK 10	WQ	ACETONE	9.6	8.0		ug/l	RB02-SP15	U Flag
SW8260B	TRIP BLANK 10	WQ	ACETONE	9.6	3.0		ug/l	PW-02-06-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MW-3-SP15	WG	DIBROMOFLUOROMETHANE	121	85	115	1	J Flag

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	MW-912-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	10.0	205	223	1	65	130	None
SW8260B	W-08-71-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	10.0	187	189	1	65	130	None

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	W-08-71-SP15	MS/MSD	CYCLOHEXANE	ND	10.0	113	118	1	85	115	None

Method	Parent Sample	Analyte	Dil Fac	Unit	RPD	RPD Limit	Qualifier
SW8260B	MW-912-SP15	METHYL ETHYL KETONE (2-BUTANONE)	1	ug/l	32	30	None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-182464/5	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	167	151	65	130	None
SW8260B	LCS 160-182464/5	LCS/LCSD	METHYL ACETATE	128	123	66	121	None
SW8260B	LCS 160-182486/7	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	174	160	65	130	None
SW8260B	LCS 160-182654/5	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	135	167	65	130	None
SW8260B	LCS 160-182654/5	LCS/LCSD	CYCLOHEXANE	111	121	85	115	None
SW8260B	LCS 160-182654/5	LCS/LCSD	METHYLCYCLOHEXANE	108	116	85	115	None

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
W-02-70-SP15	369745005 (160-11082-5)	D5174	WG	Sample was wet ashed, treated in a muffle furnace, and diluted 10X due to matrix effects and quenching, resulting in an elevated detection limit; the result was qualified with UJ.
MW-4-SP15	160-11082-1	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-9-SP15	160-11082-4	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
W-12-120-SP15	160-11082-8	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.

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Sample ID	Lab ID	Method	Sample Type	Action
W-27-285-SP15	160-11082-10	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) and CIS-1,2-DICHLOROETHYLENE within the calibration curve. Only PCE and cis-1,2-DCE are reported from the dilution.
PW-02-07-SP15	160-11082-12	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
W-32-110-SP15	160-11082-18	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	PW-02-06-SP15	MW-912-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	ND	ND	NC	--	--
SW6010	NICKEL	ug/L	WG	40	A	3.1	3.3	6.2%	Good	None
SW8260B	CHLOROFORM	ug/L	WG	1.0	A	0.54	0.48	11.8%	Good	None
SW8260B	TERT-BUTYL METHYL ETHER	ug/L	WG	2.0	A	1.8	1.7	5.7%	Good	None
SW8260B	Tetrachloroethylene (PCE)	ug/L	WG	1.0	A	0.32	0.28	13.3%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-201-220-SP15	MW-913-SP15	RPD	RPD Rating	Sample Qual
D5174	Uranium, Total	ug/l	Water	0.100	A	ND	ND	NC	--	--
SW6010	NICKEL	ug/L	WG	40	A	5.9	6.3	6.6%	Good	None
SW8260B	CHLOROFORM	ug/L	WG	1.0	A	0.81	0.82	1.2%	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	WG	1.0	A	1.3	1.4	7.4%	Good	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11082
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. Samples MW-206-320-SP15 and MW-206-470-SP15 were recorded on the COC, but not collected. The samples were not crossed off the COC prior to being sent to the laboratory. The MW's were sampled at a later date, and not received by the laboratory. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 369739.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was collected for sample W-10-120-SP15. A field duplicate was collected for sample W-36-448-SP15 (MW-914-SP15). A trip blank was provided in each cooler with samples for VOC analysis.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. Acetone was detected in Trip Blank 11.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. Sample results for acetone were U qualified as non-detect in sample MW-209-380-SP15. The sample result was less than the PQL; therefore, the MDL was elevated to the sample result.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits in the MS/MSD of W-10-120-SP15. The LCS/LCSD for the analyte was also non-compliant. The sample results for the analyte were UJ qualified for CCV failures. Cyclohexane was recovered high in the MS/MSD of W-10-120-SP15. The LCS/LCSD for the analyte was also non-compliant. The analyte is a poor performer and was not detected in the parent sample. No qualification of the data was made Styrene was recovered low in the MS/MSD of W-10-120-SP15. The analyte was not detected in the samples, and the parent sample results was qualified UJ as estimated non-detect.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits LCS and LCSD's associated with batch 182654. The sample results were non-detect, and qualified UJ due to CCV failures. Cyclohexane and methlycyclohexane were recovered above the control limit in the LCSD associated with batch 182654. The analytes are poor performing compounds. The sample results were non-detect; therefore, no qualification of the data was made.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples W-10-120-SP15, W-36-390-SP15, W-36-448-SP15, MW-209-380-SP15, and MW-914-SP15 were initially analyzed at a dilution. Elevated reporting limits are provided. The samples underwent a further diluted for analytes that exceeded the calibration curve. Only one result was reported.
Do field duplicate results show good precision for all compounds? See Table 7	Yes.

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	No.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7.	N/A The field duplicate sample pair were not analyzed for total uranium for this SDG.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to check for quenching; only one result is reported per sample. No qualifiers were required.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	Acetone(0.0224), methyl acetate(0.0131), 2-butanone(0.0354), and 2-hexanone(0.0654), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSM. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2040) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSM; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. 1,1,2,2-tetrachloroethane exhibited a % D of 66.4% in CCV 160-182654/4. The analyte was not detected in any of the samples; therefore, they were qualified UJ as estimated non-detect.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0225), methyl acetate(0.0145), 2-butanone(0.0327), and 2-hexanone(0.0694) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-182654/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
• Sample results for 1,1,2,2-tetrachloroethane were UJ qualified due to CCV failures. • Elevated reporting limits provided for samples W-10-120-SP15, W-36-390-SP15, W-36-448-SP15, MW-209-380-SP15, and MW-914-SP15 due to initial analysis completed at a dilution. • Sample results for acetone were U qualified as non-detect in sample MW-209-380-SP15.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11098-1	WG	MW-17S-SP15	160-11098-5	03/27/2015			
160-11098-1	WG	MW-209-380-SP15	160-11098-8	03/26/2015			
160-11098-1	WG	MW-209-530-SP15	160-11098-9	03/26/2015			
160-11098-1	WG	MW-914-SP15	160-11098-10	03/27/2015			
160-11098-1	WQ	TRIP BLANK 11	160-11098-11	03/27/2015			
160-11098-1	WG	W-10-120-SP15	160-11098-1	03/27/2015		MS/MSD	
160-11098-1	WG	W-11-70-SP15	160-11098-2	03/27/2015			
160-11098-1	WG	W-36-390-SP15	160-11098-3	03/27/2015			
160-11098-1	WG	W-36-448-SP15	160-11098-4	03/27/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11098-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	8	N/FD
160-11098-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-11098-1	WG	SW6010B	Metals (ICP), Nickel	3	N
160-11098-1 (GEL SDG 369739)	WG	D5174	Total Uranium by KPA	3	N

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	Trip Blank 11	WG	Acetone	9.2		ug/l	0.34	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	Trip Blank 11	WQ	Acetone	9.2	4.6	JD	ug/l	MW-209-380-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B								

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	W-10-120-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	25.0	185	176	2.5	65	130	
SW8260B	W-10-120-SP15	MS/MSD	STYRENE	ND	25.0	58	54	2.5	65	135	
SW8260B	W-10-120-SP15	MS/MSD	CYCLOHEXANE	ND	25.0	110	116	2.5	85	115	

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-182654/5	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	135	167	65	130	
SW8260B	LCS 160-182654/5	LCS/LCSD	CYCLOHEXANE	111	121	85	115	
SW8260B	LCS 160-182654/5	LCS/LCSD	METHYLCYCLOHEXANE	108	116	85	115	

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
W-10-120-SP15	160-11098-1	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
W-36-390-SP15	160-11098-3	SW8260B	WG	Sample was initially analyzed at 5X dilution. Elevated reporting limits provided. The sample was diluted by 50X to bring Trichloroethylene (TCE) within the calibration curve. Only TCE is reported from the dilution.
W-36-448-SP15	160-11098-4	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Trichloroethylene (TCE) within the calibration curve. Only TCE is reported from the dilution.
MW-209-380-SP15	160-11098-8	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Trichloroethylene (TCE) and Tetrachloroethylene (PCE) within the calibration curve. Only TCE and PCE are reported from the dilution.
MW-914-SP15	160-11098-10	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Trichloroethylene (TCE) within the calibration curve. Only TCE is reported from the dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	W-36-448-SP15	MW-914-SP15	RPD	RPD Rating	Sample Qual

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11098
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Method	Analyte	Unit	Matrix	PQL	Anal Type	W-36-448-SP15	MW-914-SP15	RPD	RPD Rating	Sample Qual
SW8260B	1,1,1-TRICHLOROETHANE	ug/L	WG	2.5	A	0.67	0.67	0.0%	Good	None
SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	WG	2.5	A	2.5	2.7	7.7%	Good	None
SW8260B	1,1-DICHLOROETHANE	ug/L	WG	2.5	A	1.0	1.0	0.0%	Good	None
SW8260B	1,1-DICHLOROETHENE	ug/L	WG	2.5	A	1.2	1.2	0.0%	Good	None
SW8260B	1,4-DIOXANE (P-DIOXANE)	ug/L	WG	5.0	A	3.4	3.8	11.1%	Good	None
SW8260B	CARBON TETRACHLORIDE	ug/L	WG	2.5	A	5.7	6.0	5.1%	Good	None
SW8260B	CHLOROFORM	ug/L	WG	2.5	A	1.1	1.1	0.0%	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	WG	2.5	A	50	51	2.0%	Good	None
SW8260B	Tetrachloroethylene (PCE)	ug/L	WG	2.5	A	76	78	2.6%	Good	None
SW8260B	TRANS-1,2-DICHLOROETHENE	ug/L	WG	2.5	A	3.0	2.7	10.5%	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	WG	25	A	210	220	4.7%	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan

QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 370339.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was collected for sample PW-07-06-SP15. The laboratory used MW-205-285-SP15 and MW-212-580-SP15 for laboratory QC of Method SW8260B. A field duplicate was collected for sample MW-210-380-SP15 (MW-915-SP15). A trip blank was provided in each cooler with samples for VOC analysis.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. 2-Butanone, 2-hexanone, acetone, and toluene were detected in Trip Bank 12.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. Sample results for acetone were U qualified as non-detect in samples MW-205-285-SP15, MW-210-380-SP15, MW-915-SP15, and PW-06-06-SP15. Sample results for 2-butanone and 2-hexanone were U qualified as non-detect in sample MW-205-285-SP15. If the sample result was less than the PQL, the MDL was elevated to the sample result; however, if the sample result was greater than the PQL, then the PQL was elevated to the sample result.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods.*	No. Dibromofluoromethane was recovered high in sample MW-205-470-SP15. The only detected result was tetrachloroethylene (PCE), which was already qualified J due to the sample result being between the MDL and PQL. No further action was taken. The sample was not re-analyzed and there were no indications of matrix effects from the chromatogram.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were <u>≤</u>30%, then "R" flag associated non-detect values.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits in the MS/MSD of MW-205-285-SP15, MW-212-580-SP15, and PW-07-06-SP15. The LCS/LCSD for the analyte was also non-compliant. The sample results for the analyte were UJ qualified for CCV failures. Cyclohexane, methylcyclohexane, and acetone were recovered high in the MS/MSD of MW-205-285-SP15. The analytes are poor performers and were not detected in the parent sample. No qualification of the data was made.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits LCS and LCSD's associated with batches 184199, 183122, and 182682. The sample results were non-detect, and qualified UJ due to CCV failures. Cyclohexane was recovered above the control limit in the LCS associated with batch 184199. The sample results were non-detect; therefore, no qualification of the data was made.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Sample MW-10-SP15 was initially analyzed at a 2.5 dilution. Elevated reporting limits are provided. The following samples were diluted due to target analytes exceeding the calibration curve: MW-10-SP15, MW-11-SP15, PW-06-07-SP15, MW-205-285-SP15, MW-210-280-SP15, MW-915-SP15, and MW-210-380-SP15. Only the target analyte is reported from the dilution.
Do field duplicate results show good precision for all compounds? See Table 7	Yes.

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	No.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7.	N/A The field duplicate sample pair were not analyzed for total uranium for this SDG.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to check for quenching; only one result is reported per sample. No qualifiers were required.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	No. 1,4-Dichlorobenzene-d4 was recovered low in batch 182682 and the following samples were impacted: MW-206-470-SP15, MW-210-280-SP15, MW-10-SP15, MW-11-SP15, PW-06-07-SP15, MW-210-280-SP15, and MW-210-380-SP15. Sample results for 1,4-dichlorobenzene in samples MW-210-280-SP15 and MW-210-380-SP15 were qualified J as estimated. The remaining results for bromoform, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene were non-detect and qualified UR for rejected non-detect. The samples were not re-analyzed and there were no indications of matrix effects from the chromatograms.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0257), methyl acetate(0.0131), 2-butanone(0.0320), and 2-hexanone(0.0674), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSM. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.1689) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSM; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made. Acetone(0.0224), methyl acetate(0.0131), 2-butanone(0.0354), and 2-hexanone(0.0654), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSZ. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2040) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSZ; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	No. 1,1,2,2-tetrachloroethane exhibited a % D of 59.5% in ICV 160-182107/14. The sample results were qualified UJ due to CCV failures.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. 1,1,2,2-tetrachloroethane exhibited a % D of 62.9% in CCV 160-182682/2 and a % D of 72.3 in CCV 160-183122/4. The analyte was not detected in any of the samples; therefore, they were qualified UJ as estimated non-detect. Dichlorodifluoromethane(26.8), trichlorofluoromethane(26.8), carbon tetrachloride(23.4), 1,1,1-trichloroethane(23.1), and 1,1,2,2-tetrachloroethane(55.7) each exhibited a % D greater than the laboratory criteria of 20% in CCV 160-184199/4. Dichlorodifluoromethane, and trichlorofluoromethane are poor performers; however, per EPA SOP USEPA-540-R-08-01, a %D <40% is acceptable for poor performers and a %D <25% is acceptable for normal analytes. No qualification of the data was made. Results for ,1,2,2-tetrachloroethane were UJ qualified due to %D failures.

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Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0264), methyl acetate(0.0130), 2-butanone(0.0317), 2-hexanone(0.0638) and 4-methyl-2-pentanone(0.0964) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 in CCV 160-182682/2. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2724) was less than the laboratory minimum of 0.300 CCV 160-182682/2; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made. Acetone(0.0279), methyl acetate(0.0154), 2-butanone(0.0352), and 2-hexanone(0.0727) exhibited minimum RRF less than the laboratory minimum of 0.100 in CCV 160-183122/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. Acetone(0.0232), methyl acetate(0.0148), 2-butanone(0.0367), and 2-hexanone(0.0689) exhibited minimum RRF less than the laboratory minimum of 0.100 in CCV 160-184199/4. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2724) was less than the laboratory minimum of 0.300 CCV 160-184199/4; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.

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Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Summary of Potential Impacts on Data Usability

Major Concerns

- Sample results for bromoform, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene were UR qualified as rejected non-detect due to internal standard failures in samples MW-206-470-SP15, MW-210-280-SP15, MW-10-SP15, MW-11-SP15, PW-06-07-SP15, MW-210-280-SP15, and MW-210-380-SP15.

Minor Concerns

- Sample results for 1,1,2,2-tetrachloroethane were UJ qualified due to CCV failures.
- Elevated reporting limits provided for sample MW-10-SP15 due to a 2.5X dilution.
- Sample results for acetone were U qualified as non-detect in samples MW-205-285-SP15, MW-210-380-SP15, MW-915-SP15, and PW-06-06-SP15.
- Sample results for 2-butanone and 2-hexanone were U qualified as non-detect in sample MW-205-285-SP15.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11116
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11116-1	WG	MW-10-SP15	160-11116-1	03/30/2015			
160-11116-1	WG	MW-11-SP15	160-11116-2	03/30/2015			
160-11116-1	WG	MW-205-285-SP15	160-11116-9	03/30/2015	MS/MSD		
160-11116-1	WG	MW-205-470-SP15	160-11116-10	03/30/2015			
160-11116-1	WG	MW-206-470-SP15	160-11116-11	03/30/2015	MS/MSD		
160-11116-1	WG	MW-210-280-SP15	160-11116-12	03/30/2015			
160-11116-1	WG	MW-210-380-SP15	160-11116-13	03/30/2015			
160-11116-1	WG	MW-210-470-SP15	160-11116-14	03/30/2015			
160-11116-1	WG	MW-212-580-SP15	160-11116-15	03/30/2015	MS/MSD		
160-11116-1	WG	MW-915-SP15	160-11116-16	03/30/2015			
160-11116-1	WG	PW-06-05-SP15	160-11116-3	03/28/2015			
160-11116-1	WG	PW-06-06-SP15	160-11116-4	03/28/2015			
160-11116-1	WQ	PW-06-07-SP15	160-11116-5	03/28/2015			
160-11116-1	WG	PW-07-05-SP15	160-11116-6	03/30/2015			
160-11116-1	WG	PW-07-06-SP15	160-11116-7	03/30/2015		MS/MSD	
160-11116-1	WG	PW-07-07-SP15	160-11116-8	03/30/2015			
160-11116-1	WG	TRIP BLANK 12	160-11116-17	03/30/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11116-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	16	N/FD
160-11116-1	WG	SW8260B	Volatile Organic Compounds (GC/MS), SIM, 1,4-Dioxane	16	N/FD
160-11116-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-11116-1	WG	SW6010B	Metals (ICP), Nickel	5	N
160-11116-1 (GEL SDG 370339)	WG	D5174	Total Uranium by KPA	5	N

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TRIP BLANK 12	TB	METHYL ETHYL KETONE (2-BUTANONE)	1.2	J	ug/l	0.52	5.0
SW8260B	TRIP BLANK 12	TB	2-HEXANONE	0.32	J	ug/l	0.22	5.0
SW8260B	TRIP BLANK 12	TB	ACETONE	8.3		ug/l	0.34	2.0
SW8260B	TRIP BLANK 12	TB	TOLUENE	0.23	J	ug/l	0.072	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 12	WQ	METHYL ETHYL KETONE (2-BUTANONE)	1.2	5.2		ug/l	MW-205-285-SP15	U Flag
SW8260B	TRIP BLANK 12	WQ	2-HEXANONE	0.32	0.45	J	ug/l	MW-205-285-SP15	U Flag
SW8260B	TRIP BLANK 12	WQ	ACETONE	8.3	33	J	ug/l	MW-205-285-SP15	U Flag
SW8260B	TRIP BLANK 12	WQ	ACETONE	8.3	1.9	J	ug/l	MW-210-380-SP15	U Flag
SW8260B	TRIP BLANK 12	WQ	ACETONE	8.3	12		ug/l	MW-915-SP15	U Flag
SW8260B	TRIP BLANK 12	WQ	ACETONE	8.3	3.2		ug/l	PW-06-06-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MW-205-470-SP15	WG	DIBROMOFLUOROMETHANE	116	85	115	1	None

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Date Performed:	Data Validation Review:

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	MW-205-285-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	10.0	172	188	1	65	130	None
SW8260B	MW-205-285-SP15	MS/MSD	CYCLOHEXANE	ND	10.0	117	114	1	85	115	None
SW8260B	MW-205-285-SP15	MS/MSD	METHYLCYCLOHEXANE	ND	10.0	125	117	1	85	115	None
SW8260B	MW-205-285-SP15	MS/MSD	ACETONE	ND	10.0	90	156	1	40	140	None
SW8260B	MW-212-580-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	10.0	172	176	1	65	130	None
SW8260B	PW-07-06-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	10.0	219	224	1	65	130	None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-182682/6	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	145	136	65	130	None
SW8260B	LCS 160-183122/5	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	159	149	65	130	None
SW8260B	LCS 160-184199/5	LCS/LCSD	1,1,2,2-TETRACHLOROETHANE	153	151	65	130	None
SW8260B	LCS 160-184199/5	LCS/LCSD	CYCLOHEXANE	119	115	85	115	None

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-10-SP15	160-11116-1	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by 25X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-11-SP15	160-11116-2	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
PW-06-07-SP15	160-11116-5	SW8260B	WG	The sample was diluted by 5X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.

Sample ID	Lab ID	Method	Sample Type	Action
MW-205-285-SP15	160-11116-9	SW8260B	WG	The sample was diluted by 5X to bring Trichloroethylene (TCE) within the calibration curve. Only TCE is reported from the dilution.
MW-210-280-SP15	160-11116-12	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
MW-210-380-SP15	160-11116-13	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) and Trichloroethylene (TCE) within the calibration curve. Only PCE and TCE are reported from the dilution.
MW-915-SP15	160-11116-16	SW8260B	WG	The sample was diluted by 10X to bring Tetrachloroethylene (PCE) and Trichloroethylene (TCE) within the calibration curve. Only PCE and TCE are reported from the dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-210-380-SP15	MW-915-SP15	RPD	RPD Rating	Sample Qual
SW8260B	1,1,1-TRICHLOROETHANE	ug/L	WG	1.0	A	ND	0.21	NC		
SW8260B	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	WG	1.0	A	1.1	0.94	15.7%	Good	None
SW8260B	1,1-DICHLOROETHANE	ug/L	WG	1.0	A	ND	0.28	NC		
SW8260B	1,1-DICHLOROETHENE	ug/L	WG	1.0	A	0.54	0.41	27.4%	Good	None
SW8260B	1,2-DICHLOROBENZENE	ug/L	WG	1.0	A	1.9	1.9	0.0%	Good	None
SW8260B	1,4-DICHLOROBENZENE	ug/L	WG	1.0	A	0.26	0.24	8.0%	Good	None
SW8260B	CHLOROFORM	ug/L	WG	1.0	A	3.5	3.8	8.2%	Good	None
SW8260B	CIS-1,2-DICHLOROETHYLENE	ug/L	WG	1.0	A	7.6	7.4	2.7%	Good	None
SW8260B	Tetrachloroethylene (PCE)	ug/L	WG	10	A	160	160	0.0%	Good	None
SW8260B	TRICHLOROETHYLENE (TCE)	ug/L	WG	10	A	42	41	2.4%	Good	None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
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COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No. The cooler temperature was 1.9°C at receipt. The samples were noted to be received in good condition.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was not collected for the sample delivery group; however, the laboratory used MW-15D-SP15 for laboratory QC of Method SW8260B, and MW-206-320-SP15 for laboratory QC of Method SW6010B.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. 2-Butanone, 2-hexanone, acetone, and toluene were detected in Trip Blank 13. 2-Butanone, 2-hexanone, and acetone were detected in RB03-SP15.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. Results for 2-butanone, 2-hexanone, and acetone were U qualified as non-detect in the RB03-SP15 due to positive detections in Trip Blank 13. The result for acetone in sample MW-204-470-SP15 was U qualified as non-detect due to a positive detection in Trip Blank 13. If the sample result was less than the PQL, the MDL was elevated to the sample result; however, if the sample result was greater than the PQL, then the PQL was elevated to the sample result.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No. 4-Bromofluorobenzene was recovered high in sample MW-15D-SP15. The sample did not have any reportable results; therefore, no qualification of the data was made. The sample was not reanalyzed and there were no indications of matrix effects from the chromatogram.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits in the MS/MSD of MW-15D-SP15. The LCS/LCSD for the analyte was also non-compliant. The sample results for the analyte were UJ qualified for CCV failures.

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Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	No. 1,1,2,2-tetrachloroethane was recovered above the control limits in the LCS/LCSD 160-183712/5. The sample results were non-detect, and previously qualified UJ due to CCV failures. Cyclohexane was recovered above the control limits in the LCS 160-183712/5. The sample results were non-detect; therefore, no qualification of the data was made.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Sample MW-204-320-SP15 was initially analyzed at a 2.5 dilution. Elevated reporting limits are provided. The sample was further dilute by 25X due to high concentrations of tetrachloroethylene. Only one result is reported.
Do field duplicate results show good precision for all compounds? See Table 7	N/A No field duplicate sample pair was included in this SDG.

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2.	No.
Were all samples run under acceptable calibration?	Yes.
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank then "U" flag data.*	No.
LCS within QC criteria (75-125% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Total U Analysis - Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7.	N/A No field duplicate sample pair was included in this SDG.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to check for quenching; only one result is reported per sample. No qualifiers were required.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0224), methyl acetate(0.0131), 2-butanone(0.0354), and 2-hexanone(0.0654), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2040) was less than the laboratory minimum of 0.300; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	No. Dichlorodifluoromethane(28.6) and 1,1,2,2-tetrachloroethane(70.7) exceeded the % D in CCV 160-183712/4. Dichlorodifluoromethane is a poor performer; therefore, per EPA SOP USEPA-540-R-08-01, a % D <40% is acceptable. No qualification of the data was made. 1,1,2,2-tetrachloroethane was not detected in any of the samples. The sample results were qualified UJ as estimated non-detect.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0284), methyl acetate(0.0154), 2-butanone(0.0371), and 2-hexanone(0.0760), exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	Yes.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.

Summary of Potential Impacts on Data Usability
Major Concerns
• None.
Minor Concerns
• Sample results for 1,1,2,2-tetrachloroethane were UJ qualified due to CCV failures.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Summary of Potential Impacts on Data Usability
• Elevated reporting limits provided for sample MW-204-320-SP15 due to 2.5X dilution. • 2-Butanone, 2-hexanone, and acetone were U qualified as non-detect in the RB03-SP15 due to positive detections in Trip Blank 13. • Acetone was U qualified as non-detect in in sample MW-204-470-SP15 due to a positive detection in Trip Blank 13.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11161-1	WG	MW-15D-SP15	160-11161-1	04/01/15 12:35			
160-11161-1	WG	MW-15DD-SP15	160-11161-2	03/31/15 16:50	MS/MSD		
160-11161-1	WG	MW-15S-SP15	160-11161-3	03/31/15 16:00			
160-11161-1	WG	MW-204-320-SP15	160-11161-4	04/01/15 10:20			
160-11161-1	WG	MW-204-470-SP15	160-11161-5	03/31/15 12:40			
160-11161-1	WG	MW-206-320-SP15	160-11161-6	03/31/15 10:45	MS/MSD		
160-11161-1	WH	RB03-SP15	160-11161-7	03/31/15 10:30			
160-11161-1	WQ	Trip Blank 13	160-11161-8	03/31/15 08:00			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11161-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	6	N
160-11161-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	2	TB/RB
160-11161-1	WG	SW8260C-SIM	Volatile Organics by GC/MS SIM (1,4-Dioxane)	6	N
160-11161-1	WG	SW6010B	Metals (ICP) – Nickel	6	N
160-11161-1	WG	ASTM D 5174	Total Uranium by KPA	6	N

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	RB03-SP15	RB	2-Butanone (MEK)	1.8	J	ug/l	0.52	5
SW8260B	RB03-SP15	RB	2-Hexanone	0.38	J	ug/l	0.22	5
SW8260B	RB03-SP15	RB	Acetone	15		ug/l	0.34	2
SW8260B	TRIP BLANK 13	TB	2-Butanone (MEK)	1.3	J	ug/l	0.52	5
SW8260B	TRIP BLANK 13	TB	2-Hexanone	0.27	J	ug/l	0.22	5
SW8260B	TRIP BLANK 13	TB	Acetone	11		ug/l	0.34	2
SW8260B	TRIP BLANK 13	TB	Toluene	0.25	J	ug/l	0.072	1

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 13	WQ	ACETONE	11	1.7	J	ug/l	MW-204-470-SP15	U Flag
SW8260B	TRIP BLANK 13	WQ	2-HEXANONE	0.27	0.38	J	ug/l	RB03-SP15	U Flag
SW8260B	TRIP BLANK 13	WQ	METHYL ETHYL KETONE (2-BUTANONE)	1.3	1.8	J	ug/l	RB03-SP15	U Flag
SW8260B	TRIP BLANK 13	WQ	ACETONE	11	15		ug/l	RB03-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MW-15D-SP15	WG	p-Bromofluorobenzene	122	75	120	1	None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	MW-15D-SP15	MS/MSD	1,1,2,2-TETRACHLOROETHANE	ND	10.0	181	179	1	65	130	None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-183712/5	LCS	1,1,2,2-TETRACHLOROETHANE	161	149	65	130	None: High & ND
SW8260B	LCS 160-183712/5	LCS	CYCLOHEXANE	119	112	85	115	None: High & ND

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-206-320-SP15	160-11161-6	SW8260B	WG	Sample was initially analyzed at 2.5X dilution. Elevated reporting limits provided. The sample was diluted by25X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.

Table 7 – Summary of Field Duplicate Results

None

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11161-1
Date Completed: 03 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semi-volatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11682
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct?	The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event. A MS/MSD was not collected for the sample delivery group. MW-211-190-SP15, MW-211-455-SP15, and S-1-450-SP15 were used as laboratory QC. A field duplicate was not collected for the sample delivery group. A trip blank was provided in each cooler with samples for VOC analysis.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes. Insufficient sample volume was available to perform a MS/MSD/DUP associated with batch 190437. The associated samples dilutions for target analytes. A LCS/LCSD was analyzed which is acceptable.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11682
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. Acetone was detected in Trip Blank 14.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. Sample results for acetone were U qualified as non-detect in samples MW-211-455-SP15, MW-213-570-SP15, and MW-211-190-SP15.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No. p-Bromofluorobenzene was recovered high in MW-P114-290-SP15. The positive results in the sample were qualified J as estimated.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	No. Iron, lead, manganese, nickel, sodium, thallium were recovered high in the MS/MSD of MW-211-455-SP15 by Method 6010B. The analytes were J qualified for positive detections. No qualification was made for analytes that were non-detect.

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Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Samples MW-P110-355-SP15 and MW-P110-440-SP15 were initially analyzed at 2.5X by Method 8260. Elevated reporting limits are provided. The samples were further diluted due to target analytes exceeding the calibration curve. Only one result was reported. Samples MW-211-455-SP15 and MW-211-455-SP15-F were diluted for analysis by Method 6010 due to the nature of the matrix. Elevated reporting limits are provided.
Do field duplicate results show good precision for all compounds? See Table 7	N/A A field duplicate was not collected with the SDG.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11682
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0299), methyl acetate(0.0115), 2-butanone(0.0382), 2-hexanone(0.0683) and 1,2-dibromo-3-chloropropane(0.0483) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for the initial calibration on instrument VMSL. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2893) was less than the laboratory minimum of 0.300 for the initial calibration on instrument VMSM; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes.

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Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0332), methyl acetate(0.0100), 2-butanone(0.0342), 2-hexanone(0.0715) and 1,2-dibromo-3-chloropropane(0.0485) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for CCV 160-190287/3. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2695) was less than the laboratory minimum of 0.300 for CCV 160-190287/3; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made. Acetone(0.0374), methyl acetate(0.0106), 2-butanone(0.0356), 2-hexanone(0.0687) and 1,2-dibromo-3-chloropropane(0.0499) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 for CCV 160-190287/3. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2838) was less than the laboratory minimum of 0.300 for CCV 160-190287/3; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.
ICP	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	No. Arsenic(123%), cadmium(150%), lead(144%), nickel(121%, and zinc(125%) were all recovered greater than 20% of the expected value in CRI 160-192334/7. Zinc and lead were the only analytes detected, and the results were already qualified J as estimated for result value between the MDL and RL.

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Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
ICP	ICB/CCB detections <2X MDL?	No. Beryllium was detected in the CCB 160-192334/64 at 1.8ug/L, which is greater than 2X the MDL. Beryllium was not detected in the samples; therefore, no qualification was required.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	No. Calcium was recovered at 13% in sample MW-211-455-SP15. The calcium results were qualified J as estimated in MW-211-455-SP15 and MW-211-455-SP15-F.

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
• Elevated reporting limits are provided for samples MW-P110-355-SP15 and MW-P110-440-SP15 due to an initial analysis dilution of 2.5X by Method 8260. • Elevated reporting limits are provided for samples MW-211-455-SP15 and MW-211-455-SP15-F due to the nature of the matrix by Method 6010. Elevated reporting limits are provided. • Calcium results in samples MW-211-455-SP15 and MW-211-455-SP15-F were J qualified as estimated due to the serial dilution recovery exceeding 10%.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11682
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11682-1	WG	MW-211-190-SP15	160-11682-4	05/04/2015	MS/MSD		
160-11682-1	WG	MW-211-250-SP15	160-11682-5	05/04/2015			
160-11682-1	WG	MW-211-455-SP15	160-11682-6	05/04/2015	MS/MSD		
160-11682-1	WQ	MW-211-455-SP15-F	160-11682-7	05/04/2015			
160-11682-1	WW	MW-213-570-SP15	160-11682-8	05/04/2015			
160-11682-1	WG	MW-214-570-SP15	160-11682-9	05/04/2015			
160-11682-1	WG	MW-P110-355-SP15	160-11682-1	05/04/2015			
160-11682-1	WG	MW-P110-440-SP15	160-11682-2	05/04/2015			
160-11682-1	WG	MW-P114-290-SP15	160-11682-3	05/04/2015			
160-11682-1	WG	S-1-450-SP15	160-11682-11	05/05/2015	MS/MSD		
160-11682-1	WG	TRIP BLANK 14	160-11682-10	05/04/2015			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11682-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	10	N
160-11682-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-11682-1	WG	SW8260B	Volatile Organic Compounds (GC/MS), SIM, 1,4-Dioxane	10	N
160-11682-1	WG	SW6010B	TAL Metals (ICP)	2	N

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11682
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TRIP BLANK 14	TB	ACETONE	4.9		ug/l	0.34	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 14	WG	ACETONE	4.9	2.5		ug/l	MW-211-455-SP15	U Flag
SW8260B	TRIP BLANK 14	WG	ACETONE	4.9	5.0		ug/l	MW-213-570-SP15	U Flag
SW8260B	TRIP BLANK 14	WG	ACETONE	4.9	5.1		ug/l	MW-211-190-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MW-P114-290-SP15	WG	p-Bromofluorobenzene	122	75	120	1	

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	MW-211-455-SP15	MS/MSD	CALCIUM	64000	10000	245	167	10	80	120	4X
SW8260B	MW-211-455-SP15	MS/MSD	IRON	33000	10000	169	119	10	80	120	J Flag
SW8260B	MW-211-455-SP15	MS/MSD	LEAD	8.0	1000	121	110	10	80	120	J Flag
SW8260B	MW-211-455-SP15	MS/MSD	MANGANESE	840	1000	123	102	10	80	120	J Flag
SW8260B	MW-211-455-SP15	MS/MSD	NICKEL	ND	1000	121	110	10	80	120	None

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW8260B	MW-211-455-SP15	MS/MSD	SODIUM	25000	10000	144	108	10	80	120	J Flag
SW8260B	MW-211-455-SP15	MS/MSD	THALLIUM	ND	200	129	115	10	80	120	None

Table 5 - List of LCS Recoveries outside Control Limits
None

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-P110-355-SP15	160-11682-1	SW8260B	WG	The sample was initially analyzed at a 2.5X dilution. Elevated reporting limits provided. The sample was further diluted by 25X to bring Tetrachloroethylene (PCE) and Trichloroethylene (TCE) within the calibration curve. Only PCE and TCE are reported from the dilution.
MW-P110-440-SP15	160-11682-2	SW8260B	WG	The sample was initially analyzed at a 2.5X dilution. Elevated reporting limits provided. The sample was further diluted by 25X to bring Tetrachloroethylene (PCE) within the calibration curve. Only PCE is reported from the dilution.
S-1-450-SP15	160-11682-2	SW8260B	WG	The sample was diluted by 20X to bring Tetrachloroethylene (PCE) and Trichloroethylene (TCE) within the calibration curve. Only PCE and TCE are reported from the dilution.
MW-211-455-SP15	160-11682-6	SW6010B	WG	The samples were diluted by 10X due to the nature of the sample. The laboratory noted that the samples have historically caused internal standard failures and have been known to be high in salts.
MW-211-455-SP15-F	160-11682-7	SW6010B	WG	The samples were diluted by 10X due to the nature of the sample. The laboratory noted that the samples have historically caused internal standard failures and have been known to be high in salts.

Table 7 – Summary of Field Duplicate Results
None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11682
Date Completed: 04 June 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Key:

AP	=	Acid Phenol
BN	=	Base Neutral
CCV	=	Continuing calibration verification
COC	=	Chain-of-custody
CVAA	=	Cold Vapor Automatic Absorption
GC	=	Gas Chromatography
GC/MS	=	Gas Chromatography/Mass Spectrometry
ICP	=	Inductively Coupled Plasma Argon Spectrometry
ICS	=	Interference check standard
ICV	=	Initial calibration verification
NA	=	Not Applicable
LCS	=	Laboratory Control Sample
MS/MSD	=	Matrix Spike/Matrix Spike Duplicate
QAPP	=	Quality Assurance Project Plan
QC	=	Quality Control
SD	=	Serial Dilution
SVOCs	=	Semivolatile Organic Compounds
TIC	=	Tentatively Identified Compound
VOCs	=	Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11728-1
Date Completed: 27 May 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No. The cooler temperature was 1.8°C at receipt. The samples were noted to be received in good condition.
Frequency of Field QC Samples Correct?	N/A The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	Yes.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11728-1
Date Completed: 27 May 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2	Yes. Acetone was detected in the Trip Blank 15.
Were any analytes flagged for blank contamination? See Tables 2A and 2B *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	Yes. The sample result for acetone in sample S-1-325-SP15 was U qualified due to analyte detection in the trip blank.
Surrogate for method blanks and LCS within limits? See Table 3 *Organic Methods Only*	Yes.
Surrogate for samples and MS/MSD within limits? *Organic Methods Only*. See Table 3 Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	Yes.
MS/MSD within QC criteria? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	N/A MS/MSD was not collected for this sample delivery group.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11728-1
Date Completed: 27 May 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
LCS within QC criteria? See Table 5 *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes.
Were any samples re-analyzed or diluted? See Table 6 *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Sample MW-P114-170R-SP15 was run at a dilution to bring trichloroethene within the calibration curve. Only the target analyte was reported from the dilution.
Do field duplicate results show good precision for all compounds? See Table 7	N/A Field duplicate was not collected with the sample delivery group.

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	Yes.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11728-1
Date Completed: 27 May 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0299), methyl acetate(0.0115), 2-butanone(0.0382), 2-hexanone(0.0683), and 1,2-dibromo-3-chloropropane(0.0483) exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2893) was less than the laboratory minimum of 0.300; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. Acetone(0.0332), methyl acetate(0.0100), 2-butanone(0.0342), 2-hexanone(0.0715), and 1,2-dibromo-3-chloropropane exhibited minimum relative response factors (RRF) less than the laboratory minimum of 0.100 or 0.050. These analytes are poor performers; therefore, per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made. The RRF for 1,1,2,2-tetrachloroethane(0.2695) was less than the laboratory minimum of 0.300; however, per EPA SOP USEPA-540-R-08-01, a RRF >0.050 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11728-1
Date Completed: 27 May 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Summary of Potential Impacts on Data Usability
Major Concerns
None.
Minor Concerns
Low level acetone detection in sample S-1-325-SP15 was U qualified as non-detect due to a positive detection for acetone in the trip blank.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11728-1
Date Completed: 27 May 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-11728-1	WQ	Trip Blank 15	160-11728-1	05/05/15			
160-11728-1	WG	S-1-325-SP15	160-11728-2	05/05/15 18:25			
160-11728-1	WG	MW-P114-170R-SP15	160-11728-3	05/05/15 19:30			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-11728-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	2	N
160-11728-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-11728-1	WG	SW8260C-SIM	Volatile Organics by GC/MS SIM (1,4-Dioxane)	2	N

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11728-1
Date Completed: 27 May 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TRIP BLANK 15	TB	Acetone	5.2		ug/l	0.34	2

Table 2A - List of Samples Qualified for Method Blank Contamination

None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 15	WG	Acetone	5.2	3.1		ug/l	S-1-325-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

None

Table 5 - List of LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-P114-170R-SP15	160-11728-3	SW8260B	WG	The sample was diluted to bring the concentration of trichloroethene within the calibration range. Only the target analyte was reported from the dilution.

Table 7 – Summary of Field Duplicate Results

None

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-11728-1
Date Completed: 27 May 2015	Data Validation Chemist: J. Z. Christopher, Lynne Kalmbach
Date Performed:	Data Validation Review:

Key:

AP = Acid Phenol
BN = Base Neutral
CCV = Continuing calibration verification
COC = Chain-of-custody
CVAA = Cold Vapor Automatic Absorption
GC = Gas Chromatography
GC/MS = Gas Chromatography/Mass Spectrometry
ICP = Inductively Coupled Plasma Argon Spectrometry
ICS = Interference check standard
ICV = Initial calibration verification
NA = Not Applicable
LCS = Laboratory Control Sample
MS/MSD = Matrix Spike/Matrix Spike Duplicate
QAPP = Quality Assurance Project Plan
QC = Quality Control
SD = Serial Dilution
SVOCs = Semivolatile Organic Compounds
TIC = Tentatively Identified Compound
VOCs = Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

The samples and analytical methods included in this sample delivery group (SDG) are documented in Table 1 Sample Summary and Table 2 Method Summary. All data qualification was reviewed and approved by the qualified Data Validation Chemist listed in the heading of this DUSR.

Specific criteria for reporting and QC limits were obtained from the project Quality Assurance Project Plan (QAPP). Compliance with the project QC criteria is documented in this DUSR. The checklist and tables summarize the data review process and summarize the data that is qualified due to non-conformance with the QAPP. Any major or minor concerns affecting data usability are summarized below. The representativeness and comparability of the data are evaluated to determine how data usability may be impacted.

Completeness Review - General Sample and Batch Information - See Attachment	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. The laboratory re-issued the data package and EDD because they had inadvertently switched sample IDs for metals and VOC results in the original versions. The case narrative was not updated for the discussion of internal standard failure and referenced sample DRY-J-B1-19-Z3 instead of DRY-H-J-SG3 in the VOC discussion section.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No. The samples were received in good condition at a temperature of 12.3 °C. The client was notified and instructed the lab to proceed with analyses. VOC results were qualified with a J for detected compounds and a UJ for nondetects because the temperature upon receipt was above criteria.
Frequency of Field QC Samples Correct?	Yes.
Laboratory QC frequency correct? *Method blank and LCS with each batch and one set of MS/MSD per 20 samples?*	One MS/MSD was collected but there was sufficient sample to perform MS/MSD analyses for metals only. For VOCs, LCS/LCSD analyses were performed instead. An MS/MSD is not required for alpha or gamma spectroscopy. No field duplicates were collected this round. One trip blank was included.
All forms and raw data complete?	Yes.
Case narrative present and complete?	Yes.
Target analyte list and reporting limits match QAPP?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method, trip and field blanks? See Table 2.	Yes. SW8260: 2-Butanone (MEK) and Acetone were detected in the trip blank (TRIP BLANK 060215). SW6010: Lead was detected in method blank MB 160-194547/1-A. Lead and cadmium were detected in continuing calibration blanks (CCB).
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank or <10 times blank for common laboratory contaminants then "U" flag data. Qualification also applies to TICs reported with GC/MS.*	SW8260: Acetone results were U qualified in several samples due to positive detection in the trip blank (TRIP BLANK 060215). SW6010: Lead results were U qualified in samples DRYH-J-SG2 and DRY-J-B1-19-Z3 due to detection in the associated CCBs.
Surrogate for method blanks and LCS within limits? See Table 3. -- *Organic Methods Only*	No. SW8260: The surrogate recovery for 4-bromofluorobenzene was high in MB 160-195480/9. No qualification of the data was made.
Surrogate for samples and MS/MSD within limits? See Table 3. -- *Organic Methods Only* Were appropriate samples re-analyzed? *All samples should be re-analyzed for VOCs. Matrix effects should be established for all other methods. Only samples exceeding these criteria are listed on the Surrogate Outlier Report.*	No. SW8260: Toluene-d8 and 4-bromofluorobenzene were recovered high in TRIP BLANK 060215. 4-bromofluorobenzene was recovered high in DRYH-J-SG1, DRYH-J-SG, and DRYH-J-SG3. The results for detected compounds in the samples were qualified J as estimated. No qualification was made on non-detect results.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Chemical Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
MS/MSD within QC criteria? See Table 4. *If out and LCS is compliant, then J flag positive data in original sample due to matrix.* *If metal recoveries were ≤30%, then "R" flag associated non-detect values.*	SW8260B: Insufficient sample volume was available to perform a MS/MSD; however, an LCS/LCSD was analyzed, which is acceptable, with acceptable recoveries. SW6010: The MS/MSD recoveries for sample DRYH-J-SG1 for aluminum, copper, iron, and zinc were outside criteria. The parent sample results for aluminum, copper, and zinc were qualified with a J as estimated. For the parent sample result for iron; no qualifier was required because the sample concentration exceeded the spike concentration more than four times. The MS recovery for potassium was outside criteria; however, the MSD and RPD as well as the LCS were acceptable; therefore, no qualifiers were added. The PDS recovered high for chromium and lead; the parent sample results were qualified with a J as estimated. SW6020: The MS/MSD recoveries for sample DRYH-J-SG1 for uranium-234, uranium-235, and uranium-238 were outside criteria. No qualifiers were required because the sample concentration exceeded the spike concentration more than four times. SW7471: The MS recovery for mercury was outside criteria; however, the MSD and RPD as well as the LCS were acceptable; therefore, no qualifiers were added.
LCS within QC criteria? See Table 5. *If out, and the recovery high with no positive values, then no data qualification is required. Positive results are "J" flagged and non-detects are "J" flagged if low. Reject data with recovery <10%.*	Yes.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. SW6010: The samples were diluted due to the sample matrix. SW6020: The samples were diluted due to high target analyte concentrations.
Do field duplicate results show good precision for all compounds? See Table 7.	No field duplicate samples were included with this SDG.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
GC/MS	Do internal standards areas and retention time meet criteria? *Samples should be re-analyzed to establish matrix effects or chromatograms documenting matrix effects provided.*	No. The internal standard 1,4-dichlorobenzene-d4 exhibited area counts less than the lower limit in sample DRY-H-J-SG3. The detected sample results were qualified J as estimated and the non-detect results were qualified UR as rejected.
GC/MS	Does initial calibration meet criteria for all positive target compounds? (<30% RSD for CCCs and <15% for each analyte or curve fit)	Yes.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	No. SW8260 ICV: Acetone (0.0702), and methyl acetate (0.0229) exhibited relative response factors (RRF) less than the laboratory minimum in batch 194991. Acetone (0.0299), methyl acetate (0.0115), 2-butanone (0.0382), 1,1,2,2,-tetrachloroethane (0.2893), 2-hexanone (0.0683), and 1,2-dibromo-3-chloroproane (0.0483) exhibited relative response factors (RRF) less than the laboratory minimum in batch 190178. In cases, the analytes are poor performers and per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	Does second source calibration verification meet criteria? (25% of expected value for each analyte)	Yes.
GC/MS	Does continuing calibration meet criteria for all positive target compounds? (<20% D for each analyte)	Yes.
	Is the minimum response factor met for all compounds? (≥0.30 for chlorobenzene and 1,1,2,2,-PCA, ≥0.10 for chloromethane, bromoform, 1,1-DCA)	SW8260 CCV: 2-butanone (0.0352), 2-hexanone (0.0623), 1,1,2,2,-tetrachloroethane (0.2971), 4-methyl-2-pentanone (MIBK – 0.0940), acetone (0.0335), and methyl acetate (0.0112) exhibited relative response factors (RRF) less than the laboratory minimum in batch 195480. Acetone (0.0860), and methyl acetate (0.0222) exhibited relative response factors (RRF) less than the laboratory minimum in batch 194991. In cases, the analytes are poor performers and per EPA SOP USEPA-540-R-08-01, a RRF >0.010 is acceptable. No qualification of the data was made.
GC/MS	For TICs are there any system related compounds that should not be reported?	N/A
ICP	ICS recoveries within 80-120%?	Yes.
ICP	ICV recoveries within 90-110%?	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Organic Analyses by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
CVAA	CCV recoveries within 90-110% or 80-120% for mercury?	Yes.
ICP	CRI recoveries within 20% of expected value?	No. Chromium,and lead were recovered high in CRI 160-196420/7. The associated sample results were bracketed by CCVL at the same concentration and the same source as the CRI, which were within acceptance criteria; therefore, no qualification of the data was made.
ICP	ICB/CCB detections <2X MDL?	Yes.
ICP	Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	Yes.
ICP/MS	Is there one serial dilution per 20 samples? Serial dilution recoveries within 90-110% for concentrations greater than 50 times reporting limit?	The serial dilution results were acceptable.
ICP/MS	ICV recoveries within 95-105%?	Yes.
ICP/MS	ICS recoveries within 80-120%?	Yes.

Compliance Review Radiochemical Analyses Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 2. *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	No
Were any analytes flagged for blank contamination? See Tables 2A and 2B. *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	No
LCS within QC criteria (70-130% recovery)? See Table 5. *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Radiochemical Analyses Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes.
Do field duplicate results show good precision for all isotopes? See Table 7. *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	N/A. No field duplicate was included with this SDG.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No.
Were background and continuing calibration checks performed daily?	Yes.
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies found in spectra? *If found check spectra and calculations; qualify per USACE guidance.*	No.
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Compliance Review Radiochemical Analyses Approval by Data Validation Chemist		
Method	**Description**	**Notes and Qualifiers**
Gamma Spec	Was the soil matrix density comparable to the calibration standard density? (70-130%) *If not comparable, qualify results with J.*	Yes.
Gamma Spec	Were the samples prepared in sealed containers and subjected to a 21-day ingrowth period prior to analysis? *If not, qualify results with J.*	Yes.
Alpha Spec	Were background and continuing calibration checks (pulsers) performed daily?	Yes.
Alpha Spec	Were tracer yields within limits (QAPP: 50-100%, lab 30-110%)? *If recoveries were outside laboratory derived limits, but within default limits of 20-150%, flag associated results as estimated (J) after corrective actions; otherwise R. If recoveries are <20%: flag as rejected (R) and >150% rejected (R).*	Yes.
Alpha Spec	If recoveries were outside control limits, were adequate quantities of tracers used and were calculations correct? *Evaluate entire SDG for systematic errors and qualify if needed*	Yes. All tracer recoveries were within limits.
Alpha Spec	MS/MSD within QC criteria for Alpha Spectroscopy (70-130% recovery, RPD ± 35)? *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	N/A. MS/MSD are optional for alpha spec and were not performed for this SDG.

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Summary of Potential Impacts on Data Usability

A-01-R

- There is no valid value for EPAR2 for the analytical method A-01-R; therefore the EDD does not pass the EDP check for this method.

GA-01-R

- The valid value for EPAR2 for the analytical method is EML GA-01-R; therefore the EDD references EML GA-01-R instead of GA-01-R for these analyses.

SW8260

- The case narrative referenced sample DRY-J-B1-19-Z3 instead of DRY-H-J-SG3 in the VOC discussion section about internal standard failure in the revised report. The report was revised because the initial report had switched the two sample IDs listed above for VOC and metals analyses.
- The samples were received at 12.3 degrees C; therefore VOC results were qualified with a J for detected compounds and a UJ for nondetects.
- There was insufficient sample to perform MS/MSD for VOCs; therefore an LCS/LCSD was performed instead.
- Acetone results were qualified with a U due to acetone detected in the trip blank.
- Surrogate recoveries were above criteria for three samples, causing detected results to be qualified with a J as estimated.
- Internal standard area counts were below criteria for sample DRY-H-J-SG3; therefore detected sample results were qualified with a J as estimated and nondetects were qualified with a UR as nondetected-rejected.
- ICVs and CCVs for poor performing compounds exhibited RRF below criteria; no qualification was required.

SW6010

- Lead and cadmium were detected in CCBs; some lead results were qualified with a U as nondetect.
- Lead was detected in the method blank; no sample results were qualified on this basis because they were already qualified with a U due to the CCB.
- MS/MSD recoveries for aluminum, copper, and zinc were outside criteria; therefore, the parent sample results were qualified with a J as estimated.
- The post digestion spike recoveries for chromium and lead were outside criteria; therefore, the parent sample results were qualified with a J as estimated.

Tables

Data Usability Summary Report	Project: Sylvania Off Site Groundwater
Laboratory: TestAmerica, St Louis	LAB SDG ID: 160-12232-1, 160-12232-2
Date Completed: 5 August 2015	Data Validation Chemist: J. Z. Christopher
Date Performed:	Data Validation Review:

Table 1 - Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-12232-1	SO	DRYH-J-SG1	160-12232-1	6/2/2015 15:40		MS/MSD	
160-12232-1	SO	DRYH-J-SG2	160-12232-2	6/2/2015 15:05			
160-12232-1	SO	DRYH-J-SG3	160-12232-3	6/2/2015 16:10			
160-12232-1	SO	DRY-J-B1-19-Z3	160-12232-4	6/2/2015 16:30			
160-12232-1	WQ	TRIP BLANK 060215	160-12232-5	6/2/2015 0:00			

Table 1A - Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-12232-1	SO	A-01-R	Isotopic Thorium, (Alpha Spectrometry)	4	N
160-12232-1	SO	A-01-R	Isotopic Uranium, (Alpha Spectrometry)	4	N
160-12232-2	SO	GA-01-R	Radium-226, (Gamma Spectrometry)	4	N
160-12232-1	SO	6010B	Metals (ICP)	4	N
160-12232-1	SO	6020A	Metals (ICP/MS)	4	N
160-12232-1	SO	7471BA	Mercury (CVAA)	4	N
160-12232-1	SO/WQ	8260B	Volatile Organic Compounds (GC/MS)	5	N/TB

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TRIP BLANK 060215	TB	2-Butanone (MEK)	1.3	J	ug/l	0.52	5
SW8260B	TRIP BLANK 060215	TB	Acetone	6.4		ug/l	0.34	2
SW6010	MB 160-194547/1-A	MB	LEAD	0.114	J	mg/kg	0.11	0.88
SW6010	CCB-160-196420/46	CCB	CADMIUM	0.400	J	ug/l	0.33	4.9
SW6010	CCB-160-196420/33	CCB	LEAD	1.60	J	ug/l	0.11	0.88
SW6010	CCB-160-196420/46	CCB	LEAD	1.60	J	ug/l	0.11	0.88

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW6010	CCB-160-196420/33	SO	LEAD	1.60	7.3	J	ug/l	DRYH-J-SG2	U Flag
SW6010	CCB-160-196420/46	SO	LEAD	1.60	7.3	J	ug/l	DRYH-J-SG2	U Flag
SW6010	CCB-160-196420/33	SO	LEAD	1.60	4.0	J	ug/l	DRY-J-B1-19-Z3	U Flag
SW6010	CCB-160-196420/46	SO	LEAD	1.60	4.0	J	ug/l	DRY-J-B1-19-Z3	U Flag

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 060215	SO	ACETONE	6.4	16		ug/kg	DRYH-J-SG1	U Flag
SW8260B	TRIP BLANK 060215	SO	ACETONE	6.4	22		ug/kg	DRYH-J-SG2	U Flag
SW8260B	TRIP BLANK 060215	SO	ACETONE	6.4	18		ug/kg	DRYH-J-SG3	U Flag
SW8260B	TRIP BLANK 060215	SO	ACETONE	6.4	15		ug/kg	DRY-J-B1-19-Z3	U Flag

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Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	DRYH-J-SG1	SO	4-Bromofluorobenzene (Surr)	139	85	120	1	J Flag
SW8260B	DRYH-J-SG2	SO	4-Bromofluorobenzene (Surr)	121	85	120	1	J Flag
SW8260B	DRYH-J-SG3	SO	4-Bromofluorobenzene (Surr)	132	85	120	1	J Flag
SW8260B	TRIP BLANK 060215	WQ	4-Bromofluorobenzene (Surr)	124	75	120	1	J Flag
SW8260B	TRIP BLANK 060215	WQ	Toluene-d8 (Surr)	122	85	120	1	J Flag
SW8260B	MB 160-195480/9	WQ	4-Bromofluorobenzene (Surr)	122	85	120	1	J Flag

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW6010	DRYH-J-SG1MS	MS/MSD	Aluminum	1800	1020	146	160	10	80	120	J Flag
SW6010	DRYH-J-SG1MS	MS/MSD	Copper	280	102	39	57	10	80	120	J Flag
SW6010	DRYH-J-SG1MS	MS/MSD	Iron	8100	1020	-248	-302	10	80	120	4X
SW6010	DRYH-J-SG1MS	MS/MSD	Potassium	700	1020	126	118	10	80	120	None
SW6010	DRYH-J-SG1MS	MS/MSD	Zinc	120	102	66	78	10	80	120	J Flag
SW6020A	DRYH-J-SG1MS	MS/MSD	U-234	0.16	0.00744	-1002	-783	5	75	125	4X
SW6020A	DRYH-J-SG1MS	MS/MSD	U-235	18	0.436	-2170	-1758	5	75	125	4X
SW6020A	DRYH-J-SG1MS	MS/MSD	U-238	1500	0.452	-231497	-198614	500	75	125	4X
SW7471	DRYH-J-SG1MS	MS/MSD	Mercury	0.48	0.799	72	93	1	80	120	None

Table 5 - List of LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
DRYH-J-SG1	160-12232-1	SW6010A	SO	Initial analysis run at a 10X dilution due to the nature of the matrix. Elevated reporting limits provided.
DRYH-J-SG2	160-12232-2	SW6010A	SO	Initial analysis run at a 10X dilution due to the nature of the matrix. Elevated reporting limits provided.
DRYH-J-SG3	160-12232-3	SW6010A	SO	Initial analysis run at a 10X dilution due to the nature of the matrix. Elevated reporting limits provided.
DRY-J-B1-19-Z3	160-12232-4	SW6010A	SO	Initial analysis run at a 10X dilution due to the nature of the matrix. Elevated reporting limits provided.
DRYH-J-SG1	160-12232-1	SW6020A	SO	Initial analysis run at a 5X dilution due to the high concentration of target analytes. Elevated reporting limits provided.
DRYH-J-SG2	160-12232-2	SW6020A	SO	Initial analysis run at a 5X dilution due to the high concentration of target analytes. Elevated reporting limits provided.
DRYH-J-SG3	160-12232-3	SW6020A	SO	Initial analysis run at a 5X dilution due to the high concentration of target analytes. Elevated reporting limits provided.
DRY-J-B1-19-Z3	160-12232-4	SW6020A	SO	Initial analysis run at a 5X dilution due to the high concentration of target analytes. Elevated reporting limits provided.
DRYH-J-SG1	160-12232-1	SW6020A	SO	Initial analysis run at a 500X dilution due to the high concentration of U-238. Elevated reporting limits provided.
DRYH-J-SG3	160-12232-3	SW6020A	SO	Initial analysis run at a 500X dilution due to the high concentration of U-238. Elevated reporting limits provided.

Table 7 – Summary of Field Duplicate Results

None.

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Key:

AP	=	Acid Phenol
BN	=	Base Neutral
CCV	=	Continuing calibration verification
COC	=	Chain-of-custody
CVAA	=	Cold Vapor Automatic Absorption
GC	=	Gas Chromatography
GC/MS	=	Gas Chromatography/Mass Spectrometry
ICP	=	Inductively Coupled Plasma Argon Spectrometry
ICS	=	Interference check standard
ICV	=	Initial calibration verification
NA	=	Not Applicable
LCS	=	Laboratory Control Sample
MS/MSD	=	Matrix Spike/Matrix Spike Duplicate
QAPP	=	Quality Assurance Project Plan
QC	=	Quality Control
SD	=	Serial Dilution
SVOCs	=	Semivolatile Organic Compounds
TIC	=	Tentatively Identified Compound
VOCs	=	Volatile Organic Compounds

Data Usability Summary Report	Project: Sylvania: Monitoring Well: WI15
Date Completed: April 29, 2015	Completed by: Lynne Kalmbach and Joanna Christopher

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
- Department of Defense (DoD) Quality Systems Manual for Environmental Laboratories Version 5.0
- USACE Kansas City and St. Louis District Radionuclide Data Quality Evaluation Guidance for Alpha and Gamma Spectroscopy, Revision 01

Specific criteria for QC limits were obtained from the project specific QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory
1003954.0001	160-10230-1	TestAmerica: St Louis

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-10230-1	WG	MW-214-395-WI15	160-10230-1	01/21/15 11:30			
160-10230-1	WG	MW-216-510-WI15	160-10230-2	01/20/15 15:51			
160-10230-1	WG	MW-218-95-WI15	160-10230-3	01/21/15 15:30			
160-10230-1	WG	MW-219-560-WI15	160-10230-4	01/21/15 12:30	MS/MSD		
160-10230-1	WG	MW-220-325-WI15	160-10230-5	01/20/15 13:35			
160-10230-1	WG	MW-58-75-WI15	160-10230-6	01/20/15 16:05	MS/MSD		
160-10230-1	WG	MW-59-75-WI15	160-10230-7	01/20/15 17:30	MS/MSD		
160-10230-1	WG	MW-607-WI15	160-10230-8	01/20/15 16:05			

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-10230-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	7	N/FD
160-10230-1	WG	SW8260C-SIM	Volatile Organics by GC/MS SIM (1,4-Dioxane)	7	N/FD
160-10230-1	WG	SW6010B	Metals (ICP), Nickel	3	N/FD
160-10230-1 (GEL SDG 365777)	WG	D5174	Total Uranium by KPA	4	N/FD
160-10230-1	WG	A-01-R	Isotopic Uranium (Alpha Spectrometry)	4	N/FD

Data Usability Summary Report	Project: Sylvania: Monitoring Well: WI15
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General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. Nitric preserved bottles were sent to the laboratory, but nickel analysis was not indicated on the COC. Per the client, the following samples were logged in for nickel analysis: MW-58-75-WI15, MW-59-75-WI15, and MW-607-WI15. The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 365777.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/10 samples MS/MSD – 1/20 samples up to one week or 5% Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	No. 1 field duplicate per 8 samples Trip blank was not included MS/MSD was not collected Equipment blank was not collected Note: The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event.
Case narrative present and complete?	Yes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Reanalysis Results (Table 6)
- Field Duplicate Results (Table 7)

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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or, field blanks (see Table 2)?	No.
For samples, if results are < 5 times the blank or < 10 times the blank for common laboratory contaminants, then "U" flag data.	No qualifications required.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples and MS/MSD within limits? (See Table 3). If not, were all samples reanalyzed for VOCs?	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Is MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then "J" flag positive data in original sample due to matrix.	A MS/MSD was not indicated on the COC; however, the laboratory used sample MW-59-75-WI15 as laboratory QC. The results were acceptable.
Is LCS within QC criteria (see Table 5)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. Cyclohexane and methylcyclohexane were recovered high in LCS and/or LCSD 160-170969/5. The associated samples were non-detect for the analytes; therefore, no qualification of the data was made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix?	No. 8260B-SIM: 1,4-Dioxane-d8 was recovered low in sample MW-216-510-WI15. The laboratory reanalyzed the sample and the failure was reproduced, which indicates matrix effects. The result was qualified J as estimated.
Is initial calibration for target compounds <15% RSD or curve fit?	Yes. The following poor performing analytes exhibited an RRF value less than the laboratory minimum criterion of 0.1000: acetone, methyl acetate, 2-butanone, and 2-hexanone. The RRF values were ≥0.0100; the allowance for poor performing analytes per EPA Region 2 SOP HW-33, Rev 3. The %RSD was acceptable and the associated results were non-detect for the analytes. No qualification of the data was made.
Is continuing calibration for target compounds < 20.5% D.	For CCV 160-170969/4, the following analytes exceeded 20% D: Dichlorodifluoromethane(24.1), trichlorofluoromethane (21.2), carbon tetrachloride(21.2), and styrene(20.7). The following analytes exceeded the minimum relative response factor(RRF): acetone(0.0315), methyl acetate(0.0175), 2-butanone(0.0373), and 2-hexanone(0.0885).

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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
	Acetone, 2-butanone, dichlorodifluoromethane, 2-hexanone, dichlorodifluoromethane, trichlorofluoromethane, and methyl acetate are all poor performing compounds. %D ≤ 40% and min RRF ≥0.010 is acceptable per EPA Region 2 SOP HW-33, Rev 3. For all other volatile compounds, the SOP allows up the 25% D. All analytes except for carbon tetrachloride were not detected in the samples. No qualification of the data was made for the non-detect results. Carbon tetrachloride was detected in sample MW-219-560-WI15, which was reanalyzed under an acceptable CCV 160-171425/4. Only the target analyte was reported form the re-analysis.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. MW-219-560-WI15, MW-220-325-WI15, MW-58-75-WI15, and MW-607-WI15 were dilute due to elevated levels of tetrachloroethene and/or trichloroethene. Only the target analytes were reported from the dilution. MW-219-560-WI15 and MW-220-325-WI15 were initially analyzed at dilutions prior to being further diluted due to target analytes exceeding the calibration curve. Elevated reporting limits are provided for non-detect analytes.
For TICs are there any system related compounds that should not be reported?	N/A
Do field duplicate results show good precision for all compounds (see Table 7)?	Yes.

Total Metals by ICP	
Description	**Notes and Qualifiers**
Are any compounds present in method and field blanks as noted on Table 2?	Yes. Nickel was detected in the continuing calibration blank (CCB) 160-170576/12; however, the CCB did not bracket the samples.
For samples, if results are < 5 times the blank then "U" flag data.	No qualification required.
Is laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Are MS/MSD within QC criteria (see Table 4)? QC limits are not applicable to sample results greater than 4 times spike amount. All N flagged data for MS are flagged J as estimated.	Yes. The laboratory performed a MS/MSD analysis on sample MW-58-75-WI15. The recoveries were acceptable.
Were elements recovered ≤30%? If so, “R” flag associated NDs on Form 1's.	No.

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Total Metals by ICP	
Description	**Notes and Qualifiers**
Is LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	Yes.
Is there one serial dilution per 20 samples? Flag all data reported with an "E" as "J".	Yes.
Spot check ICS recoveries 80-120%. Contact lab if unacceptable.	ICS recoveries were acceptable.
Spot check ICV 95-105%. Contact lab if unacceptable.	ICV recoveries were acceptable.
Spot check CCV 90-110% or 80-120% for mercury. Contact lab if unacceptable.	CCV recoveries were acceptable.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
Do field duplicate results show good precision for all compounds (see Table 7)?	Yes.

Total U Analysis by KPA	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2	No.
Were any analytes flagged for blank contamination? See Table 2A *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No.
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.

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Total U Analysis by KPA	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision? See Table 7	Yes.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Sample MW-58-75-WI15 was re-analyzed with a post-spike to test for quenching. No evidence of quenching was found, so the original result was reported and no qualifiers were required.
Were all samples run under acceptable calibration?	Yes.

Isotopic Thorium and Uranium by Alpha Spectrometry	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 2. *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	Yes. U-238 was detected in the method blank above the uncertainty or MDC but below the PQL.
Were any analytes flagged for blank contamination? See Table 2A. *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	Yes. The U-238 result for sample MW-218-95-WI15 was <5 times the blank concentration and did not pass the USACE NAD test; therefore, it was qualified with J as estimated.
LCS within QC criteria (70-130% recovery)? *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Alpha Spectroscopy (70-130% recovery, RPD ± 35)? *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	N/A An MS/MSD was not required for alpha spectroscopy.

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Isotopic Thorium and Uranium by Alpha Spectrometry	
Description	**Notes and Qualifiers**
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes. LCS/LCSD were analyzed instead of a matrix duplicate sample. Results were within criteria.
Do field duplicate results show good precision for all isotopes? *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	No. Sample MW-607-WI15 was the field duplicate for sample MW-58-75-WI15. Precision was outside acceptance criteria for the U-233/234 results; therefore the results were qualified with a UJ as estimated (both results were below the MDC and 2-sigma uncertainty).
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No.
Were background and continuing calibration checks (pulsers) performed daily?	Yes.
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies found in spectra? *If found check calculations, qualify per USACE guidance.*	No.
Were tracer yields within limits (QAPP: 50-100%, lab 30-110%)? *If recoveries were outside laboratory derived limits, but within default limits of 20-150%, flag associated results as estimated (J) after corrective actions; otherwise R. If recoveries are <20%: flag as rejected (R) and >150% rejected (R).*	Yes.
If recoveries were outside control limits, were adequate quantities of tracers used and were calculations correct? *Evaluate entire SDG for systematic errors and qualify if needed*	N/A: All recoveries were within limits.

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Isotopic Thorium and Uranium by Alpha Spectrometry	
Description	**Notes and Qualifiers**
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

Summary of Potential Impacts on Data Usability
8260B • A trip blank was not included with the sample shipment. • MW-219-560-WI15 and MW-220-325-WI15 were initially analyzed at dilutions. Elevated reporting limits are provided for non-detect analytes. This may impact data comparability. 8260B-SIM • Sample results for MW-216-510-WI15 were J qualified as estimated due to internal standard failure. A-01-R • There is no valid value for EPAR2 for the analytical method A-01-R; therefore the EDD does not pass the EDP check. • The field duplicate precision was outside acceptance criteria for U-233/234; therefore, the U-233/234 results for the field duplicate sample pair (MW-58-75-WI15 and MW-607-WI15) were qualified with UJ as estimated. • U-238 was detected in the method blank; therefore, the U-238 result for sample MW-218-95-WI15 was qualified with J as estimated.

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	CCB 160-170576/12	CCB	Nickel	2.80	J	ug/l	2.57	40

Table 2A - List of Samples Qualified for Method Blank Contamination
None

Table 2B - List of Samples Qualified for Field Blank Contamination
None

Table 3 - List of Samples with Surrogates outside Control Limits
None

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits
None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-170969/5	LCS	Cyclohexane	123	119	85	115	None: High & ND
SW8260B	LCS 160-170969/5	LCS	Methylcyclohexane	121	114	85	115	None: High & ND

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-219-560-WI15	160-10230-4	SW8260B	WG	Initial analysis run at 5X dilution. Sample dilute by 50X for tetrachloroethene and trichloroethene concentrations exceeding the calibration curve. Elevated reporting limits provided for non-detect analytes.
MW-220-325-WI15	160-10230-5	SW8260B	WG	Initial analysis run at 10X dilution. Sample dilute by 100X for tetrachloroethene and trichloroethene concentrations exceeding the calibration curve. Elevated reporting limits provided for non-detect analytes.

Sample ID	Lab ID	Method	Sample Type	Action
MW-58-75-WI15	160-10230-6	SW8260B	WG	Sample dilute by 5X for tetrachloroethene concentration exceeding the calibration curve. No impact to data usability.
MW-6074-WI15	160-10230-8	SW8260B	WG	Sample dilute by 5X for tetrachloroethene concentration exceeding the calibration curve. No impact to data usability.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-58-75-WI15	MW-607-WI15	RPD	RPD Rating	Sample Qual
A-01-R	Uranium-233/234	pci/l	Water	0.115	A	0.0605	0.0158	117.2%	Poor	J Flag
A-01-R	Uranium-235/236	pci/l	Water	0.0972	A	-0.00502	-0.0147	-98.2%	Good	None
A-01-R	Uranium-238	pci/l	Water	0.0902	A	0.0242	0.0197	20.5%	Good	None
D5174	Uranium, total	ug/l	Water	0.100	A	ND	ND	NC	--	--
SW6010	Nickel	ug/l	Water	40	A	3.8	4.7	21.2%	Good	None
SW8260B	1,1,1-Trichloroethane	ug/l	Water	1	A	5.8	5.5	5.3%	Good	None
SW8260B	1,1-Dichloroethane	ug/l	Water	1	A	2.1	2.2	4.7%	Good	None
SW8260B	1,4-Dioxane	ug/l	Water	5	A	2.6	2	26.1%	Good	None
SW8260B	cis-1,2-Dichloroethene	ug/l	Water	1	A	6.3	6.4	1.6%	Good	None
SW8260B	Tetrachloroethene	ug/l	Water	5	A	120	130	8.0%	Good	None
SW8260B	trans-1,2-Dichloroethene	ug/l	Water	1	A	0.18	ND	NC	--	--
SW8260B	Trichloroethene	ug/l	Water	1	A	1.3	1.3	0.0%	Good	None

Acronym List and Table Key:

CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
GC/MS = gas chromatography / mass spectrometry
LCS = laboratory control sample
MBLK = method blank
MS = matrix spike

Data Usability Summary Report	Project: Sylvania: Monitoring Well: WI15
Date Completed: April 29, 2015	Completed by: Lynne Kalmbach and Joanna Christopher

Acronym List and Table Key:

MSD	=	matrix spike duplicate
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QAPP	=	quality assurance project plan
QC	=	quality control
RPD	=	relative percent difference
SDG	=	sample delivery group
TIC	=	tentatively identified compound
VOC	=	volatile organic compound

Data Usability Summary Report	Project: Sylvania: Monitoring Well: WI15
Date Completed: April 29, 2015	Completed by: Lynne Kalmbach

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
- Department of Defense (DoD) Quality Systems Manual for Environmental Laboratories Version 5.0
- USACE Kansas City and St. Louis District Radionuclide Data Quality Evaluation Guidance for Alpha and Gamma Spectroscopy, Revision 01

Specific criteria for QC limits were obtained from the project specific QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory
1003954.0001	160-10255-1	TestAmerica: St Louis

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-10255-1	WG	MW-217-490-WI15	160-10255-1	01/21/15 09:20	MS/MSD		

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-10989-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	1	N
160-10989-1	WG	SW8260C-SIM	Volatile Organics by GC/MS SIM (1,4-Dioxane)	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/10 samples MS/MSD – 1/20 samples up to one week or 5% Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	No. Field duplicate was not collected Trip blank was not included MS/MSD was not collected Equipment blank was not collected Note: The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event.
Case narrative present and complete?	Yes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Reanalysis Results (Table 6)
- Field Duplicate Results (Table 7)

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Data Usability Summary Report	Project: Sylvania: Monitoring Well: WI15
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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or, field blanks (see Table 2)?	No
For samples, if results are < 5 times the blank or < 10 times the blank for common laboratory contaminants, then "U" flag data.	No qualifications required.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples and MS/MSD within limits? (See Table 3). If not, were all samples reanalyzed for VOCs?	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Is MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then "J" flag positive data in original sample due to matrix.	A MS/MSD was not provided in the sample delivery group.
Is LCS within QC criteria (see Table 5)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. Cyclohexane and methylcyclohexane were recovered high in LCS and/or LCSD 160-170969/5. The associated samples were non-detect for the analytes; therefore, no qualification of the data was made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix?	Yes.
Is initial calibration for target compounds <15% RSD or curve fit?	Yes. The following poor performing analytes exhibited an RRF value less than the laboratory minimum criterion of 0.1000: acetone, methyl acetate, 2-butanone, and 2-hexanone. The RRF values were ≥0.0100; the allowance for poor performing analytes per EPA Region 2 SOP HW-33, Rev 3. The %RSD was acceptable and the associated results were non-detect for the analytes. No qualification of the data was made.
Is continuing calibration for target compounds < 20.5% D.	For CCV 160-170969/4, the following analytes exceeded 20% D: Dichlorodifluoromethane(24.1), trichlorofluoromethane (21.2), carbon tetrachloride(21.2), and styrene(20.7). The following analytes exceeded the minimum relative response factor: acetone(0.0315), methyl acetate(0.0175), 2-butanone(0.0373), and 2-hexanone(0.0885). Acetone, 2-butanone, dichlorodifluoromethane, 2-hexanone, dichlorofluoromethane, trichlorofluoromethane, and methyl acetate are all poor performing compounds. %D ≤ 40% and min RRF ≥0.010 is acceptable per EPA Region 2 SOP HW-33, Rev 3. For all other volatile compounds, the SOP allows up the 25% D. The analytes were not detected in the samples. No qualification of the data was made.

Data Usability Summary Report	Project: Sylvania: Monitoring Well: WI15
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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	N/A
Do field duplicate results show good precision for all compounds (see Table 7)?	N/A A field duplicate was not provided in the sample delivery group.

Summary of Potential Impacts on Data Usability
8260B • A trip blank was not included with the sample shipment.

Table 2 - List of Positive Results for Blank Samples
None

Table 2A - List of Samples Qualified for Method Blank Contamination
None

Table 2B - List of Samples Qualified for Field Blank Contamination
None

Table 3 - List of Samples with Surrogates outside Control Limits
None

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits
None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS 160-170969/5	LCS	Cyclohexane	123	119	85	115	None: High & ND
SW8260B	LCS 160-170969/5	LCS	Methylcyclohexane	121	114	85	115	None: High & ND

Table 6 –Samples that were Re-analyzed
None

Table 7 – Summary of Field Duplicate Results
None

Acronym List and Table Key:

CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
GC/MS	=	gas chromatography / mass spectrometry
LCS	=	laboratory control sample
MBLK	=	method blank
MS	=	matrix spike

Data Usability Summary Report	Project: Sylvania: Monitoring Well: WI15
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Acronym List and Table Key:

MSD	=	matrix spike duplicate
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QAPP	=	quality assurance project plan
QC	=	quality control
RPD	=	relative percent difference
SDG	=	sample delivery group
TIC	=	tentatively identified compound
VOC	=	volatile organic compound

Data Usability Summary Report	Project: Sylvania: Monitoring Well: SP15
Date Completed: April 28, 2015	Completed by: Lynne Kalmbach and Joanna Christopher

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
- Department of Defense (DoD) Quality Systems Manual for Environmental Laboratories Version 5.0
- USACE Kansas City and St. Louis District Radionuclide Data Quality Evaluation Guidance for Alpha and Gamma Spectroscopy, Revision 01

Specific criteria for QC limits were obtained from the project specific QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory
1003954.0001	160-10989-1	TestAmerica: St Louis

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-10989-1	WG	MW-58S-SP15	160-10989-1	03/17/15 17:45	MS/MSD		
160-10989-1	WG	MW-59S-SP15	160-10989-2	03/17/15 18:15			
160-10989-1	WG	MW-215-395-SP15	160-10989-3	03/18/15 10:20			
160-10989-1	WG	MW-216-510-SP15	160-10989-4	03/19/15 14:25			
160-10989-1	WG	MW-217-490-SP15	160-10989-5	03/18/15 18:05			
160-10989-1	WG	MW-218-95-SP15	160-10989-6	03/19/15 10:30			
160-10989-1	WG	MW-219-560-SP15	160-10989-7	03/19/15 14:45			
160-10989-1	WG	MW-220-325-SP15	160-10989-8	03/19/15 17:15			
160-10989-1	WG	MW-904-SP15	160-10989-9	03/19/15 00:00			
160-10989-1	WQ	TRIP BLANK 06	160-10989-10	03/18/15 08:00			

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-10989-1	WG	SW8260B	Volatile Organic Compounds (GC/MS)	8	N/FD
160-10989-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-10989-1	WG	SW8260C-SIM	Volatile Organics by GC/MS SIM (1,4-Dioxane)	8	N/FD
160-10989-1	WG	SW6010B	Metals (ICP), Nickel	8	N/FD
160-10989-1 (GEL SDG 369354)	WG	D5174	Total Uranium by KPA	3	N

Data Usability Summary Report	Project: Sylvania: Monitoring Well: SP15
Date Completed: April 28, 2015	Completed by: Lynne Kalmbach and Joanna Christopher

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes The analyses for total uranium by kinetic phosphorescence were performed by GEL Laboratories under subcontract to TestAmerica St. Louis as GEL SDG 369354.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/10 samples MS/MSD – 1/20 samples up to one week or 5% Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	No. 1 field duplicate per 8 samples 1 trip blank per VOC cooler MS/MSD was not collected Equipment blank was not collected Note: The SDG is part of a larger sampling event. Field QC will be assessed at the end of the sampling event.
Case narrative present and complete?	Yes. Note: The subcontracted data report for SDG 369354 referenced incorrect lab sample IDS (10969 instead of 10989); however, the IDs were correct in the remainder of the report and in the EDD; therefore, there is no impact on data usability.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Reanalysis Results (Table 6)
- Field Duplicate Results (Table 7)

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Data Usability Summary Report	Project: Sylvania: Monitoring Well: SP15
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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or, field blanks (see Table 2)?	Yes. Acetone and 2-butanone were detected in TRIP BLANK 06.
For samples, if results are < 5 times the blank or < 10 times the blank for common laboratory contaminants, then "U" flag data.	Acetone was detected in samples MW-215-395-SP15 AND MW-216-510-SP15 at levels below the trip blank detection, but above the PQL. The results were qualified U as non-detect. The PQL was elevated to the detected result.
Are surrogates for method blanks and LCS within limits?	No. 4-Bromofluorobenzene and toluene-d8 were recovered high in MB 160-180337/8 and MB 160-180642/8. No qualification of the data was made.
Are surrogates for samples and MS/MSD within limits? (See Table 3). If not, were all samples reanalyzed for VOCs?	No. 4-Bromofluorobenzene was recovered high in samples MW-59S-SP15, MW-215-395-SP15, MW-58S-SP15, and MW-904-SP15. The positive detections in each sample were qualified J as estimated. 4-Bromofluorobenzene and toluene-d8 were recovered high in MW-217-490-SP15. The positive detections in each sample were qualified J as estimated.
Is Laboratory QC frequency at least one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Is MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then “J” flag positive data in original sample due to matrix.	A MS/MSD was not collected in this sample delivery group.
Is LCS within QC criteria (see Table 5)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. Cyclohexane was recovered high in LCSD 160-180642/6. The associated samples were non-detect for the analytes; therefore, no qualification of the data was made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix?	Yes.

Data Usability Summary Report	Project: Sylvania: Monitoring Well: SP15
Date Completed: April 28, 2015	Completed by: Lynne Kalmbach and Joanna Christopher

Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Is initial calibration for target compounds <15% RSD or curve fit?	Yes. The following poor performing analytes exhibited an RRF value less than the laboratory minimum criterion of 0.1000/0.0500: acetone, methyl acetate, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, and 1,2-dibromo-3-chloropropane. The RRF values were ≥0.0100; the allowance for poor performing analytes per EPA Region 2 SOP HW-33, Rev 3. The %RSD was acceptable and the associated results were non-detect for the analytes. No qualification of the data was made.
Is continuing calibration for target compounds < 20.5% D.	For CCV 160-180337/4, the following analytes exceeded 20% D: Bromomethane(-29.0), chloroethane(-20.3), 2-butanone(21.5), and styrene(25.5). The following analytes exceeded the minimum relative response factor: Acetone(0.0220), methyl acetate(0.0147), 2-butanone(0.0317), 4-methyl-2-pentanone(0.0907), and 2-hexanone(0.0575). For CCV 160-180642/4, the following analytes exceeded the minimum relative response factor: acetone(0.0246), methyl acetate(0.0160), 2-butanone(0.0324), 4-methyl-2-pentanone(0.0969), and 2-hexanone(0.0651). Acetone, 2-butanone, chloroethane, 2-hexanone, 4-methyl-4-pentanone, and methyl acetate are all poor performing compounds. %D ≤ 40% and min RRF ≥0.010 is acceptable per EPA Region 2 SOP HW-33, Rev 3. For all other volatile compounds, the SOP allows up the 25% D. No qualification of the data was made with the exception of styrene results associated with CCV 160-180337/4. The results were qualified UJ as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. MW-219-560-SP15, MW-220-325-SP15, MW-58S-SP15, and MW-904-SP15 were dilute due to elevated levels of tetrachloroethene and/or trichloroethene. Only the target analytes were reported from the dilution. MW-219-560-SP15, MW-220-325-SP15, and MW-904-SP15 were initially analyzed at dilutions prior to being further diluted for high concentrations. Elevated reporting limits are provided for non-detect analytes.
For TICs are there any system related compounds that should not be reported?	N/A
Do field duplicate results show good precision for all compounds (see Table 7)?	Yes.

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Total Metals by ICP	
Description	**Notes and Qualifiers**
Are any compounds present in method and field blanks as noted on Table 2?	No.
For samples, if results are < 5 times the blank then "U" flag data.	Not required.
Is laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Are MS/MSD within QC criteria (see Table 4)? QC limits are not applicable to sample results greater than 4 times spike amount. All N flagged data for MS are flagged J as estimated.	Yes. The laboratory performed a MS/MSD analysis on sample MW-58S-SP15. The recoveries were acceptable.
Were elements recovered ≤30%? If so, "R" flag associated NDs on Form 1's.	No.
Is LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	Yes.
Is there one serial dilution per 20 samples? Flag all data reported with an "E" as "J".	Yes.
Spot check ICS recoveries 80-120%. Contact lab if unacceptable.	ICS recoveries were acceptable.
Spot check ICV 95-105%. Contact lab if unacceptable.	ICV recoveries were acceptable.
Spot check CCV 90-110% or 80-120% for mercury. Contact lab if unacceptable.	CCV recoveries were acceptable.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. Samples MW-59S-SP15 and MW-58S-SP15 were dilute by 5X due to the nature of the matrix. Elevated reporting limits are provided.
Do field duplicate results show good precision for all compounds (see Table 7)?	N/A Nickel analysis was not requested in the field duplicate samples.

Total U Analysis by KPA	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? See Table 2	No.
Were any analytes flagged for blank contamination? See Table 2A *For samples, if results are <5 times the blank or <10 times blank then "U" flag data.*	No.

Data Usability Summary Report	Project: Sylvania: Monitoring Well: SP15
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Total U Analysis by KPA	
Description	**Notes and Qualifiers**
LCS within QC criteria (75-125% recovery)? See Table 5 *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Kinetic Phosphorescence (75-125% recovery, RPD ± 20)? See Table 4 *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Do field duplicate results show good precision? See Table 7	N/A -- Field duplicate samples were not analyzed in this SDG for total U.
Were any samples re-analyzed or diluted? See Table 6. *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	Yes. Several samples were re-analyzed with a post-spike to test for quenching and then reanalyzed due to LCS noncompliance; only one result was reported per sample and no qualifiers were required.
Were all samples run under acceptable calibration?	Yes.

Summary of Potential Impacts on Data Usability
8260B • Acetone was detected in the TRIP BLANK 06. Low level acetone results in samples MW-215-39S-SP15 and MW-216-510-SP15 were U qualified as non-detect. • Surrogate recoveries were exceeded control limits in samples MW-59S-SP15, MW-215-395-SP15, MW-58S-SP15, MW-904-SP15, and MW-217-490-SP15. The positive detections were qualified J as estimated. • MW-219-560-SP15, MW-220-325-SP15, and MW-904-SP15 were initially analyzed at dilutions. Elevated reporting limits are provided for non-detect analytes. This may impact data comparability. 6010B • MW-59S-SP15 and MW-58S-SP15 were dilute due to the nature of the matrix. Elevated reporting limits are provided. This may impact data comparability.

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	TRIP BLANK 06	TB	2-Butanone (MEK)	1	J	ug/l	0.52	5
SW8260B	TRIP BLANK 06	TB	Acetone	7.7		ug/l	0.34	2

Table 2A - List of Samples Qualified for Method Blank Contamination
None

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW8260B	TRIP BLANK 06	WG	Acetone	7.7	3.4		ug/l	MW-215-395-SP15	U Flag
SW8260B	TRIP BLANK 06	WG	Acetone	7.7	3.3		ug/l	MW-216-510-SP15	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	MB 160-180337/8	MB	4-Bromofluorobenzene (Surr)	129	75	120	1	J Flag
SW8260B	MB 160-180337/8	MB	Toluene-d8 (Surr)	121	85	120	1	J Flag
SW8260B	MW-59S-SP15	WG	4-Bromofluorobenzene (Surr)	132	75	120	1	J Flag
SW8260B	MW-217-490-SP15	WG	4-Bromofluorobenzene (Surr)	132	75	120	1	J Flag
SW8260B	MW-217-490-SP15	WG	Toluene-d8 (Surr)	123	85	120	1	J Flag
SW8260B	MW-215-395-SP15	WG	4-Bromofluorobenzene (Surr)	130	75	120	1	J Flag
SW8260B	MB 160-180642/8	MB	4-Bromofluorobenzene (Surr)	124	75	120	1	J Flag
SW8260B	MB 160-180642/8	MB	Toluene-d8 (Surr)	123	85	120	1	J Flag
SW8260B	MW-58S-SP15	WG	4-Bromofluorobenzene (Surr)	124	75	120	1	J Flag
SW8260B	MW-904-SP15	WG	4-Bromofluorobenzene (Surr)	122	75	120	2.5	J Flag

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Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits
None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCSD 160-180642/6	LCSD	Cyclohexane	107	121	85	115	None: High & ND

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-219-560-SP15	160-10989-7	SW8260B	WG	Initial analysis run at 5X dilution. Sample dilute by 50X for tetrachloroethene and trichloroethene concentrations exceeding the calibration curve. Elevated reporting limits provided for non-detect analytes.
MW-220-325-SP15	160-10989-8	SW8260B	WG	Initial analysis run at 10X dilution. Sample dilute by 100X for tetrachloroethene and trichloroethene concentrations exceeding the calibration curve. Elevated reporting limits provided for non-detect analytes.
MW-58S-SP15	160-10989-1	SW8260B	WG	Sample dilute by 10X for tetrachloroethene concentration exceeding the calibration curve. No impact to data usability.
MW-904-SP15	160-10989-9	SW8260B	WG	Initial analysis run at 2.5X dilution. Sample dilute by 25X for tetrachloroethene and trichloroethene concentrations exceeding the calibration curve. Elevated reporting limits provided for non-detect analytes.
MW-58S-SP15	160-10989-1	SW6010B	WG	Sample run at a 5X dilution due to the nature of the matrix. Elevated reporting limits provided.
MW-59S-SP15	160-10989-2	SW6010B	WG	Sample run at a 5X dilution due to the nature of the matrix. Elevated reporting limits provided.

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Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-219-560-SP15	MW-904-SP15	RPD	RPD Rating	Sample Qual
SW8260B	1,1,1-Trichloroethane	ug/l	Water	5	A	9.9	9.6	3.1%	Good	None
SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	Water	5	A	14	13	7.4%	Good	None
SW8260B	1,1-Dichloroethane	ug/l	Water	5	A	2.8	2.6	7.4%	Good	None
SW8260B	1,1-Dichloroethene	ug/l	Water	5	A	26	24	8.0%	Good	None
SW8260B	1,2-Dichloroethane	ug/l	Water	5	A	ND	0.68	NC	--	--
SW8260B	1,4-Dioxane	ug/l	Water	5	A	19	18	5.4%	Good	None
SW8260B	Carbon tetrachloride	ug/l	Water	5	A	32	32	0.0%	Good	None
SW8260B	Chloroform	ug/l	Water	5	A	6.6	6.5	1.5%	Good	None
SW8260B	cis-1,2-Dichloroethene	ug/l	Water	5	A	88	90	2.2%	Good	None
SW8260B	Tetrachloroethene	ug/l	Water	50	A	350	380	8.2%	Good	None
SW8260B	Toluene	ug/l	Water	5	A	1.2	1.2	0.0%	Good	None
SW8260B	Trichloroethene	ug/l	Water	50	A	640	660	3.1%	Good	None

Acronym List and Table Key:

CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
GC/MS = gas chromatography / mass spectrometry
LCS = laboratory control sample
MBLK = method blank
MS = matrix spike
MSD = matrix spike duplicate
NYSDEC = New York State Department of Environmental Conservation
PQL = practical quantitation limit
QA = quality assurance
QAPP = quality assurance project plan
QC = quality control
RPD = relative percent difference
SDG = sample delivery group

Data Usability Summary Report	Project: Sylvania: Monitoring Well: SP15
Date Completed: April 28, 2015	Completed by: Lynne Kalmbach and Joanna Christopher

Acronym List and Table Key:

TIC = tentatively identified compound
VOC = volatile organic compound

Data Usability Summary Report	Project: Sylvania: Dry Well Samples
Date Completed: June 10, 2016	Completed by: Lynne Kalmbach and Joanna Christopher

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
- Department of Defense (DoD) Quality Systems Manual for Environmental Laboratories Version 5.0
- USACE Kansas City and St. Louis District Radionuclide Data Quality Evaluation Guidance for Alpha and Gamma Spectroscopy, Revision 01

Specific criteria for QC limits were obtained from the project specific QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory
1003954.0001.07	160-9202-1 160-9245-1 160-9249-1	TestAmerica: St Louis

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-9202-1	SO	DRYH-F-EAST	160-9202-3	11/4/2014 11:10			DRYH-G-EAST
160-9202-1	SO	DRYH-F-NORTH	160-9202-4	11/4/2014 10:40			DRYH-G-NORTH
160-9202-1	SO	DRYH-F-WEST-1	160-9202-2	11/4/2014 9:05			DRYH-G-WEST-1
160-9202-1	SO	DRYH-F-WEST-2	160-9202-5	11/4/2014 11:30			DRYH-G-WEST-2
160-9202-1	SO	DRYH-F-Z3	160-9202-6	11/4/2014 15:25			DRYH-G-Z3
160-9202-1	SO	DRYH-F-Z4	160-9202-7	11/4/2014 15:35			DRYH-G-Z4
160-9202-1	SO	DRYH-F-Z5	160-9202-8	11/4/2014 15:40			DRYH-G-Z5
160-9202-1	SO	DRYH-F-Z501	160-9202-1	11/4/2014 15:50			DRYH-G-Z501
160-9202-1	SO	DRYH-F-Z6	160-9202-9	11/4/2014 15:50			DRYH-G-Z6
160-9202-1	SO	DRYH-F-Z7	160-9202-10	11/4/2014 15:55			DRYH-G-Z7
160-9245-1	SO	DRYH-F-Z8	160-9245-1	11/5/2014 9:25		MS/MSD	DRYH-G-Z8
160-9249-1	WQ	RB-06	160-9245-1	11/6/2014 17:30		MS/MSD	None

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-9202-1 160-9245-1	SO	SW8260B	Volatile Organic Compounds (GC/MS)	10	SAMP
160-9202-1 160-9245-1	SO	SW6010B	Metals (ICP)	11	SAMP
160-9202-1 160-9245-1	SO	SW6020A	Metals (ICP/MS), Isotopic Uranium	11	SAMP
160-9202-1 160-9245-1	SO	SW7471B	Mercury (CVAA)	11	SAMP

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Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-9202-1 160-9245-1	SO	A-01-R	Isotopic Uranium (Alpha Spectrometry)	11	SAMP
160-9202-1 160-9245-1	SO	A-01-R	Isotopic Thorium (Alpha Spectrometry)	11	SAMP
160-9202-1 160-9245-1	SO	GA-01-R	Radium-226 & Other Gamma Emitters (GS)	11	SAMP
160-9249-1	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	RB
160-9249-1	WQ	SW6010B	Metals (ICP)	1	RB
160-9249-1	WQ	SW6020A	Metals (ICP/MS)	1	RB
160-9249-1	WQ	SW7470	Mercury (CVAA)	1	RB
160-9249-1	WQ	ASTM D5174	Total Uranium (Kinetic Phosphorescence)	1	RB

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. The laboratory mistakenly logged in the samples with "2" instead of "Z". A revision to the laboratory report 160-9202-1 was issued. The sample names were changed from "F" to "G" per the project manager since "F" samples had already been collected. Volatile organic analysis (VOA) was not performed on sample DRYH-F-Z8 due to laboratory login error. The laboratory received the samples; however, they did not log them in for analysis.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	No. 1 field duplicate per 10 samples 1 MS/MSD per 10 samples – The MS/MSD was collected by the field team, but not logged in by the laboratory. Trip Blanks were not included in the sample coolers for VOA. Rinsate blank RB-06 collected the day after sampling.
Case narrative present and complete?	Yes.

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General Sample Information	
Any holding time violations?	Yes. The following samples were re-extracted and analyzed outside of hold time for mercury analysis by Method 7471B. The laboratory noted a software malfunction resulting in the loss of initial data results. DRYH-F-Z3 DRYH-F-Z4 DRYH-F-Z5 DRYH-F-Z501 DRYH-F-Z6 DRYH-F-Z7 DRYH-F-EAST DRYH-F-NORTH DRYH-F-WEST-1 DRYH-F-WEST-2 The positive detections were qualified J- as estimated with a low bias. The non-detect results were qualified UR as rejected non-detect.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Reanalysis Results (Table 6)
- Field Duplicate Results (Table 7)

Go to Tables List

Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or, field blanks (see Table 2)?	Yes. 2-Hexanone, Acetone, Methyl Ethyl Ketone (2-Butanone), and Methylene Chloride were detected in rinsate blank.
For samples, if results are < 5 times the blank or < 10 times the blank for common laboratory contaminants, then "U" flag data.	Five (5) samples were U qualified for acetone detection in the RB, One (1) sample was U qualified for Methyl Ethyl Ketone (2-Butanone) detection in the RB, and four (4) samples were U qualified for methylene chloride detection in the RB (acetone and methylene chloride are common laboratory contaminants).
Are surrogates for method blanks and LCS within limits?	Yes.

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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Are surrogates for samples and MS/MSD within limits? (See Table 3). If not, were all samples reanalyzed for VOCs?	No. The following samples had two (2) surrogate recoveries that were outside of control limits: DRYH-F-WEST-2 (low level), DRYH-F-EAST (medium level), and DRYH-F-NORTH (medium level). The following samples had four (4) surrogate recoveries that were outside of control limits: DRYH-F-WEST-2 (medium level) and DRYH-F-Z4 (medium level). The results in each sample were qualified J/UJ as estimated.
Is Laboratory QC frequency at least one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Is MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then "J" flag positive data in original sample due to matrix.	Sample DRYH-F-Z8 was submitted for MS/MSD analysis; however, the laboratory did not login the sample by mistake. A MS/MSD was not performed with batch 156421 or 157148; however, a LCS and LCSD were performed.
Is LCS within QC criteria (see Table 5)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. The following analytes failed recovery low in the LCS/LCSD associated with batch 157148: chloroethane, chloromethane, cyclohexane, dichlorodifluoromethane, methylcyclohexane, trichlorofluoromethane, and vinyl chloride. All of the analytes except vinyl chloride are poor performing compounds in a multi-parameter spike. The associated results were all non-detect for all the analytes except methylcyclohexane. The results were qualified J/UJ as estimated. Trichlorofluoromethane exhibited poor precision between the LCS and LCSD. The results were qualified UJ due to recovery failures.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	No. DCB was recovered low in sample DRYH-F-WEST-2. The results were already qualified J/UJ for surrogate failures.
Is initial calibration for target compounds <15% RSD or curve fit?	No. The following analytes were recovered greater than 15% in the initial calibration. Ethanol %RSD 32.0% Isopropyl Alcohol 21.0% Acetonitrile 23.0% 1,4-Dioxane 31.0% Ethanol, isopropyl alcohol and acetonitrile were not compounds of concern and no reported for the samples. 1,4-Dioxane was not detected in any of the samples; therefore, no qualification of the data was made.
Is continuing calibration for target compounds < 20.5% D.	Dichlorodifluoromethane exhibited %D of 22.5% D in CCV 160-156421/3. Acetone exhibited a %D of 23.3 in CCV 160-157423/3.

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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
	Trichlorofluoromethane and 2-hexanone exhibited %D of 26.9 and 30.6% respectively in CCV 160-157148/3. The sample results associated with each CCV were non-detect for the analytes exceeding control limits.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Samples DRYH-F-Z4, DRYH-F-EAST, DRYH-F-NORTH, and DRYH-F-WEST-1 were analyzed and reported at medium level due to high concentrations of target analytes and matrix interferences. Sample DRYH-F-WEST-2 was analyzed at low and medium level; however, only acetone, Dibromochloromethane and tetrachloroethane were reported from the medium level analysis.
For TICs are there any system related compounds that should not be reported?	N/A
Do field duplicate results show good precision for all compounds (see Table 7)?	Yes.

Total Metals by ICP and Mercury by CCVA	
Description	**Notes and Qualifiers**
Are any compounds present in method and field blanks as noted on Table 2?	Yes. Several metals were detected in the method blanks associated with the samples. Additionally, detections of metals were found in the ICB and CCB associated with the samples. Iron, Lead, Selenium, Vanadium, and Zinc were detected in the rinsate blank.
For samples, if results are < 5 times the blank then "U" flag data.	Beryllium was non-detect in the samples; therefore, no qualification of the data was required. Sample results for nickel, calcium and zinc were greater than 5X the laboratory blank detection; therefore, no qualification of the data was required. In the following instances, the sample results were less than 5X the blank detection and qualified U as non-detect. The sample results were less than the PQL; therefore, the detection limit updated to the sample result. Two (2) samples were U qualified for selenium detection in the CCB. Five (5) samples were U qualified for silver detections in the ICB or CCB. Two (2) samples were U qualified for lead detection in the RB, One (1) sample was U qualified for selenium detection in the RB, Seven (7) samples were U qualified for vanadium detection in the RB, and five (5) samples were U qualified for zinc in the RB.
Is laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.

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Total Metals by ICP and Mercury by CCVA	
Description	**Notes and Qualifiers**
Are MS/MSD within QC criteria (see Table 4)? QC limits are not applicable to sample results greater than 4 times spike amount. All N flagged data for MS are flagged J as estimated.	No. Most of the analytes failed recovery in the MS/MSD of DRYH-F-WEST-1. The matrix was noted to be oily; therefore, matrix interference was present. Four (4) analytes were outside of controls limits in the MS/MSD of DRYH-F-Z8. The MSD was outside of control limits for mercury in sample DRYH-F-EAST. The laboratory noted that this sample was non-homogeneous mixture of oily, dirt-covered rocks; therefore matrix interference was present. The analytes were qualified J as estimated if the MS/MSD recovery was high or low, but the post digestion spike (PDS) was ≥75%. If the MS/MSD/PDS recoveries were all low, the analyte was qualified J- as estimated with a low bias. If the analyte was not detected in the parent sample and the MS/MSD/PDS recoveries were low, then the analyte was qualified UR as rejected. However, if the PDS recovery was acceptable, then the analyte was qualified UJ as estimated non-detect.
Were elements recovered ≤30%? If so, “R” flag associated NDs on Form 1's.	No.
Is LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	Yes.
Is there one serial dilution per 20 samples? Flag all data reported with an “E” as “J”.	The serial dilution for sample DRYH-G-WEST-1 was greater than 15% for aluminum, arsenic, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, manganese, nickel, silver, and zinc. The sample matrix was noted as oily indicating matrix interference. No qualification of the data was made regarding the serial dilution exceedances; however, most of the analytes were previously qualified for MS/MSD failures.
Spot check ICS recoveries 80-120%. Contact lab if unacceptable.	ICS recoveries were acceptable.
Spot check ICV 95-105%. Contact lab if unacceptable.	Calcium, chromium, cobalt, lead, nickel, and thallium were recovered between 106-107% in the ICV 160-163725/18. EPA Region 2 SOP HW-2a allows 90-110% of true value to be acceptable. No qualification of the data was made.
Spot check CCV 90-110% or 80-120% for mercury. Contact lab if unacceptable.	CCV’s were acceptable.

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Total Metals by ICP and Mercury by CCVA	
Description	**Notes and Qualifiers**
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. All of the samples were diluted for analysis by Method 6010B due to the nature of the matrix. Each sample reported non-detect results at elevated reporting limits, which may impact data usability. Two (2) samples were diluted for analysis by Method 7471B to bring the concentration of target analytes within calibration range. There is no impact to data usability.
Do field duplicate results show good precision for all compounds (see Table 7)?	One of the field duplicate results was less than 5X PQL for both chromium and aluminum; therefore, the results were not qualified. Iron exhibited poor precision in the field duplicate samples and was J qualified as estimated.

Isotopic Uranium by ICP/MS	
Description	**Notes and Qualifiers**
Are any compounds present in method and field blanks as noted on Table 2?	
For samples, if results are < 5 times the blank then "U" flag data.	
Is laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Are MS/MSD within QC criteria (see Table 4)? QC limits are not applicable to sample results greater than 4 times spike amount. All N flagged data for MS are flagged J as estimated.	No. The MS/MSD recoveries for U-236 were low in sample DRYH-F-WEST-1. A PDS was not performed. The results were qualified J- as estimated with a low bias.
Were elements recovered ≤30%? If so, “R” flag associated NDs on Form 1's.	No.
Is LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	Yes.
Is there one serial dilution per 20 samples? Flag all data reported with an “E” as “J”.	The serial dilution results were acceptable.
Spot check ICS recoveries 80-120%. Contact lab if unacceptable.	ICS recoveries were acceptable.
Spot check ICV 95-105%. Contact lab if unacceptable.	Uranium-236 was recovered at 92% in the ICV 160-163726/9, and uranium-234 was recovered at 109% in ICV 160-164183/8. EPA Region 2 SOP HW-2b allows 90-110% of true value to be acceptable. No qualification of the data was made.
Spot check CCV 90-110%. Contact lab if unacceptable.	CCV’s were acceptable.

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Isotopic Uranium by ICP/MS	
Description	**Notes and Qualifiers**
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. All of the samples were diluted for analysis by Method 6020A due to the nature of the matrix. The following samples reported non-detect results at elevated reporting limits, which may impact data usability: DRYH-F-WEST-2, DRYH-F-Z3, DRYH-F-Z5, DRYH-F-Z501, DRYH-F-Z6, DRYH-F-Z7.
Do field duplicate results show good precision for all compounds (see Table 7)?	One of the field duplicate results was less than 5X PQL for U-238. The results were not qualified.

Isotopic Thorium and Uranium by Alpha Spectrometry	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 2. *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	Yes. Th-230 was detected in both method blanks above the uncertainty or MDC but below the PQL.
Were any analytes flagged for blank contamination? See Table 2A. *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	No. All sample results that were <5 times the blank concentration passed the USACE NAD test; therefore, no qualifiers were added.
LCS within QC criteria (70-130% recovery)? *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Alpha Spectroscopy (70-130% recovery, RPD ± 35)? *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes.

Isotopic Thorium and Uranium by Alpha Spectrometry	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision for all isotopes? *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	Yes.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No.
Were background and continuing calibration checks (pulsers) performed daily?	Yes.
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies found in spectra? *If found check calculations, qualify per USACE guidance.*	No.
Were tracer yields within limits (QAPP: 50-100%, lab 30-110%)? *If recoveries were outside laboratory derived limits, but within default limits of 20-150%, flag associated results as estimated (J) after corrective actions; otherwise R. If recoveries are <20%: flag as rejected (R) and >150% rejected (R).*	Yes.
If recoveries were outside control limits, were adequate quantities of tracers used and were calculations correct? *Evaluate entire SDG for systematic errors and qualify if needed*	N/A: All recoveries were within limits.
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

Radium-226 and Other Gamma Emitters by Gamma Spectrometry

Description	Notes and Qualifiers
Any holding time violations?	No.
Any compounds present in method and field blanks? (See Table 2.) *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	No.
Were any analytes flagged for blank contamination? (See Table 2A.) *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	No.
LCS within QC criteria (70-130% recovery)? *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes.
Do field duplicate results show good precision for all isotopes? (See Table 7.) *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	No. K-40 results for the field duplicate sample pair were qualified with J/UJ due to field duplicate precision.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No.
Were the samples prepared in sealed containers and subjected to a 21-day ingrowth period prior to analysis? *If not comparable, qualify results with J.*	Yes.
Was the soil matrix density comparable to the calibration standard density? (70-130%) *If not comparable, qualify Ra-226 results with J.*	Yes.
Were background and continuing calibration checks performed daily?	Yes.

Radium-226 and Other Gamma Emitters by Gamma Spectrometry	
Description	**Notes and Qualifiers**
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies in Ra-226 or Ra-228 daughters found? *If found, check spectra and calculations.*	No.
Spot check the raw data; were any anomalies found in other identified radionuclides? *If found, check spectra and calculations.*	No.
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

Compliance Review Total Uranium by KPA Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 2. *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	No.
Were any analytes flagged for blank contamination? See Table 2A. *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	No.
LCS within QC criteria (70-130% recovery)? *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.

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Compliance Review Total Uranium by KPA Analysis Approval by Data Validation Chemist	
Description	**Notes and Qualifiers**
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes.
Do field duplicate results show good precision for all isotopes? *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	Yes.
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No.
Were background and continuing calibration checks performed daily?	Yes.
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies found in spectra? *If found check spectra and calculations; qualify per USACE guidance.*	No.
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

Summary of Potential Impacts on Data Usability

8260B

- A trip blank was not provided in the coolers with samples for volatiles analysis.
- Several sample results were U qualified due to rinsate blank contamination.
- Due to matrix interferences, surrogate recoveries were below control limits for the following samples: DRYH-F-WEST-2, DRYH-F-EAST, DRYH-F-NORTH, AND DRYH-F-Z4. The results were qualified J/UJ as estimated. There was insufficient sample quantity for further analysis.
- The internal standard DCB was recovered low in sample DRY-F-WEST-2. The sample results were already qualified J/UJ for surrogate failures. There was insufficient sample quantity available to re-analyze the sample, and the failures are likely due to the nature of the matrix.
- The following samples were run at medium level due to high concentrations of target analytes and sample matrix issues: DRYH-F-Z4, DRYH-F-EAST, DRYH-F-NORTH, and DRYH-F-WEST-1. Elevated reporting limits were provided. It was noted in the narrative that all of the samples were initially analyzed as low level soil samples; however, due to internal standard and surrogate failures, the laboratory only reported the medium level results. This may impact data comparability.
- The laboratory did not login sample DRYH-F-Z8 for volatiles analysis. Extra volume was provided for MS/MSD analysis for this sample. Therefore, volatiles results are not available for this sample and a MS/MSD was not performed in the associated analysis batch.
- The following analytes failed recovery low in the LCS/LCSD associated with batch 157148: chloroethane, chloromethane, cyclohexane, dichlorodifluoromethane, methylcyclohexane, trichlorofluoromethane, and vinyl chloride. All of the analytes except vinyl chloride are poor performing compounds in a multi-parameter spike. The associated results were all non-detect for all the analytes except methylcyclohexane. The results were qualified J/UJ as estimated.

6010B

- Many of the sample digestates were oily with a high viscosity which resulted in the laboratory performing dilutions on them prior to analysis.
- Several sample results were U qualified due to rinsate blank contamination.
- Sample results were qualified as estimated and estimated non-detect due to failures associated with the MS/MSD. Thallium results for sample DRYH-F-WEST-1 were rejected due to 0% recoveries in the MS/MSD and low PDS recovery.
- Calcium was qualified as estimated due to poor precision in the field duplicate samples of DRYH-F-Z6.

7471B

- Due to software problems, the initial results for mercury were lost by the laboratory. The samples were re-extracted outside of hold time. The positive results were qualified J- as estimated with a low bias. The non-detect results were qualified UR as rejected.

6020A

- The MS/MSD recoveries for U-236 in sample DRYH-F-WEST-1 were below acceptance criteria. The results were qualified J- was estimated with a low bias.
- The sample results were diluted prior to analysis due to the nature of the matrix. The following samples had non-detect values and are reported with elevated reporting limits: DRYH-F-WEST-2, DRYH-F-Z3, DRYH-F-Z5, DRYH-F-Z501, DRYH-F-Z6, DRYH-F-Z7.

A-01-R

- There is no valid value for EPAR2 for the analytical method A-01-R; therefore the EDD does not pass the EDP check.

GA-01-R

- The field duplicate precision was outside acceptance criteria for K-40; therefore, the K-40 results for the field duplicate sample pair were qualified with J/UJ as estimated.
- The valid value for EPAR2 for the analytical method is EML GA-01-R; therefore the EDD references EML GA-01-R instead of GA-01-R for these analyses.

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Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
A-01-R	MB 160-155331/1-A	MB	Thorium-230	0.05219	None	pCi/g	0.0272	1.00
A-01-R	MB 160-158789/1-A	MB	Thorium-230	0.0598	None	pCi/g	0.015	1.00
SW6010B	MB 160-163033/1-A	MB	Nickel	0.169	J	mg/kg	0.098	3.4
SW6010B	MB 160-163033/1-A	MB	Selenium	0.211	J	mg/kg	0.17	1.3
SW6010B	MB 160-163033/1-A	MB	Silver	0.0674	J	mg/kg	0.059	0.84
SW6010B	MB 160-163033/1-A	MB	Zinc	1.04	J	mg/kg	0.47	8.4
SW6010B	MB 160-163030/1-A	MB	Calcium	6.87	J	mg/kg	6.5	240
SW6010B	MB 160-163030/1-A	MB	Selenium	0.367	J	mg/kg	0.2	1.5
SW6010B	MB 160-163030/1-A	MB	Zinc	1.03	J	mg/kg	0.54	9.7
SW6010B	ICB 160-163725/19	ICB	Beryllium	0.300	J	µg/L	0.283	5.0
SW6010B	ICB 160-163725/19	ICB	Silver	1.20	J	µg/L	0.994	20
SW6010B	CCB 160-163725/25	CCB	Selenium	2.30	J	µg/L	2.08	15
SW6010B	CCB 160-163725/49	CCB	Selenium	2.80	J	µg/L	2.08	15
SW6010B	CCB 160-163725/61	CCB	Selenium	2.30	J	µg/L	2.08	15
SW6010B	CCB 160-163725/61	CCB	Silver	1.10	J	µg/L	0.994	20
SW6010B	CCB 160-163725/73	CCB	Selenium	2.30	J	µg/L	2.08	15
SW6010B	CCB 160-163725/73	CCB	Silver	1.30	J	µg/L	0.994	20
SW6020A	ICB 160-163726/10	ICB	Uranium-238	0.00866	J	µg/L	0.0082	0.050
SW6020A	ICB 160-164183/10	ICB	Uranium-238	0.00845	J	µg/L	0.0082	0.050
SW6010B	RB-06	RB	Iron	20	J	µg/L	13	100
SW6010B	RB-06	RB	Lead	1.1	J	µg/L	0.60	10
SW6010B	RB-06	RB	Selenium	2.9	J	µg/L	2.1	15
SW6010B	RB-06	RB	Vanadium	5.5	J	µg/L	4.4	50
SW6010B	RB-06	RB	Zinc	16	J	µg/L	8.3	30

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW8260B	RB-06	RB	2-Hexanone	0.83	J	µg/L	0.22	5.0
SW8260B	RB-06	RB	Acetone	3.6		µg/L	0.34	2.0
SW8260B	RB-06	RB	Methyl Ethyl Ketone (2-Butanone)	1.3	J	µg/L	0.52	5.0
SW8260B	RB-06	RB	Methylene Chloride	0.39	J	µg/L	0.27	1.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW6010B	CCB 160-163725/49	SO	Selenium	2.3	0.0040	J	mg/L	DRYH-G-Z501	U Flag
SW6010B	ICB 160-163725/19	SO	Silver	1.2	0.0018	J	mg/L	DRYH-G-Z501	U Flag
SW6010B	CCB 160-163725/73	SO	Silver	0.0013	0.0012	J	mg/L	DRYH-F-Z5	U Flag
SW6010B	CCB 160-163725/73	SO	Selenium	0.0023	0.0039	J	mg/L	DRYH-F-Z5	U Flag
SW6010B	CCB 160-163725/73	SO	Silver	0.0023	0.0016	J	mg/L	DRYH-G-Z6	U Flag
SW6010B	CCB 160-163725/73	SO	Silver	0.0023	0.0007	J	mg/L	DRYH-G-Z7	U Flag
SW6010B	CCB 160-163725/73	SO	Silver	0.0013	0.0011	J	mg/L	DRYH-G-Z8	U Flag

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW6010B	RB-06	SO	Lead	1.1	1.4	JD	mg/kg	DRYH-G-Z7	U Flag
SW6010B	RB-06	SO	Lead	1.1	4.9	JD	mg/kg	DRYH-G-Z8	U Flag
SW6010B	RB-06	SO	Selenium	2.9	13	JD	mg/kg	DRYH-G-WEST-2	U Flag
SW6010B	RB-06	SO	Vanadium	5.5	13	JD	mg/kg	DRYH-G-EAST	U Flag
SW6010B	RB-06	SO	Vanadium	5.5	9.3	JD	mg/kg	DRYH-G-NORTH	U Flag
SW6010B	RB-06	SO	Vanadium	5.5	21	JD	mg/kg	DRYH-G-WEST-1	U Flag
SW6010B	RB-06	SO	Vanadium	5.5	5.3	JD	mg/kg	DRYH-G-Z3	U Flag

Method	Field Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW6010B	RB-06	SO	Vanadium	5.5	17	JD	mg/kg	DRYH-G-Z4	U Flag
SW6010B	RB-06	SO	Vanadium	5.5	5.8	JD	mg/kg	DRYH-G-Z7	U Flag
SW6010B	RB-06	SO	Vanadium	5.5	15	JD	mg/kg	DRYH-G-Z8	U Flag
SW6010B	RB-06	SO	Zinc	16	20	JD	mg/kg	DRYH-G-Z3	U Flag
SW6010B	RB-06	SO	Zinc	16	14	JD	mg/kg	DRYH-G-Z5	U Flag
SW6010B	RB-06	SO	Zinc	16	7	JD	mg/kg	DRYH-G-Z6	U Flag
SW6010B	RB-06	SO	Zinc	16	14	JD	mg/kg	DRYH-G-Z7	U Flag
SW6010B	RB-06	SO	Zinc	16	40	JD	mg/kg	DRYH-G-Z8	U Flag
SW6010B	RB-06	SO	Acetone	3.6	8.2	J	µg/kg	DRYH-G-Z3	U Flag
SW6010B	RB-06	SO	Acetone	3.6	12	J	µg/kg	DRYH-G-Z5	U Flag
SW6010B	RB-06	SO	Acetone	3.6	19	J	µg/kg	DRYH-G-Z501	U Flag
SW6010B	RB-06	SO	Acetone	3.6	12	J	µg/kg	DRYH-G-Z6	U Flag
SW6010B	RB-06	SO	Acetone	3.6	35		µg/kg	DRYH-G-Z7	U Flag
SW6010B	RB-06	SO	Methyl Ethyl Ketone (2-Butanone)	1.3	7.9	J	µg/kg	DRYH-G-WEST-2	U Flag
SW6010B	RB-06	SO	Methylene Chloride	0.39	1.7	J	µg/kg	DRYH-G-WEST-2	U Flag
SW6010B	RB-06	SO	Methylene Chloride	0.39	1.6	J	µg/kg	DRYH-G-Z3	U Flag
SW6010B	RB-06	SO	Methylene Chloride	0.39	2	J	µg/kg	DRYH-G-Z5	U Flag
SW6010B	RB-06	SO	Methylene Chloride	0.39	3.7	J	µg/kg	DRYH-G-Z501	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	DRYH-F-WEST-2 (low)	SO	Toluene-d8 (Surr)	120	85	115	1	J/UJ Flag
SW8260B	DRYH-F-WEST-2 (low)	SO	4-Bromofluorobenzene (Surr)	209	85	120	1	J/UJ Flag
SW8260B	DRYH-F-EAST (med)	SO	Toluene-d8 (Surr)	70	85	115	1	J/UJ Flag
SW8260B	DRYH-F-EAST (med)	SO	4-Bromofluorobenzene (Surr)	66	85	120	1	J/UJ Flag

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	DRYH-F-NORTH (med)	SO	Toluene-d8 (Surr)	121	85	115	1	J/UJ Flag
SW8260B	DRYH-F-NORTH (med)	SO	4-Bromofluorobenzene (Surr)	126	85	120	1	J/UJ Flag
SW8260B	DRYH-F-WEST-2 (med)	SO	1,2-Dichloroethane-d4 (Surr)	72	71	128	1	J/UJ Flag
SW8260B	DRYH-F-WEST-2 (med)	SO	Dibromofluoromethane (Surr)	70	76	126	1	J/UJ Flag
SW8260B	DRYH-F-WEST-2 (med)	SO	Toluene-d8 (Surr)	78	85	115	1	J/UJ Flag
SW8260B	DRYH-F-WEST-2 (med)	SO	4-Bromofluorobenzene (Surr)	81	85	120	1	J/UJ Flag
SW8260B	DRYH-F-Z4 (med)	SO	1,2-Dichloroethane-d4 (Surr)	158	71	128	1	J/UJ Flag
SW8260B	DRYH-F-Z4 (med)	SO	Dibromofluoromethane (Surr)	152	76	126	1	J/UJ Flag
SW8260B	DRYH-F-Z4 (med)	SO	Toluene-d8 (Surr)	149	85	115	1	J/UJ Flag
SW8260B	DRYH-F-Z4 (med)	SO	4-Bromofluorobenzene (Surr)	150	85	120	1	J/UJ Flag

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW6010B	DRYH-F-Z8	SO	Aluminum	3900	1190	743	876	10	80	120	J Flag
SW6010B	DRYH-F-Z8	SO	Antimony	ND	59.4	45	45	10	80	120	UJ Flag
SW6010B	DRYH-F-Z8	SO	Iron	32000	1190	1760	1629	10	80	120	4X
SW6010B	DRYH-F-Z8	SO	Manganese	250	119	57	28	10	80	120	J Flag
SW6010B	DRYH-F-Z8	SO	Potassium	ND	1190	146	161	10	80	120	None
SW7471B	DRYH-F-EAST	SO	Mercury	2.4	1.18	83	11	10	80	120	J- Flag
SW6020A	DRYH-F-WEST-1	SO	U-236	0.0047	0.0127	17	2	10	75	125	J- Flag
SW6020A	DRYH-F-WEST-1	SO	U-238	6.8	1.43	69	-91	10	75	125	4X
SW6010B	DRYH-F-WEST-1	SO	Aluminum	16000	1450	188	272	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Antimony	70	72.5	75	87	10	80	120	None
SW6010B	DRYH-F-WEST-1	SO	Arsenic	350	145	84	59	10	80	120	J- Flag
SW6010B	DRYH-F-WEST-1	SO	Barium	840	145	172	118	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Beryllium	ND	145	70	70	10	80	120	UJ Flag

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW6010B	DRYH-F-WEST-1	SO	Cadmium	24	145	74	79	10	80	120	J Flag
SW6010B	DRYH-F-WEST-1	SO	Calcium	4900	1450	-9	-35	10	80	120	J Flag
SW6010B	DRYH-F-WEST-1	SO	Chromium	1000	145	35	40	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Cobalt	1400	145	167	119	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Copper	2100	145	38	284	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Iron	7000	1450	75	47	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Lead	3500	145	16	-45	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Magnesium	660	1450	73	71	10	80	120	J Flag
SW6010B	DRYH-F-WEST-1	SO	Manganese	80	145	74	74	10	80	120	J Flag
SW6010B	DRYH-F-WEST-1	SO	Nickel	2600	145	125	86	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Potassium	ND	1450	115	114	10	80	120	None
SW6010B	DRYH-F-WEST-1	SO	Selenium	130	72.5	74	67	10	80	120	J Flag
SW6010B	DRYH-F-WEST-1	SO	Silver	140	29.0	278	266	10	80	120	4X
SW6010B	DRYH-F-WEST-1	SO	Sodium	520	1450	74	71	10	80	120	J- Flag
SW6010B	DRYH-F-WEST-1	SO	Thallium	ND	29.0	0	0	10	80	120	UR Flag
SW6010B	DRYH-F-WEST-1	SO	Vanadium	21	145	69	74	10	80	120	J- Flag
SW6010B	DRYH-F-WEST-1	SO	Zinc	3400	145	322	409	10	80	120	4X

Method	Parent Sample	Analyte	Dil Fac	Unit	RPD	RPD Limit	Qualifier
SW7471B	DRYH-F-EAST	Mercury	10	mg/kg	29	20	J- Flag
SW6020A	DRY-F-WEST-1	U-236	10	mg/kg	31	20	J- Flag
SW6020A	DRY-F-WEST-1	U-238	10	mg/kg	36	20	4X

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS/LCSD 160-157152	WQ	Chloroethane	19	18	40	155	UJ Flag

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
SW8260B	LCS/LCSD 160-157152	WQ	Chloromethane	18	18	50	130	UJ Flag
SW8260B	LCS/LCSD 160-157152	WQ	Cyclohexane	77	77	85	115	UJ Flag
SW8260B	LCS/LCSD 160-157152	WQ	Dichlorodifluoromethane	1	1	35	135	UJ Flag
SW8260B	LCS/LCSD 160-157152	WQ	Methylcyclohexane	84	85	85	115	J/UJ Flag
SW8260B	LCS/LCSD 160-157152	WQ	Trichlorofluoromethane	20	14	25	185	UJ Flag
SW8260B	LCS/LCSD 160-157152	WQ	Vinyl chloride	29	30	60	125	UJ Flag

Method	Parent Sample	Analyte	Dil Fac	Unit	RPD	RPD Limit	Qualifier
SW8260B	LCS/LCSD 160-157152	Trichlorofluoromethane	1	ug/kg	36	30	UJ Flag

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
DRYH-F-EAST	160-9202-3	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for beryllium, potassium, and thallium.
DRYH-F-NORTH	160-9202-4	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for beryllium, potassium, and thallium.
DRYH-F-WEST-1	160-9202-2	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for beryllium, potassium, and thallium.
DRYH-F-WEST-2	160-9202-5	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for antimony, beryllium, potassium, sodium, thallium, and vanadium.
DRYH-F-Z3	160-9202-6	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for arsenic, antimony, beryllium, cadmium, lead, potassium, sodium, thallium, selenium.
DRYH-F-Z4	160-9202-7	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for beryllium, potassium, and thallium.

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Sample ID	Lab ID	Method	Sample Type	Action
DRYH-F-Z5	160-9202-8	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for antimony, beryllium, calcium, cadmium, cobalt, lead, potassium, sodium, thallium, and vanadium.
DRYH-F-Z501	160-9202-1	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for antimony, arsenic, beryllium, calcium, cadmium, copper, lead, nickel, potassium, sodium, thallium, vanadium, and zinc.
DRYH-F-Z6	160-9202-9	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for antimony, beryllium, calcium, cadmium, lead, potassium, selenium, sodium, thallium, and vanadium.
DRYH-F-Z7	160-9202-10	SW6010B	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for antimony, beryllium, calcium, cadmium, copper, potassium, selenium, sodium, and thallium.
DRYH-F-Z8	160-9245-1	SW6010B	SO	10X: Dilute to bring the concentration of target analytes within the calibration range. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, sodium and thallium.
DRYH-F-EAST	160-9202-3	SW6020A	SO	10X: Diluted due to the oily nature of the matrix. No impact to data usability.
DRYH-F-NORTH	160-9202-4	SW6020A	SO	10X: Diluted due to the nature of the matrix. No impact to data usability.
DRYH-F-WEST-1	160-9202-2	SW6020A	SO	10X: Diluted due to the oily nature of the matrix. No impact to data usability.
DRYH-F-WEST-2	160-9202-5	SW6020A	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for U-236.
DRYH-F-Z3	160-9202-6	SW6020A	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for U-234 and U-236.
DRYH-F-Z4	160-9202-7	SW6020A	SO	10X: Diluted due to the nature of the matrix. No impact to data usability.
DRYH-F-Z5	160-9202-8	SW6020A	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for U-234, U-235, and U-236.
DRYH-F-Z501	160-9202-1	SW6020A	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for U-234, U-235, and U-236.

Sample ID	Lab ID	Method	Sample Type	Action
DRYH-F-Z6	160-9202-9	SW6020A	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for U-234, U-235, and U-236.
DRYH-F-Z7	160-9202-10	SW6020A	SO	10X: Diluted due to the nature of the matrix. Elevated reporting limits provided for U-234, U-235, and U-236.
DRYH-F-Z8	160-9245-1	SW6020A	SO	10X: Dilute due to the abundance of non-target analytes. The samples were noted to be high in salts, which cause internal standard and instrument failure. Elevated reporting limits provided.
DRYH-F-EAST	160-9202-3	SW7471	SO	10X: Diluted to bring the concentration of target analytes within the calibration range. No impact to data usability.
DRYH-F-WEST-1	160-9202-2	SW7471	SO	10X: Diluted to bring the concentration of target analytes within the calibration range. No impact to data usability.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	DRYH-F-Z6	DRYH-F-Z501	RPD	RPD Rating	Sample Qual
A-01-R	Thorium-228	pci/g	SO	0.0642	A	0.148	0.119	21.7%	Good	None
A-01-R	Thorium-230	pci/g	SO	0.027	A	0.205	0.14	37.7%	Good	None
A-01-R	Thorium-232	pci/g	SO	0.0269	A	0.102	0.139	30.7%	Good	None
A-01-R	Uranium-233/234	pci/g	SO	0.054	A	0.105	0.113	7.3%	Good	None
A-01-R	Uranium-235/236	pci/g	SO	0.0302	A	0.0179	0.0201	11.6%	Good	None
A-01-R	Uranium-238	pci/g	SO	0.039	A	0.139	0.0787	55.4%	Good	None
GA-01-R	Potassium-40	pci/g	SO	0.789	A	1.72	0.73	80.8%	Poor	J Flag
GA-01-R	Radium-226	pci/g	SO	0.0332	A	0.219	0.158	32.4%	Good	None
GA-01-R	Radium-228	pci/g	SO	0.146	A	0.0841	0.075	11.4%	Good	None
SW6010B	Aluminum	mg/kg	SO	370	A	1200	570	71.2%	Poor	None: <5X PQL

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Method	Analyte	Unit	Matrix	PQL	Anal Type	DRYH-F-Z6	DRYH-F-Z501	RPD	RPD Rating	Sample Qual
SW6010B	Arsenic	mg/kg	SO	8.7	A	2	ND	NC	--	--
SW6010B	Barium	mg/kg	SO	43	A	5.3	3.6	38.2%	Good	None
SW6010B	Chromium	mg/kg	SO	13	A	41	2.7	175.3%	Poor	None: <5X PQL
SW6010B	Cobalt	mg/kg	SO	43	A	2.3	1.6	35.9%	Good	None
SW6010B	Copper	mg/kg	SO	22	A	5.9	ND	NC	--	--
SW6010B	Iron	mg/kg	SO	87	A	5800	1700	109.3%	Poor	J Flag
SW6010B	Magnesium	mg/kg	SO	870	A	68	36	61.5%	Good	None
SW6010B	Manganese	mg/kg	SO	8.7	A	110	83	28.0%	Good	None
SW6010B	Nickel	mg/kg	SO	35	A	1.3	ND	NC	--	--
SW6010B	Selenium	mg/kg	SO	13	A	ND	3.5	NC	--	--
SW6010B	Silver	mg/kg	SO	8.7	A	1.4	1.6	13.3%	Good	None
SW6010B	Zinc	mg/kg	SO	87	A	7	ND	NC	--	--
SW6020A	U-238	mg/kg	SO	0.022	A	0.48	0.079	143.5%	Poor	None: <5X PQL
SW8260B	Acetone	ug/kg	SO	22	A	12	19	45.2%	Good	None
SW8260B	Methylene Chloride	ug/kg	SO	11	A	ND	3.7	NC	--	--

Acronym List and Table Key:

CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
GC/MS = gas chromatography / mass spectrometry
LCS = laboratory control sample
MBLK = method blank
MS = matrix spike
MSD = matrix spike duplicate
NYSDEC = New York State Department of Environmental Conservation

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Acronym List and Table Key:

PQL	=	practical quantitation limit
QA	=	quality assurance
QAPP	=	quality assurance project plan
QC	=	quality control
RPD	=	relative percent difference
SDG	=	sample delivery group
TIC	=	tentatively identified compound
VOC	=	volatile organic compound

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The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
- Department of Defense (DoD) Quality Systems Manual for Environmental Laboratories Version 5.0
- USACE Kansas City and St. Louis District Radionuclide Data Quality Evaluation Guidance for Alpha and Gamma Spectroscopy, Revision 01

Specific criteria for QC limits were obtained from the project specific QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory
1003954.0001.07	160-8684-1 160-8643-1	TestAmerica: St Louis

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-8643-1	SO	STB-01-Z1	160-8643-1	9/29/2014			
160-8643-1	SO	STB-01-Z2	160-8643-2	9/29/2014			
160-8643-1	SO	STB-01-Z3	160-8643-3	9/30/2014			
160-8643-1	SO	STB-01-Z4	160-8643-4	9/30/2014			
160-8643-1	SO	STB-01-Z5	160-8643-5	9/30/2014			
160-8643-1	SO	STB-01-Z6	160-8643-6	9/30/2014			
160-8643-1	SO	STB-01-Z7	160-8643-7	9/30/2014			
160-8643-1	SO	STB-01-500	160-8643-8	9/30/2014			
160-8643-1	SO	STB-01-Z8	160-8643-9	9/30/2014	LR	MS/MSD	
160-8684-1	SO	STB-02-Z8	160-8684-1	10/03/2014	LR/MS/ MSD		
160-8684-1	SO	STB-02-500	160-8684-2	10/03/2014			
160-8684-1	SO	STB-02-Z6	160-8684-3	10/03/2014			
160-8684-1	SO	STB-02-Z4	160-8684-4	10/03/2014			
160-8684-1	SO	STB-02-Z2	160-8684-5	10/03/2014			
160-8684-1	SO	STB-02-Z7	160-8684-6	10/03/2014			
160-8684-1	SO	STB-02-Z5	160-8684-7	10/03/2014			
160-8684-1	SO	STB-02-Z3	160-8684-8	10/03/2014			
160-8684-1	SO	STB-02-Z1	160-8684-9	10/03/2014			
160-8684-1	SO	STB-03-Z2	160-8684-10	10/03/2014			
160-8684-1	SO	STB-03-Z3B	160-8684-11	10/03/2014			
160-8684-1	SO	STB-03-Z3A	160-8684-12	10/03/2014			

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Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-8643-1 160-8684-1	SO	SW8260B	Volatile Organic Compounds (GC/MS)	21	N/FD
160-8643-1 160-8684-1	SO	SW6010B	Metals (ICP)	21	N/FD
160-8643-1 160-8684-1	SO	SW7471B	Mercury (CVAA)	21	N/FD
160-8643-1 160-8684-1	SO	A-01-R	Isotopic Uranium (Alpha Spectrometry)	21	N/FD
160-8643-1 160-8684-1	SO	A-01-R	Isotopic Thorium (Alpha Spectrometry)	21	N/FD
160-8643-1 160-8684-1	SO	GA-01-R	Radium-226 & Other Gamma Emitters (GS)	21	N/FD

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No. Two of the coolers associated with SDG 160-8643-1 were received at 0.9°C and 1.2°C. There laboratory did not indicate any evidence of the samples freezing.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	No. 2 field duplicate per 19 samples 1 MS/MSD per 19 samples Trip Blanks were not included in the sample coolers for VOA. Rinsate blank not required.
Case narrative present and complete?	Yes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Reanalysis Results (Table 6)
- Field Duplicate Results (Table 7)

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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or, field blanks (see Table 2)?	No.
For samples, if results are < 5 times the blank or < 10 times the blank for common laboratory contaminants, then "U" flag data.	No qualifications required.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples and MS/MSD within limits? (See Table 3). If not, were all samples reanalyzed for VOCs?	No. Two surrogate recoveries exceeded the control limits for STB-02-Z1. The samples results were qualified J/UJ as estimated.
Is Laboratory QC frequency at least one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Is MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then “J” flag positive data in original sample due to matrix.	Yes.
Is LCS within QC criteria (see Table 5)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	No. DCB and CBZ were recovered low in sample STB-02-Z1. The sample results were already qualified as estimated due to surrogate failures.
Is initial calibration for target compounds <15% RSD or curve fit?	No. The following analytes exhibited an RSD greater than 15% and were not curve fit in the initial calibration. Ethanol 48.8% RSD Ethyl Acetate 22.1% RSD Trans-1,4-dichloro-2-butene 15.2% RSD These analytes were not compounds of concern and not reported for the samples.
Is continuing calibration for target compounds < 20.5% D.	Dichlorodifluoromethane exhibited %D of 22.6% and chloromethane exhibited a %D 26.2 in CCV 160-148061/3. The analytes are poor performing compounds in a multi-parameter spike and EPA SOP HW-33 Rev3 allows up to 40% D for poor performers. The associated sample results were non-detect and no qualification of data was made.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Sample STB-02-Z1 was analyzed at medium level for tetrachloroethene and trichloroethene due to high concentration values. All other analytes are reported from the low level.
For TICs are there any system related compounds that should not be reported?	N/A
Do field duplicate results show good precision for all compounds (see Table 7)?	Yes.

Total Metals by ICP and Mercury by CCVA	
Description	**Notes and Qualifiers**
Are any compounds present in method and field blanks as noted on Table 2?	Yes. Several metals were detected in the method blanks associated with the samples. Additionally, detections of metals were found in the ICB and CCB associated with the samples.
For samples, if results are < 5 times the blank then "U" flag data.	Selenium, beryllium, and cadmium were all non-detect in the samples; therefore, no qualification of the data was required. Sample results for calcium and iron were greater than 5X the blank detection; therefore, no qualification of the data was required. In the following instances, the sample results were less than 5X the blank detection and qualified U as non-detect. The sample results were less than the PQL; therefore, the detection limit updated to the sample result. Two (2) samples were U qualified for zinc detection in the method blank. Eighteen (18) samples were U qualified for lead detections in the ICB or CCB. Seven (7) samples were U qualified for copper detections in the CCB.
Is laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Are MS/MSD within QC criteria (see Table 4)? QC limits are not applicable to sample results greater than 4 times spike amount. All N flagged data for MS are flagged J as estimated.	No. Aluminum was recovered high in the MS and MSDs for samples STB-01-Z8 and STB-02-Z8. The post digestion spike (PDS) was acceptable; therefore, the results in the parent sample were qualified J as estimated.
Were elements recovered ≤30%? If so, “R” flag associated NDs on Form 1's.	No.
Is LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	Yes.
Is there one serial dilution per 20 samples? Flag all data reported with an “E” as “J”.	The serial dilutions were acceptable.
Spot check ICS recoveries 80-120%. Contact lab if unacceptable.	ICS recoveries were acceptable.
Spot check ICV 95-105%. Contact lab if unacceptable.	ICV’s were acceptable.
Spot check CCV 90-110% or 80-120% for mercury. Contact lab if unacceptable.	CCV’s were acceptable.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. All of the samples were diluted for analysis by Method 6010B due to the nature of the matrix. The laboratory noted that all of the digestates were yellow in color. Each sample reported non-detect results at elevated reporting limits, which may impact data usability.

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Total Metals by ICP and Mercury by CCVA	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision for all compounds (see Table 7)?	Yes.

Isotopic Thorium and Uranium by Alpha Spectrometry	
Description	**Notes and Qualifiers**
Any holding time violations?	No
Any compounds present in method and field blanks? See Table 2. *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	Yes. Th-228 and Th-230 were detected in method blanks above the uncertainty or MDC but below the PQL.
Were any analytes flagged for blank contamination? See Table 2A. *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	Yes. Some (not all) sample results that were <5 times the blank concentration passed the USACE NAD test; therefore, J/UJ qualifiers were added as applicable.
LCS within QC criteria (70-130% recovery)? *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes.
MS/MSD within QC criteria for Alpha Spectroscopy (70-130% recovery, RPD ± 35)? *If out and LCS is compliant, then J flag positive data in original sample due to matrix.*	Yes.
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes.

Isotopic Thorium and Uranium by Alpha Spectrometry	
Description	**Notes and Qualifiers**
Do field duplicate results show good precision for all isotopes? *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	No. Th-230, Th-232, and U-238 results for the field duplicate sample pairs were qualified with UJ due to field duplicate precision (all field duplicate sample pair results were <MDC).
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No.
Were background and continuing calibration checks (pulsers) performed daily?	Yes.
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies found in spectra? *If found check calculations, qualify per USACE guidance.*	No.
Were tracer yields within limits (QAPP: 50-100%, lab 30-110%)? *If recoveries were outside laboratory derived limits, but within default limits of 20-150%, flag associated results as estimated (J) after corrective actions; otherwise R. If recoveries are <20%: flag as rejected (R) and >150% rejected (R).*	Yes.
If recoveries were outside control limits, were adequate quantities of tracers used and were calculations correct? *Evaluate entire SDG for systematic errors and qualify if needed*	N/A: All recoveries were within limits.
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

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Radium-226 and Other Gamma Emitters by Gamma Spectrometry	
Description	**Notes and Qualifiers**
Any holding time violations?	No.
Any compounds present in method and field blanks? (See Table 2.) *Method blank results should be less than ½ PQL, <MDC, and less than the uncertainty.*	Yes. Ra-226 was detected in a method blank above the uncertainty or MDC but below the PQL.
Were any analytes flagged for blank contamination? (See Table 2A.) *For samples, if results are <5 times the blank, apply the Normalized Absolute Difference test in USACE Guidance. Qualify as noted.*	Yes. Some (not all) sample results that were <5 times the blank concentration passed the USACE NAD test; therefore, J qualifiers were added as applicable.
LCS within QC criteria (70-130% recovery)? *If recoveries are between 50 and 150% then J-flag results. Reject data with recovery <50% or greater than 150%. High recoveries need to be flagged manually.*	Yes
Matrix duplicate within QC criteria (RPD ± 35, NAD < 1.96) ? *MD must be performed on site samples to use results for qualification. If out, apply the Normalized Absolute Difference* <1.96 *test in USACE Guidance. Qualify as noted.*	Yes.
Do field duplicate results show good precision for all isotopes? (See Table 7.) *For any sample with high RPDs (>70 for soil samples) evaluate the difference factor and apply professional judgment as noted in the USACE Guidance.*	No. K-40 results for one field duplicate sample pair and Ra-228 results for the other field duplicate sample pair were qualified with UJ due to field duplicate precision (all field duplicate sample pair results were <MDC).
Were any samples re-analyzed or diluted? *For any sample re-analysis and dilutions ensure that only one result per sample and analyte is flagged as reportable.*	No.
Were the samples prepared in sealed containers and subjected to a 21-day ingrowth period prior to analysis? *If not comparable, qualify results with J.*	Yes.
Was the soil matrix density comparable to the calibration standard density? (70-130%) *If not comparable, qualify Ra-226 results with J.*	Yes.

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Radium-226 and Other Gamma Emitters by Gamma Spectrometry	
Description	**Notes and Qualifiers**
Were background and continuing calibration checks performed daily?	Yes.
Were instrument checks marked as failed and if so checks performed more than twice to bring into compliance? *Determine if project samples were impacted and qualify if necessary.*	No.
Spot check the raw data, were any anomalies in Ra-226 or Ra-228 daughters found? *If found, check spectra and calculations.*	No.
Spot check the raw data; were any anomalies found in other identified radionuclides? *If found, check spectra and calculations.*	No.
Were the relationships between results, uncertainties, and MDCs in compliance? *If not, refer to the USACE for guidance in qualification of results.*	Yes.

Summary of Potential Impacts on Data Usability

8260B

- A trip blank was not provided in the coolers with samples for volatiles analysis.
- Due to matrix interferences, surrogate recoveries were below control limits for sample STB-02-Z1. The results were qualified J/UJ as estimated.
- The internal standards DCB and CBZ were recovered low in sample STB-02-Z1. The sample results were already qualified J/UJ for surrogate failures.

6010B

- All of the sample digestates were noted to have a yellow color; therefore, they were all dilute prior to analysis. Each sample reports several analytes at elevated reporting limits.
- Aluminum was qualified J as estimated due to high recovery in the MS and MSD of samples STB-01-Z8 and STB-02-Z8.

A-01-R

- The field duplicate precision was outside acceptance criteria for several isotopes; therefore, the results for the field duplicate sample pairs were qualified with J/UJ as estimated.
- Thorium isotopes were detected in method blanks above the MDC or 2-sigma uncertainty and below the PQL. Sample results were qualified with J as applicable.
- There is no valid value for EPAR2 for the analytical method A-01-R; therefore the EDD does not pass the EDP check.

GA-01-R

- The field duplicate precision was outside acceptance criteria for K-40 and Ra-228; therefore, these results for the field duplicate sample pairs were qualified with UJ as estimated as applicable.
- Radium-226 was detected in a method blank above the MDC or 2-sigma uncertainty and below the PQL. Sample results were qualified with J as applicable.
- The valid value for EPAR2 for the analytical method is EML GA-01-R; therefore the EDD

Summary of Potential Impacts on Data Usability
references EML GA-01-R instead of GA-01-R for these analyses.

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
A-01-R	MB 160-148115/1-A	MB	Thorium-228	0.0613	None	pCi/g	0.0383	1.00
A-01-R	MB 160-148117/1-A	MB	Thorium-228	0.09202	None	pCi/g	0.0491	1.00
A-01-R	MB 160-148117/1-A	MB	Thorium-230	0.05727	None	pCi/g	0.0491	1.00
GA-01-R	MB 160-148500/1-A	MB	Radium-226	0.115	None	pCi/g	0.106	1.00
SW6010B	MB 160-149347/1-A	MB	Selenium	0.19	J	mg/kg	0.19	1.4
SW6010B	MB 160-149347/1-A	MB	Zinc	0.668	J	mg/kg	0.51	9
SW6010B	MB 160-149867/1-A	MB	Calcium	6.6	J	mg/kg	6.1	230
SW6010B	MB 160-149867/1-A	MB	Iron	2.05	J	mg/kg	1.8	9
SW6010B	MB 160-149867/1-A	MB	Zinc	0.748	J	mg/kg	0.51	9
SW6010B	ICB 160-153689/6	ICB	Beryllium	1.20	J	ug/L	0.283	5.0
SW6010B	ICB 160-153689/6	ICB	Cadmium	0.800	J	ug/L	0.336	5.0
SW6010B	ICB 160-153689/6	ICB	Lead	0.800	J	ug/L	0.598	10
SW6010B	CCB 160-153689/48	CCB	Beryllium	0.700	J	ug/L	0.283	5.0
SW6010B	CCB 160-153689/48	CCB	Cadmium	1.10	J	ug/L	0.336	5.0
SW6010B	CCB 160-153689/48	CCB	Lead	1.60	J	ug/L	0.598	10
SW6010B	CCB 160-153689/60	CCB	Beryllium	1.30	J	ug/L	0.283	5.0
SW6010B	CCB 160-153689/60	CCB	Manganese	1.20	J	ug/L	1	15
SW6010B	CCB 160-153689/72	CCB	Beryllium	0.300	J	ug/L	0.283	5.0
SW6010B	CCB 160-153689/24	CCB	Beryllium	0.600	J	ug/L	0.283	5.0
SW6010B	CCB 160-153689/36	CCB	Beryllium	0.800	J	ug/L	0.283	5.0
SW6010B	CCB 160-153689/36	CCB	Cadmium	0.800	J	ug/L	0.336	5.0
SW6010B	CCB 160-153689/36	CCB	Copper	2.40	J	ug/L	2.1	25
SW6010B	CCB 160-153689/36	CCB	Lead	1.10	J	ug/L	0.598	10

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Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
A-01-R	MB 160-148115/1-A	SO	Thorium-228	0.0613	0.146	None	pCi/g	STB-01-500	J
A-01-R	MB 160-148115/1-A	SO	Thorium-228	0.0613	0.145	None	pCi/g	STB-01-Z2	J
A-01-R	MB 160-148115/1-A	SO	Thorium-228	0.0613	0.154	None	pCi/g	STB-01-Z4	J
A-01-R	MB 160-148115/1-A	SO	Thorium-228	0.0613	0.12	None	pCi/g	STB-01-Z5	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.161	None	pCi/g	STB-02-500	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.149	None	pCi/g	STB-02-Z2	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.223	None	pCi/g	STB-02-Z3	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.226	None	pCi/g	STB-02-Z4	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.164	None	pCi/g	STB-02-Z5	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.136	None	pCi/g	STB-02-Z6	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.181	None	pCi/g	STB-03-Z2	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.18	None	pCi/g	STB-03-Z3A	J
A-01-R	MB 160-148117/1-A	SO	Thorium-228	0.0920	0.212	None	pCi/g	STB-03-Z3B	J
A-01-R	MB 160-148117/1-A	SO	Thorium-230	0.05727	0.151	None	pCi/g	STB-02-Z2	J
A-01-R	MB 160-148117/1-A	SO	Thorium-230	0.05727	0.129	None	pCi/g	STB-02-Z6	J
A-01-R	MB 160-148117/1-A	SO	Thorium-230	0.05727	0.129	None	pCi/g	STB-03-Z3A	J
GA-01-R	MB 160-148500/1-A	SO	Radium-226	0.115	0.246	None	pCi/g	STB-02-Z2	J
GA-01-R	MB 160-148500/1-A	SO	Radium-226	0.115	0.221	None	pCi/g	STB-02-Z4	J
GA-01-R	MB 160-148500/1-A	SO	Radium-226	0.115	0.233	None	pCi/g	STB-03-Z2	J
GA-01-R	MB 160-148500/1-A	SO	Radium-226	0.115	0.18	None	pCi/g	STB-03-Z3B	J
SW6010B	MB 160-149867/1-A	SO	Zinc	0.748	3.1	JD	mg/kg	STB-02-500	U Flag
SW6010B	MB 160-149867/1-A	SO	Zinc	0.748	3.4	JD	mg/kg	STB-02-Z3	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.00160	0.0048	JD	mg/L	STB-02-Z8	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.00160	0.0034	JD	mg/L	STB-02-500	U Flag

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.00160	0.0014	JD	mg/L	STB-02-Z6	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.00160	0.0053	JD	mg/L	STB-02-Z4	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.00160	0.0021	JD	mg/L	STB-02-Z2	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.00160	0.0048	JD	mg/L	STB-02-Z7	U Flag
SW6010B	ICB 160-153689/6	SO	Lead	0.00080	0.0016	JD	mg/L	STB-02-Z3	U Flag
SW6010B	ICB 160-153689/6	SO	Lead	0.00080	0.0038	JD	mg/L	STB-03-Z2	U Flag
SW6010B	ICB 160-153689/6	SO	Lead	0.00080	0.0030	JD	mg/L	STB-03-Z3B	U Flag
SW6010B	ICB 160-153689/6	SO	Lead	0.00080	0.0030	JD	mg/L	STB-03-Z3A	U Flag
SW6010B	CCB 160-153689/36	SO	Copper	0.0024	0.0030	JD	mg/L	STB-01-Z2	U Flag
SW6010B	CCB 160-153689/36	SO	Copper	0.0024	0.0036	JD	mg/L	STB-01-Z3	U Flag
SW6010B	CCB 160-153689/36	SO	Copper	0.0024	0.0069	JD	mg/L	STB-01-Z4	U Flag
SW6010B	CCB 160-153689/36	SO	Copper	0.0024	0.0028	JD	mg/L	STB-01-Z5	U Flag
SW6010B	CCB 160-153689/36	SO	Lead	0.0011	0.0041	JD	mg/L	STB-01-Z2	U Flag
SW6010B	CCB 160-153689/36	SO	Lead	0.0011	0.0034	JD	mg/L	STB-01-Z3	U Flag
SW6010B	CCB 160-153689/36	SO	Lead	0.0011	0.0033	JD	mg/L	STB-01-Z4	U Flag
SW6010B	CCB 160-153689/36	SO	Lead	0.0011	0.0042	JD	mg/L	STB-01-Z5	U Flag
SW6010B	CCB 160-153689/36	SO	Copper	0.0024	0.0058	JD	mg/L	STB-01-Z7	U Flag
SW6010B	CCB 160-153689/36	SO	Copper	0.0024	0.0026	JD	mg/L	STB-01-500	U Flag
SW6010B	CCB 160-153689/36	SO	Copper	0.0024	0.0023	JD	mg/L	STB-01-Z8	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.0016	0.0034	JD	mg/L	STB-01-Z6	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.0016	0.0047	JD	mg/L	STB-01-Z7	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.0016	0.0029	JD	mg/L	STB-01-500	U Flag
SW6010B	CCB 160-153689/48	SO	Lead	0.0016	0.0027	JD	mg/L	STB-01-Z8	U Flag

Table 2B - List of Samples Qualified for Field Blank Contamination
None

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Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	STB-02-Z1	SO	4-Bromofluorobenzene (Surr)	164	85	120	1	UJ/J Flag
SW8260B	STB-02-Z1	SO	Toluene-d8 (Surr)	158	85	115	1	UJ/J Flag

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
SW6010B	STB-01-Z8MS	SO	Aluminum	560	917	225	181	5	80	120	J Flag
SW6010B	STB-02-Z8MS	SO	Aluminum	640	941	195	210	5	80	120	J Flag

Table 5 - List of LCS Recoveries outside Control Limits

None.

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
STB-01-500	160-8643-8	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, silver, sodium, and thallium.
STB-01-Z1	160-8643-1	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, silver, and thallium.
STB-01-Z2	160-8643-2	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, silver, and thallium.
STB-01-Z3	160-8643-3	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, potassium, selenium, silver, sodium, and thallium.
STB-01-Z4	160-8643-4	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, silver, sodium, and thallium.

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Sample ID	Lab ID	Method	Sample Type	Action
STB-01-Z5	160-8643-5	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, potassium, selenium, silver, sodium, and thallium.
STB-01-Z6	160-8643-6	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, copper, potassium, selenium, silver, and thallium.
STB-01-Z7	160-8643-7	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, cobalt, magnesium, nickel, potassium, selenium, silver, and thallium.
STB-01-Z8	160-8643-9	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, calcium, cobalt, magnesium, nickel, potassium, selenium, silver, and sodium.
STB-02-500	160-8684-2	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, calcium, cobalt, magnesium, potassium, sodium, silver, and thallium.
STB-02-Z1	160-8684-9	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, and silver.
STB-02-Z2	160-8684-5	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, cobalt, potassium, selenium, silver, sodium, thallium, and vanadium.
STB-02-Z3	160-8684-8	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, copper, potassium, selenium, silver, sodium, thallium, and vanadium.
STB-02-Z4	160-8684-4	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, silver, sodium, and thallium.
STB-02-Z5	160-8684-7	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, potassium, selenium, silver, sodium, and thallium.
STB-02-Z6	160-8684-3	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, calcium, copper, potassium, selenium, silver, sodium, thallium, and vanadium.

Sample ID	Lab ID	Method	Sample Type	Action
STB-02-Z7	160-8684-6	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, silver, sodium, and thallium.
STB-02-Z8	160-8684-1	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, calcium, cobalt, copper, potassium, selenium, silver, sodium, and thallium.
STB-03-Z2	160-8684-10	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, potassium, selenium, silver, and thallium.
STB-03-Z3A	160-8684-12	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, arsenic, beryllium, cadmium, potassium, selenium, silver, and thallium.
STB-03-Z3B	160-8684-11	SW6010B	SO	Diluted due to the nature of matrix. The digestates were yellow in color. Elevated reporting limits provided for antimony, beryllium, cadmium, potassium, selenium, silver, sodium, and thallium.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	STB-02-Z8	STB-02-500	RPD	RPD Rating	Sample Qual
A-01-R	Thorium-228	pci/g	SO	0.0666	A	0.382	0.161	81.4%	Poor	J Flag
A-01-R	Thorium-230	pci/g	SO	0.0739	A	0.224	0.226	0.9%	Good	None
A-01-R	Thorium-232	pci/g	SO	0.0521	A	0.28	0.134	70.5%	Poor	J Flag
A-01-R	Uranium-233/234	pci/g	SO	0.0519	A	0.162	0.119	30.6%	Good	None
A-01-R	Uranium-235/236	pci/g	SO	0.0505	A	-0.00261	0	-200.0%	Good	None
A-01-R	Uranium-238	pci/g	SO	0.0405	A	0.191	0.0858	76.0%	Poor	J Flag
GA-01-R	Potassium-40	pci/g	SO	1.08	A	1.01	0.228	126.3%	Poor	UJ Flag
GA-01-R	Radium-226	pci/g	SO	0.111	A	0.288	0.318	9.9%	Good	None
GA-01-R	Radium-228	pci/g	SO	0.194	A	0.224	0.282	22.9%	Good	None
GA-01-R	Bi-214	pci/g	SO	0.094	A	0.318	0.288	9.9%	Good	None
GA-01-R	Pb-212	pci/g	SO	0.105	A	0.328	0.312	5.0%	Good	None
GA-01-R	Pb-214	pci/g	SO	0.116	A	0.251	0.417	49.7%	Good	None
SW6010B	Aluminum	mg/kg	SO	190	A	640	570	11.6%	Good	None
SW6010B	Arsenic	mg/kg	SO	4.5	A	1.2	ND	NC		
SW6010B	Barium	mg/kg	SO	22	A	5.8	5.2	10.9%	Good	None

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Method	Analyte	Unit	Matrix	PQL	Anal Type	STB-02-Z8	STB-02-500	RPD	RPD Rating	Sample Qual
SW6010B	Chromium	mg/kg	SO	6.7	A	2.8	2.5	11.3%	Good	None
SW6010B	Copper	mg/kg	SO	11	A	ND	1.2	NC		
SW6010B	Iron	mg/kg	SO	45	A	1600	1500	6.5%	Good	None
SW6010B	Lead	mg/kg	SO	4.5	A	2.2	1.5	37.8%	Good	None
SW6010B	Magnesium	mg/kg	SO	450	A	16	ND	NC		
SW6010B	Manganese	mg/kg	SO	4.5	A	8.2	7.9	3.7%	Good	None
SW6010B	Nickel	mg/kg	SO	18	A	1.3	1.3	0.0%	Good	None
SW6010B	Selenium	mg/kg	SO	6.7	A	ND	1.6	NC		
SW6010B	Vanadium	mg/kg	SO	22	A	3.5	2.2	45.6%	Good	None
SW6010B	Zinc	mg/kg	SO	45	A	3.8	3.1	20.3%	Good	None
SW8260B	Acetone	ug/kg	SO	21	A	7.1	ND	NC		

Method	Analyte	Unit	Matrix	PQL	Anal Type	STB-01-Z5	STB-01-500	RPD	RPD Rating	Sample Qual
A-01-R	Thorium-228	pci/g	SO	0.0794	A	0.12	0.146	19.5%	Good	None
A-01-R	Thorium-230	pci/g	SO	0.051	A	0.14	0.299	72.4%	Poor	J Flag
A-01-R	Thorium-232	pci/g	SO	0.0246	A	0.0254	0.205	155.9%	Poor	J/UJ Flag
A-01-R	Uranium-233/234	pci/g	SO	0.0515	A	0.153	0.268	54.6%	Good	None
A-01-R	Uranium-235/236	pci/g	SO	0.0311	A	0.0175	0.0104	50.9%	Good	None
A-01-R	Uranium-238	pci/g	SO	0.0591	A	0.116	0.247	72.2%	Poor	J Flag
GA-01-R	Potassium-40	pci/g	SO	0.743	A	2.45	1.9	25.3%	Good	None
GA-01-R	Radium-226	pci/g	SO	0.0772	A	0.0864	0.172	66.3%	Good	None
GA-01-R	Radium-228	pci/g	SO	0.246	A	0.0972	0.0467	70.2%	Poor	UJ Flag
SW6010B	Aluminum	mg/kg	SO	210	A	1700	1400	19.4%	Good	None
SW6010B	Arsenic	mg/kg	SO	5	A	ND	1.3	NC		
SW6010B	Barium	mg/kg	SO	25	A	5.3	4.3	20.8%	Good	None
SW6010B	Calcium	mg/kg	SO	1200	A	50	41	19.8%	Good	None
SW6010B	Chromium	mg/kg	SO	7.5	A	2.8	3.5	22.2%	Good	None
SW6010B	Cobalt	mg/kg	SO	25	A	0.75	0.8	6.5%	Good	None
SW6010B	Copper	mg/kg	SO	12	A	1.4	1.3	7.4%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	STB-01-Z5	STB-01-500	RPD	RPD Rating	Sample Qual
SW6010B	Iron	mg/kg	SO	50	A	2500	3500	33.3%	Good	None
SW6010B	Lead	mg/kg	SO	5	A	2.1	1.4	40.0%	Good	None
SW6010B	Magnesium	mg/kg	SO	500	A	150	130	14.3%	Good	None
SW6010B	Manganese	mg/kg	SO	5	A	76	71	6.8%	Good	None
SW6010B	Nickel	mg/kg	SO	20	A	1.7	1.7	0.0%	Good	None
SW6010B	Vanadium	mg/kg	SO	25	A	3	3	0.0%	Good	None
SW6010B	Zinc	mg/kg	SO	50	A	4.4	4.3	2.3%	Good	None
SW8260B	Acetone	ug/kg	SO	19	A	11	12	8.7%	Good	None

Acronym List and Table Key:

CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
GC/MS = gas chromatography / mass spectrometry
LCS = laboratory control sample
MBLK = method blank
MS = matrix spike
MSD = matrix spike duplicate
NYSDEC = New York State Department of Environmental Conservation
PQL = practical quantitation limit
QA = quality assurance
QAPP = quality assurance project plan
QC = quality control
RPD = relative percent difference
SDG = sample delivery group
TIC = tentatively identified compound
VOC = volatile organic compound

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The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
- Department of Defense (DoD) Quality Systems Manual for Environmental Laboratories Version 5.0

Specific criteria for QC limits were obtained from the project specific QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory
1003954.0001	160-4889-1 160-4889-2 160-4889-4 160-4889-5	TestAmerica: St Louis

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
160-4889-1	SL	STS-01-FA13	160-4889-1	12/12/2013	MS/MSD		
160-4889-1	SL	STS-02-FA13	160-4889-2	12/12/2013			
160-4889-1	SL	STS-03-FA13	160-4889-3	12/12/2013			
160-4889-1	SL	STS-801-FA13	160-4889-4	12/12/2013			
160-4889-1	WQ	TB01-FA13	160-4889-5	12/12/2013			

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
160-4889-2	SL	SW8260B	Volatile Organic Compounds (GC/MS)	4	N/FD
160-4889-2	WQ	SW8260B	Volatile Organic Compounds (GC/MS)	1	TB
160-4889-1	SL	SW6010B	Metals (ICP)	4	N/FD
160-4889-1	SL	SW7471B	Mercury (CVAA)	4	N/FD
160-4889-1	SL	Moisture	Percent Moisture	4	N/FD
160-4889-5	SL	SW6020A	Metals (ICP/MS)	4	N/FD

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.

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General Sample Information	
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	No. Field duplicate not collected. MS/MSD not collected. 1 Trip Blank per cooler with VOC samples. Rinsate blank not required.
Case narrative present and complete?	Yes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Reanalysis Results (Table 6)
- Field Duplicate Results (Table 7)

Go to Tables List

Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or, field blanks (see Table 2)?	Yes. Acetone was detected in MB 160-92576/2 and tetrachloroethene was detected in MB 160-92266/1-A.
For samples, if results are < 5 times the blank or < 10 times the blank for common laboratory contaminants, then "U" flag data.	The result for acetone in sample TB-01-FA13 was U qualified as non-detect due to method blank detections. The sample result was less than the PQL; therefore, the method detection limit was elevated to the sample result. The sample results for tetrachloroethene were all greater than 5X the blank detection; therefore, no qualification of the data was made.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples and MS/MSD within limits? (See Table 3). If not, were all samples reanalyzed for VOCs?	No. Samples STS-01-FA13 and STS-801-FA13 were analyzed at a 20X and 1000X dilution; therefore, the surrogates were diluted out. No qualification of the data was made. Sample STS-02-FA13 had two surrogates recovered below control limits and STS-03-FA13 had four surrogates recovered below control limits. The laboratory performed a re-extraction and/or re-analysis and the results were duplicated; therefore, the failures are likely due to matrix interference. The sample results were qualified J/UJ as estimated.
Is Laboratory QC frequency at least one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.

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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Is MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then "J" flag positive data in original sample due to matrix.	A MS/MSD was not included with the sample delivery group.
Is LCS within QC criteria (see Table 5)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <15% RSD or curve fit?	No. The following poor performing analytes exhibited a relative response factor (RRF) value less than the laboratory minimum criterion of 0.1000: acetone, methyl acetate, and 2-butanone. The RRF values were ≥0.0100; the allowance for poor performing analytes per EPA Region 2 SOP HW-33, Rev 3. The %RSD was acceptable and the associated results were non-detect for the analytes. No qualification of the data was made.
Is continuing calibration for target compounds < 20.5% D.	ICV: For ICV 160-90908/10, the following analytes were below the minimum RRF: acetone(0.0544), methyl acetate(0.0210), and 2-butanone(0.0698). Trans-1,3-dichloropropene exhibited a %D of 20.4. CCV: For CCV 160-92558/3, the following analytes were below the minimum RRF: Acetone(0.0459), methyl acetate(0.0229), and 2-butanone(0.0745). The following analytes exceeded 20% D: 2-butanone(20.8) and 4-methyl-pentanone(22.9). For CCV 160-92762/2, the following analytes were below the minimum RRF: Acetone(0.0370), methyl acetate(0.0196), and 2-butanone(0.0628). All of the analytes that failed ICV and CCV acceptance criteria are poor performing compounds with the exception of 1,3-dichloropropene. %D ≤ 40% and min RRF ≥0.010 are acceptable for poor performing compounds per EPA Region 2 SOP HW-33, Rev 3. For all other volatile compounds, the SOP allows up the 25% D. The analytes were not detected in the samples. No qualification of the data was made.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All of the samples were analyzed at medium level due to high concentrations of target analytes. Samples STS-01-FA13 and STS-801-FA13 were initial run at a 20X dilution and then run at 1000X dilution to bring the concentrations of 1,1,1-trichloroethane, tetrachloroethene, and trichloroethene within calibration range.

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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
For TICs are there any system related compounds that should not be reported?	N/A
Do field duplicate results show good precision for all compounds (see Table 7)?	No. Tetrachloroethene exhibited poor precision in the field duplicate of STS-01-FA13. The results in both samples were qualified J as estimated.

Total Metals by ICP and Mercury by CCVA	
Description	**Notes and Qualifiers**
Are any compounds present in method and field blanks as noted on Table 2?	Yes. Selenium was detected in MB 160-94265/1-A, and vanadium was detected in CCBs 460-97021/84 and 160-97021/96.
For samples, if results are < 5 times the blank then "U" flag data.	Selenium was not detected in the samples; therefore, no qualification was required. Vanadium was detected in the samples bracketed by CCB 160-97021/96. The sample results were less than 5X the blank detection; therefore, the results were qualified U as non-detect. The sample results were less than the PQL; therefore, the detection limit was elevated to the sample result.
Is laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Are MS/MSD within QC criteria (see Table 4)? QC limits are not applicable to sample results greater than 4 times spike amount. All N flagged data for MS are flagged J as estimated.	No. SW6010B: Aluminum was recovered <75% in the MSD. The post digestion spike (PDS) recovery was 75%, which is acceptable per EPA Region 2 SOP HW-2a, Rev 15. The result in the parent sample was qualified J as estimated. Barium was recovered >130% in the MS and <30% in the MSD. The PDS was acceptable; therefore, the result was qualified J. Chromium, manganese, and nickel were recovered below 75% in the MSD. The PDS recoveries were acceptable; therefore the results were J qualified. Lead was recovered <75% in the MSD. The PDS was acceptable; therefore, the result was qualified J as estimated. The MS and MSD recoveries for silver were below 30%. The PDS was acceptable; therefore, the results were qualified J as estimated. SW7471B: Sample STS-01-FA13 was used for laboratory QC. The native sample concentration was greater than 4X the spiking concentration. No qualification of the data was required.
Were elements recovered ≤30%? If so, “R” flag associated NDs on Form 1's.	No.

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Total Metals by ICP and Mercury by CCVA	
Description	**Notes and Qualifiers**
Is LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	No. Potassium and sodium were recovered high in LCS 160-94265/2-A. Per EPA Region 2 SOP HW-2a, Rev 15, recovery up to 130% is acceptable. Potassium was recovered at 128%; and sodium was recovered at 131%. The analytes were not detected in any of the samples. No qualification of the data was made.
Is there one serial dilution per 20 samples? Flag all data reported with an "E" as "J".	The serial dilutions were acceptable.
Spot check ICS recoveries 80-120%. Contact lab if unacceptable.	ICS recoveries were acceptable.
Spot check ICV 95-105%. Contact lab if unacceptable.	ICV's were acceptable.
Spot check CCV 90-110% or 80-120% for mercury. Contact lab if unacceptable.	Sodium and potassium were recovered at 115% in CCV 160-97021/106. The sample results for the analytes were non-detect; therefore, no qualification of the data was required.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. SW6010B: All of the samples were diluted for analysis by Method 6010B due to the nature of the matrix. Each sample reported non-detect results at elevated reporting limits, which may impact data usability. SW7174B: Samples STS-01-FA13 and STS-801-FA13 were diluted by 10X due to target analytes exceeding the calibration curve. No impact to data usability.
Do field duplicate results show good precision for all compounds (see Table 7)?	No. Chromium and iron exhibited poor precision between the parent sample and field duplicate. The results in STS-01-FA13 and STS-801-FA13 were qualified J as estimated.

Summary of Potential Impacts on Data Usability
8260B • Acetone and tetrachloroethene were detected in a method blank. • Acetone was detected in a trip blank and U qualified due to method blank contamination. • Sample STS-02-FA13 and STS-03-FA13 had surrogates recovered below control limits; the sample results were qualified J/UJ as estimated. • Tetrachloroethene in the field duplicate sample pair of STS-01-FA13 results were qualified J as estimated due to precision outside control limits. 6010B • Aluminum, barium, chromium, manganese, lead, nickel, and silver results in the parent sample were J qualified due to MS/MSD recoveries outside control limits. • Vanadium sample results were qualified with U as non-detect due to contamination detected in CCBs. • Chromium and iron results in field duplicate sample pair STS-01-FA13 and STS-801-FA13 were

qualified J as estimated due to poor precision.

- All of the samples were diluted due to the nature of the matrix. Each sample reported non-detect results at elevated reporting limits, which may impact data usability.

7471B:

- MS/MSD recoveries were outside control limits for sample STS-01-FA13; the native sample concentration was greater than 4X the spiking concentration and no qualification of the data was required.

Data Usability Summary Report	Project: Sylvania: Septic Tank Borings
Date Completed: April 30, 2015	Completed by: Lynne Kalmbach and Joanna Christopher

Table 2 - List of Positive Results for Blank Samples

Method	Sample ID	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
SW6010B	MB 160-149347/1-A	MB	Selenium	0.359	J	mg/kg	0.28	1.5
SW6010B	CCB 160-97021/84	CCB	Vanadium	6.80	J	ug/L	4.06	50
SW6010B	CCB 160-97021/96	CCB	Vanadium	5.30	J	ug/L	4.06	50
SW8260B	MB 160-92266/1-A	MB	Tetrachloroethene	54.5	J	ug/kg	20	250
SW8260B	MB 160-92576/2	MB	Acetone	0.675	J	ug/l	0.34	2
SW8260B	TB01-FA13	TB	Acetone	1.1	J	ug/l	0.34	2

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Lab Blank	Matrix	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	Affected Samples	Sample Flag
SW6010B	CCB 160-97021/96	SL	Vanadium	5.30	2.26	JD	mg/L	STS-02-FA13	U Flag
SW6010B	CCB 160-97021/96	SL	Vanadium	5.30	1.62	JD	mg/L	STS-03-FA13	U Flag
SW6010B	CCB 160-97021/96	SL	Vanadium	5.30	1.79	JD	mg/L	STS-801-FA13	U Flag

Table 2B - List of Samples Qualified for Field Blank Contamination
None

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	STS-01-FA13	SL	1,2-Dichloroethane-d4 (Surr)	0	71	128	1000	Diluted Out
SW8260B	STS-01-FA13	SL	4-Bromofluorobenzene (Surr)	872	85	120	1000	Diluted Out
SW8260B	STS-01-FA13	SL	Dibromofluoromethane (Surr)	0	76	126	1000	Diluted Out
SW8260B	STS-01-FA13	SL	Toluene-d8 (Surr)	251	85	115	1000	Diluted Out
SW8260B	STS-02-FA13	SL	Dibromofluoromethane (Surr)	72	76	126	1	J/UJ Flag
SW8260B	STS-02-FA13	SL	Toluene-d8 (Surr)	78	85	115	1	J/UJ Flag

Method	Sample ID	Sample Type	Analyte	Rec. %	Low Limit	High Limit	Dilution Factor	Sample Qualifier
SW8260B	STS-03-FA13	SL	1,2-Dichloroethane-d4 (Surr)	61	71	128	1	J/UJ Flag
SW8260B	STS-03-FA13	SL	4-Bromofluorobenzene (Surr)	58	85	120	1	J/UJ Flag
SW8260B	STS-03-FA13	SL	Dibromofluoromethane (Surr)	56	76	126	1	J/UJ Flag
SW8260B	STS-03-FA13	SL	Toluene-d8 (Surr)	54	85	115	1	J/UJ Flag
SW8260B	STS-801-FA13	SL	1,2-Dichloroethane-d4 (Surr)	0	71	128	1000	Diluted Out
SW8260B	STS-801-FA13	SL	1,2-Dichloroethane-d4 (Surr)	139	71	128	20	Diluted Out
SW8260B	STS-801-FA13	SL	4-Bromofluorobenzene (Surr)	130	85	120	20	Diluted Out
SW8260B	STS-801-FA13	SL	4-Bromofluorobenzene (Surr)	814	85	120	1000	Diluted Out
SW8260B	STS-801-FA13	SL	Dibromofluoromethane (Surr)	0	76	126	1000	Diluted Out
SW8260B	STS-801-FA13	SL	Toluene-d8 (Surr)	125	85	115	20	Diluted Out
SW8260B	STS-801-FA13	SL	Toluene-d8 (Surr)	186	85	115	1000	Diluted Out

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
6010B	STS-01-FA13	SL	Aluminum	3300	1840	82	55	10	80	120	J Flag
6010B	STS-01-FA13	SL	Barium	470	184	152	26	10	80	120	J Flag
6010B	STS-01-FA13	SL	Calcium	15000	1840	123	61	10	80	120	4X
6010B	STS-01-FA13	SL	Chromium	140	184	82	72	10	80	120	J Flag
6010B	STS-01-FA13	SL	Copper	1400	184	-301	-322	10	80	120	4X
6010B	STS-01-FA13	SL	Iron	11000	1840	62	-144	10	80	120	4X
6010B	STS-01-FA13	SL	Lead	190	184	72	123	10	80	120	J Flag
6010B	STS-01-FA13	SL	Manganese	140	184	97	79	10	80	120	J Flag
6010B	STS-01-FA13	SL	Nickel	180	184	89	70	10	80	120	J Flag
6010B	STS-01-FA13	SL	Silver	66	36.9	11	18	10	80	120	J Flag

Method	Sample ID	Sample Type	Analyte	Orig. Result	Spike Amount	MS	MSD	Dil. Fac.	Low Limit	High Limit	Sample Qualifier
6010B	STS-01-FA13	SL	Sodium	ND	1840	169	155	10	80	120	None
6010B	STS-01-FA13	SL	Thallium	ND	36.9	127	120	10	80	120	None
6010B	STS-01-FA13	SL	Zinc	970	184	177	78	10	80	120	4X
7471B	STS-01-FA13	SL	Mercury	6.9	1.36	118	-46	10	80	120	4X

Method	Parent Sample	Analyte	Dil Fac	Unit	RPD	RPD Limit	Qualifier
6010B	STS-01-FA13	Barium	10	mg/kg	37	20	J Flag
6010B	STS-01-FA13	Iron	10	mg/kg	35	20	4X
6010B	STS-01-FA13	Lead	10	mg/kg	25	20	J Flag
7471B	STS-01-FA13	Mercury	10	mg/kg	31	20	4X

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Sample Type	Analyte	LCS	LCSD	Low Limit	High Limit	Sample Qualifier
6010B	LCS 160-94265/2-A	LCS	Potassium	128	--	80	120	None
6010B	LCS 160-94265/2-A	LCS	Sodium	131	--	80	120	J Flag

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
STS-01-FA13	160-4889-1	SW6010B	SL	Diluted prior to analysis by the laboratory. Elevated reporting limits provided for antimony, arsenic, beryllium, potassium, selenium, sodium, thallium and vanadium.
STS-02-FA13	160-4889-2	SW6010B	SL	Diluted prior to analysis by the laboratory. Elevated reporting limits provided for antimony, beryllium, cadmium, cobalt, potassium, selenium, silver, sodium, thallium, and vanadium.
STS-03-FA13	160-4889-3	SW6010B	SL	Diluted prior to analysis by the laboratory. Elevated reporting limits provided for antimony, beryllium, cadmium, cobalt, potassium, selenium, silver, sodium, thallium, and vanadium.

Sample ID	Lab ID	Method	Sample Type	Action
STS-801-FA13	160-4889-4	SW6010B	SL	Diluted prior to analysis by the laboratory. Elevated reporting limits provided for antimony, beryllium, potassium, selenium, sodium, thallium, and vanadium.
STS-01-FA13	160-4889-1	SW7471B	SL	Diluted by 10X to bring target analytes within calibration range. No impact to data usability.
STS-801-FA13	160-4889-4	SW7471B	SL	Diluted by 10X to bring target analytes within calibration range. No impact to data usability.
STS-01-FA13	160-4889-1	SW8260B	SL	Initially run at 20X dilution. The sample were reanalyzed at a 1000X dilution for 1,1,1-trichloroethane, tetrachloroethene, and trichloroethene. Elevated reporting limits provided for non-detect anlaytes.
STS-801-FA13	160-4889-4	SW8260B	SL	Initially run at 20X dilution. The sample were reanalyzed at a 1000X dilution for 1,1,1-trichloroethane, tetrachloroethene, and trichloroethene. Elevated reporting limits provided for non-detect anlaytes.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	STS-01-FA13	STS-801-FA13	RPD	RPD Rating	Samp Qual
SW6010B	Aluminum	mg/kg	SL	770	A	3300	15000	127.9%	Poor	<5X PQL
SW6010B	Arsenic	mg/kg	SL	18	A	ND	8.1	NC	--	--
SW6010B	Barium	mg/kg	SL	92	A	470	190	84.8%	Poor	<5X PQL
SW6010B	Cadmium	mg/kg	SL	9.2	A	7.3	12	48.7%	Good	None
SW6010B	Calcium	mg/kg	SL	4600	A	15000	21000	33.3%	Good	None
SW6010B	Chromium	mg/kg	SL	28	A	140	440	103.4%	Poor	J Flag
SW6010B	Cobalt	mg/kg	SL	92	A	30	19	44.9%	Good	None
SW6010B	Copper	mg/kg	SL	46	A	1400	800	54.5%	Good	None
SW6010B	Iron	mg/kg	SL	180	A	11000	26000	81.1%	Poor	J Flag
SW6010B	Lead	mg/kg	SL	18	A	190	330	53.8%	Good	None
SW6010B	Magnesium	mg/kg	SL	1800	A	810	1200	38.8%	Good	None
SW6010B	Manganese	mg/kg	SL	18	A	140	180	25.0%	Good	None
SW6010B	Nickel	mg/kg	SL	73	A	180	310	53.1%	Good	None
SW6010B	Silver	mg/kg	SL	18	A	66	50	27.6%	Good	None

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Method	Analyte	Unit	Matrix	PQL	Anal Type	STS-01-FA13	STS-801-FA13	RPD	RPD Rating	Samp Qual
SW6010B	Zinc	mg/kg	SL	180	A	970	830	15.6%	Good	None
SW6020A	U-234	mg/kg	SL	0.041	A	0.85	2.6	101.4%	Poor	J Flag
SW6020A	U-234	pci/g	SL	15.3	A	5280	15900	100.3%	Poor	J Flag
SW6020A	U-235	pci/g	SL	0.0361	A	174	557	104.8%	Poor	J Flag
SW6020A	U-235	mg/kg	SL	0.041	A	80	260	105.9%	Poor	J Flag
SW6020A	U-238	mg/kg	SL	0.41	A	880	420	70.8%	Poor	J Flag
SW6020A	U-238	pci/g	SL	0.0083	A	297	142	70.6%	Poor	J Flag
SW7471	Mercury	mg/kg	SL	0.7	A	6.9	4.1	50.9%	Good	None
SW8260B	1,1,1-Trichloroethane	ug/kg	SL	720000	A	7400000	4800000	42.6%	Good	None
SW8260B	1,1-Dichloroethane	ug/kg	SL	14000	A	73000	91000	22.0%	Good	None
SW8260B	1,1-Dichloroethene	ug/kg	SL	14000	A	28000	41000	37.7%	Good	None
SW8260B	1,4-Dichlorobenzene	ug/kg	SL	14000	A	370000	300000	20.9%	Good	None
SW8260B	cis-1,2-Dichloroethene	ug/kg	SL	14000	A	430000	530000	20.8%	Good	None
SW8260B	Ethylbenzene	ug/kg	SL	14000	A	4500	4800	6.5%	Good	None
SW8260B	Methylcyclohexane	ug/kg	SL	29000	A	ND	790	NC	--	--
SW8260B	m-Xylene & p-Xylene	ug/kg	SL	29000	A	11000	13000	16.7%	Good	None
SW8260B	o-Xylene	ug/kg	SL	14000	A	3600	3900	8.0%	Good	None
SW8260B	Tetrachloroethene	ug/kg	SL	720000	A	16000000	5800000	93.6%	Poor	J Flag
SW8260B	Toluene	ug/kg	SL	14000	A	70000	120000	52.6%	Good	None
SW8260B	Trichloroethene	ug/kg	SL	720000	A	1500000	1500000	0.0%	Good	None

Acronym List and Table Key:

CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
GC/MS = gas chromatography / mass spectrometry
LCS = laboratory control sample
MBLK = method blank
MS = matrix spike
MSD = matrix spike duplicate
NYSDEC = New York State Department of Environmental Conservation

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Acronym List and Table Key:

PQL	=	practical quantitation limit
QA	=	quality assurance
QAPP	=	quality assurance project plan
QC	=	quality control
RPD	=	relative percent difference
SDG	=	sample delivery group
TIC	=	tentatively identified compound
VOC	=	volatile organic compound

DATA REVIEW MEMORANDUM

DATE: April 11, 2016

TO: Daniel Kennedy, Project Manager, E & E, Buffalo

FROM: Lynne Kalmbach, Chemist, E & E, Buffalo
Joanna Christopher, Senior Radiation Scientist, E & E, Buffalo

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included; however, rinsate blanks were included for each vertical profile boring. The samples for volatile organic analysis (VOA) were sent to American Analytical Laboratories, Farmingdale, NY for analysis. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-15639-1	WG	MW-223-VP17	MW-223-VP17	1601030-001A	01/06/16	N	
160-15639-1	WG	MW-223-VP19	MW-223-VP19	1601030-002A	01/06/16	N	
160-15639-1	WG	MW-223-VP20	MW-223-VP20	1601030-003A	01/06/16	N	
160-15639-1	WG	MW-223-VP22	MW-223-VP22	1601030-004A	01/06/16	N	
160-15639-1	WG	MW-223-VP24	MW-223-VP24	1601030-005A	01/06/16	N	
160-15664-1	WQ	1601041-004AMS-7747	1601041-004AMS-7747	1601041-004AMS	01/11/16	MS	
160-15664-1	WQ	1601041-	1601041-	1601041-	01/11/16	MSD	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
		004AMSD-7747	004AMSD-7747	004AMSD			
160-15664-1	WG	MW-223-VP26	MW-223-VP26	1601041-001A	01/07/16	N	
160-15664-1	WG	MW-223-VP28	MW-223-VP28	1601041-003A	01/07/16	N	
160-15664-1	WG	MW-223-VP30	MW-223-VP30	1601041-004A	01/07/16	N	
160-15664-1	WG	MW-223-VP900	MW-223-VP900	1601041-002A	01/07/16	FD	
160-15675-1	WQ	1601058-001AMS-7767	1601058-001AMS-7767	1601058-001AMS	01/12/16	MS	
160-15675-1	WQ	1601058-001AMSD-7767	1601058-001AMSD-7767	1601058-001AMSD	01/12/16	MSD	
160-15675-1	WG	MW-223-VP32	MW-223-VP32	1601058-001A	01/11/16	N	
160-15675-1	WG	MW-223-VP35	MW-223-VP35	1601058-002A	01/11/16	N	
160-15676-1	WC	DW-01-11-16	DW-01-11-16	1601059-001A	01/11/16	EB	DW-223
160-15703-1	WQ	1601071-001AMSD-R13476	1601071-001AMSD	1601071-001AMSD	01/13/16	MSD	
160-15703-1	WQ	1601071-001AMS-R13476	1601071-001AMS	1601071-001AMS	01/13/16	MS	
160-15703-1	WG	MW-223-VP36	MW-223-VP36	1601070-001A	01/11/16	N	
160-15703-1	WG	MW-223-VP38	MW-223-VP38	1601070-002A	01/12/16	N	
160-15703-1	WG	MW-223-VP40	MW-223-VP40	1601070-004A	01/12/16	N	
160-15703-1	WG	MW-223-VP901	MW-223-VP901	1601070-003A	01/12/16	FD	
160-15704-1	WQ	RS-MW-223	RS-MW-223	1601071-001A	01/12/16	RB	RB-MW223
160-15711-1	WQ	1601078-002AMS-7791	1601078-002AMS-7791	1601078-002AMS	01/14/16	MS	
160-15711-1	WQ	1601078-002AMSD-7791	1601078-002AMSD-7791	1601078-002AMSD	01/14/16	MSD	
160-15711-1	WG	MW-223-VP42	MW-223-VP42	1601078-001A	01/13/16	N	
160-15711-1	WG	MW-223-VP44	MW-223-VP44	1601078-002A	01/13/16	N	
160-15726-1	WG	MW-223-VP48	MW-223-VP48	1601089-001A	01/14/16	N	
160-15726-1	WG	MW-223-VP50	MW-223-VP50	1601089-002A	01/14/16	N	
160-15776-1	WG	MW-223-VP53	MW-223-VP53	1601110-001A	1/18/16	N	
160-16085-1	WG	MW-223-VP55	MW-223-VP55	1602069-001A	02/11/16	N	
160-16189-1	WG	MW-224-VP17	MW-224-VP17	1602120-001A	02/19/16	N	
160-16190-1	WQ	1602116-003AMS-8204	1602116-003AMS-8204	1602116-003AMS	02/19/16	MS	
160-16190-1	WQ	1602116-003AMSD-8204	1602116-003AMSD-8204	1602116-003AMSD	02/19/16	MSD	
160-16190-1	WG	MW-224-VP04	MW-224-VP04	1602116-001A	02/18/16	N	
160-16190-1	WG	MW-224-VP06	MW-224-VP06	1602116-002A	02/18/16	N	
160-16190-1	WG	MW-224-VP08	MW-224-VP08	1602116-003A	02/18/16	N	
160-16190-1	WG	MW-224-VP10	MW-224-VP10	1602116-004A	02/18/16	N	
160-16190-1	WG	MW-224-VP12	MW-224-VP12	1602116-005A	02/18/16	N	
160-16190-1	WG	MW-224-VP14	MW-224-VP14	1602116-007A	02/18/16	N	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-16190-1	WG	MW-224-VP900	MW-224-VP900	1602116-008A	02/18/16	FD	
160-16190-1	WQ	RS-MW224	RS-MW224	1602116-006A	02/18/16	RB	RB-MW224
160-16194-1	WG	MW-224-VP 20	MW-224-VP 20	1602148-002A	02/22/16	N	MW-224-VP20
160-16194-1	WG	MW-224-VP 22	MW-224-VP 22	1602148-003A	02/22/16	N	MW-224-VP22
160-16194-1	WG	MW-224-VP 901	MW-224-VP 901	1602148-004A	02/22/16	FD	MW-224-VP901
160-16194-1	WG	MW-224-VP19	MW-224-VP19	1602148-001A	02/22/16	N	
160-16253-1	WG	MW-221-VP19	MW-221-VP19	1602176-004A	02/25/16	N	
160-16253-1	WG	MW-221-VP20	MW-221-VP20	1602176-002A	02/25/16	N	
160-16253-1	WG	MW-221-VP22	MW-221-VP22	1602176-001A	02/25/16	N	
160-16253-1	WG	MW-221-VP900	MW-221-VP900	1602176-003A	02/25/16	FD	
160-16253-1	WG	MW-224-VP27	MW-224-VP27	1602176-005A	02/25/16	N	
160-16253-1	WG	MW-224-VP28	MW-224-VP28	1602176-006A	02/25/16	N	
160-16254-1	WG	MW-224-VP25	MW-224-VP25	1602170-001A	02/24/16	N	
160-16255-1	WG	MW-221-VP12	MW-221-VP12	1602171-001A	02/24/16	N	
160-16255-1	WG	MW-221-VP15	MW-221-VP15	1602171-002A	02/24/16	N	
160-16255-1	WG	MW-221-VP16	MW-221-VP16	1602171-003A	02/24/16	N	
160-16256-1	WQ	1602164-002AMS-8247	1602164-002AMS-8247	1602164-002AMS	02/24/16	MS	
160-16256-1	WQ	1602164-002AMSD-8247	1602164-002AMSD-8247	1602164-002AMSD	02/24/16	MSD	
160-16256-1	WC	DW-221	DW-221	1602164-005A	02/23/16	EB	
160-16256-1	WC	DW-224	DW-224	1602164-004A	02/23/16	EB	
160-16256-1	WG	MW-221-VP06	MW-221-VP06	1602164-001A	02/23/16	N	
160-16256-1	WG	MW-221-VP08	MW-221-VP08	1602164-002A	02/23/16	N	
160-16256-1	WG	MW-221-VP10	MW-221-VP10	1602164-003A	02/23/16	N	
160-16263-1	WG	MW-221-VP24	MW-221-VP24	1602178-001A	02/26/16	N	
160-16263-1	WG	MW-221-VP26	MW-221-VP26	1602178-002A	02/26/16	N	
160-16263-1	WG	MW-221-VP28	MW-221-VP28	1602178-004A	02/26/16	N	
160-16263-1	WG	MW-221-VP901	MW-221-VP901	1602178-003A	02/26/16	FD	
160-16269-1	WG	MW-224-VP31	MW-224-VP31	1602186-001A	02/25/16	N	
160-16317-1	WG	MW-224-VP32	MW-224-VP32	1603001-002A	02/29/16	N	
160-16317-1	WG	MW-224-VP35	MW-224-VP35	1603001-003A	02/29/16	N	
160-16317-1	WQ	RB-MW221	RB-MW221	1603001-001A	02/29/16	RB	
160-16305-1	WG	MW-224-VP36	MW-224-VP36	1603009-001A	03/01/16	N	
160-16330-1	WG	MW-221-VP30	MW-221-VP30	1603021-001A	03/01/16	N	
160-16330-1	WG	MW-221-VP32	MW-221-VP32	1603021-002A	03/01/16	N	
160-16354-1	WG	MW-221-VP34	MW-221-VP34	1603033-001A	03/02/16	N	
160-16354-1	WG	MW-221-VP36	MW-221-VP36	1603033-002A	03/02/16	N	
160-16357-1	WG	MW-221-VP38	MW-221-VP38	1603049-001A	03/03/16	N	
160-16357-1	WG	MW-221-VP40	MW-221-VP40	1603049-002A	03/03/16	N	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-16357-1	WG	MW-221-VP42	MW-221-VP42	1603049-003A	03/03/16	N	
160-16400-1	WG	MW-221-VP44	MW-221-VP44	1603055-001A	03/04/16	N	
160-16400-1	WG	MW-221-VP46	MW-221-VP46	1603055-002A	03/04/16	N	
160-16446-1	WQ	1603077-004AMS-8382	1603077-004AMS-8382	1603077-004AMS	03/09/16	MS	
160-16446-1	WQ	1603077-004AMSD-8382	1603077-004AMSD-8382	1603077-004AMSD	03/09/16	MDS	
160-16446-1	WG	MW-222-900	MW-222-900	1603077-009A	03/08/16	FD	MW-222-VP900
160-16446-1	WG	MW-222-VP05	MW-222-VP05	1603077-002A	03/08/16	N	
160-16446-1	WG	MW-222-VP07	MW-222-VP07	1603077-003A	03/08/16	N	
160-16446-1	WG	MW-222-VP09	MW-222-VP09	1603077-004A	03/08/16	N	
160-16446-1	WG	MW-222-VP11	MW-222-VP11	1603077-005A	03/08/16	N	
160-16446-1	WG	MW-222-VP13	MW-222-VP13	1603077-001A	03/08/16	N	
160-16446-1	WG	MW-222-VP15	MW-222-VP15	1603077-006A	03/08/16	N	
160-16446-1	WG	MW-222-VP17	MW-222-VP17	1603077-007A	03/08/16	N	
160-16446-1	WG	MW-222-VP19	MW-222-VP19	1603077-008A	03/08/16	N	
160-16466-1	WG	MW-221-901	MW-221-901	1603088-003A	03/09/16	FD	MW-222-VP901
160-16466-1	WG	MW-221-VP23	MW-221-VP23	1603088-002A	03/09/16	N	MW-222-VP23
160-16466-1	WG	MW-221-VP21	MW-221-VP21	1603088-001A	03/09/16	N	MW-222-VP21
160-16486-1	WC	DW-222	DW-222	1603106-002A	03/10/16	EB	
160-16486-1	WG	MW-222-VP26	MW-222-VP26	1603106-001A	03/10/16	N	
160-16486-1	WG	MW-222-VP27	MW-222-VP27	1603106-003A	03/10/16	N	
160-16486-1	WQ	RB-MW222	RB-MW222	1603106-004A	03/10/16	RB	
160-16487-1	WG	MW-222-VP29	MW-222-VP29	1603108-001A	03/11/16	N	
160-16487-1	WG	MW-222-VP31	MW-222-VP31	1603108-002A	03/11/16	N	
160-16520-1	WQ	1603126-004AMS-8450	1603126-004AMS-8450	1603126-004AMS	03/15/16	MS	
160-16520-1	WQ	1603126-004AMSD-8450	1603126-004AMSD-8450	1603126-004AMSD	03/15/16	MSD	
160-16520-1	WG	MW-225-VP03	MW-225-VP03	1603126-001A	03/14/16	N	
160-16520-1	WG	MW-225-VP05	MW-225-VP05	1603126-002A	03/14/16	N	
160-16520-1	WG	MW-225-VP07	MW-225-VP07	1603126-004A	03/14/16	N	
160-16520-1	WG	MW-225-VP09	MW-225-VP09	1603126-005A	03/14/16	N	
160-16520-1	WG	MW-225-VP900	MW-225-VP900	1603126-003A	03/14/16	FD	
160-16566-1	WC	DW-225	DW-225	1603143-004A	03/15/16	EB	
160-16566-1	WG	MW-225-VP11	MW-225-VP11	1603143-001A	03/15/16	N	
160-16566-1	WG	MW-225-VP13	MW-225-VP13	1603143-003A	03/15/16	N	
160-16566-1	WG	MW-225-VP15	MW-225-VP15	1603143-005A	03/15/16	N	
160-16566-1	WG	MW-225-VP17	MW-225-VP17	1603143-007A	03/15/16	N	
160-16566-1	WG	MW-225-VP901	MW-225-VP901	1603143-006A	03/15/16	FD	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-16566-1	WQ	RB-225	RB-225	1603143-002A	03/16/16	RB	RB-MW225
160-16565-1	WQ	1603144-002AMS-8479	1603144-002AMS-8479	1603144-002AMS	03/17/16	MS	
160-16565-1	WQ	1603144-002AMSD-8479	1603144-002AMSD-8479	1603144-002AMSD	03/17/16	MSD	
160-16565-1	WG	MW-222-VP34	MW-222-VP34	1603144-001A	03/15/16	N	
160-16565-1	WG	MW-222-VP36	MW-222-VP36	1603144-002A	03/15/16	N	
160-16594-1	WG	MW-222-VP37	MW-222-VP37	1603159-001A	03/16/16	N	
160-16594-1	WG	MW-222-VP39	MW-222-VP39	1603159-002A	03/16/16	N	
160-16593-1	WG	MW-225-VP22	MW-225-VP22	1603160-001A	03/16/16	N	
160-16593-1	WG	MW-225-VP23	MW-225-VP23	1603160-002A	03/16/16	N	
160-16593-1	WG	MW-225-VP26	MW-225-VP26	1603160-003A	03/16/16	N	
160-16599-1	WG	MW-225-VP27	MW-225-VP27	1603175-001A	03/17/16	N	
160-16599-1	WG	MW-225-VP29	MW-225-VP29	1603175-002A	03/17/16	N	
160-16599-1	WG	MW-225-VP31	MW-225-VP31	1603175-003A	03/17/16	N	
160-16599-1	WG	MW-225-VP33	MW-225-VP33	1603175-004A	03/17/16	N	
160-16596-1	WG	MW-222-VP41	MW-222-VP41	1603176-001A	03/18/16	N	
160-16601-1	WG	MW-222-VP43	MW-222-VP43	1603180-001A	03/18/16	N	
160-16611-1	WG	MW-225-VP37	MW-225-VP37	1603190-001A	03/21/16	N	
160-16613-1	WG	MW-225-VP39	MW-225-VP39	1603193-001A	03/21/16	N	
160-16631-1	WG	MW-222-VP45	MW-222-VP45	1603204-001A	03/21/16	N	
160-16631-1	WG	MW-222-VP48	MW-222-VP48	1603204-002A	03/21/16	N	
160-16631-1	WG	MW-225-VP41	MW-225-VP41	1603204-003A	03/22/16	N	
160-16632-1	WG	MW-222-VP49	MW-222-VP49	1603208-001A	03/22/16	N	

SDG	Matrix	Test Method	Prep Method	Number of Samples	Sample Type
160-15639-1	WG	SW8260C	SW5030C	5	N
160-15664-1	WG	SW8260C	SW5030C	1	FD
160-15664-1	WG	SW8260C	SW5030C	3	N
160-15675-1	WG	SW8260C	SW5030C	2	N
160-15676-1	WG	SW8260C	SW5030C	1	EB
160-15703-1	WG	SW8260C	SW5030C	3	N
160-15703-1	WG	SW8260C	SW5030C	1	FD
160-15704-1	WQ	SW8260C	SW5030C	1	RB
160-15711-1	WG	SW8260C	SW5030C	2	N
160-15726-1	WG	SW8260C	SW5030C	2	N
160-15776-1	WG	SW8260C	SW5030C	1	N
160-16085-1	WG	SW8260C	SW5030C	1	N
160-16189-1	WG	SW8260C	SW5030C	1	N
160-16190-1	WG	SW8260C	SW5030C	6	N
160-16190-1	WG	SW8260C	SW5030C	1	FD
160-16190-1	WQ	SW8260C	SW5030C	1	RB

SDG	Matrix	Test Method	Prep Method	Number of Samples	Sample Type
160-16194-1	WG	SW8260C	SW5030C	3	N
160-16194-1	WG	SW8260C	SW5030C	1	FD
160-16253-1	WG	SW8260C	SW5030C	5	N
160-16253-1	WG	SW8260C	SW5030C	1	FD
160-16254-1	WG	SW8260C	SW5030C	1	N
160-16255-1	WG	SW8260C	SW5030C	3	N
160-16256-1	WG	SW8260C	SW5030C	3	N
160-16256-1	WC	SW8260C	SW5030C	2	EB
160-16263-1	WG	SW8260C	SW5030C	3	N
160-16263-1	WG	SW8260C	SW5030C	1	FD
160-16269-1	WG	SW8260C	SW5030C	1	N
160-16317-1	WQ	SW8260C	SW5030C	1	RB
160-16317-1	WG	SW8260C	SW5030C	2	N
160-16305-1	WG	SW8260C	SW5030C	1	N
160-16330-1	WG	SW8260C	SW5030C	2	N
160-16354-1	WG	SW8260C	SW5030C	2	N
160-16357-1	WG	SW8260C	SW5030C	3	N
160-16400-1	WG	SW8260C	SW5030C	2	N
160-16446-1	WG	SW8260C	SW5030C	8	N
160-16446-1	WG	SW8260C	SW5030C	1	FD
160-16466-1	WG	SW8260C	SW5030C	2	N
160-16466-1	WG	SW8260C	SW5030C	1	FD
160-16486-1	WG	SW8260C	SW5030C	2	N
160-16486-1	WC	SW8260C	SW5030C	1	EB
160-16486-1	WQ	SW8260C	SW5030C	1	RB
160-16487-1	WG	SW8260C	SW5030C	2	N
160-16520-1	WG	SW8260C	SW5030C	4	N
160-16520-1	WG	SW8260C	SW5030C	1	FD
160-16566-1	WG	SW8260C	SW5030C	4	N
160-16566-1	WC	SW8260C	SW5030C	1	EB
160-16566-1	WQ	SW8260C	SW5030C	1	RB
160-16566-1	WG	SW8260C	SW5030C	1	FD
160-16565-1	WG	SW8260C	SW5030C	2	N
160-16594-1	WG	SW8260C	SW5030C	2	N
160-16593-1	WG	SW8260C	SW5030C	3	N
160-16599-1	WG	SW8260C	SW5030C	4	N
160-16596-1	WG	SW8260C	SW5030C	1	N
160-16601-1	WG	SW8260C	SW5030C	1	N
160-16611-1	WG	SW8260C	SW5030C	1	N
160-16613-1	WG	SW8260C	SW5030C	1	N
160-16631-1	WG	SW8260C	SW5030C	3	N
160-16632-1	WG	SW8260C	SW5030C	1	N

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed except that custody seals were not present on the coolers containing samples associated with the following sample delivery groups: 160-15675-1 and 1650-16269-1. The sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

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2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process. As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. Methylene chloride and acetone were detected in most of the method blanks as noted on Table 2. These analytes are common laboratory contaminants. Most of the sample results were less than 10X the blank detection and were qualified "U" as not detected as noted on Table 2A. If the sample result was greater was less than the PQL, the MDL was elevated to the sample result. If the sample result was greater than the PQL, then the PQL was elevated to the sample result.

The water used during drilling was analyzed for volatiles. Bromoform, dibromochloromethane, and toluene were common detections in the water. Bromoform and dibromochloromethane are common trihalomethanes formed from the chlorination of public drinking water. Tert-butyl methyl ether was detected in sample DW-222 below the PQL.

Tert-butyl methyl ether and toluene were detected in several samples.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the effects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a

laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD) between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. The results in the parent sample was qualified J as estimated for spike recoveries that were outside of acceptance criteria. If the spike was recovered low and the result was non-detect in the parent sample, then the result was qualified UJ as estimated non-detect. No qualification of the data was made when the native sample concentration was greater than 4X the spiking concentration or if the spike recovery was high and the sample result was non-detect. For sample MW-222-VP36, the MS recovery for chloroethane was within acceptance limits and the MSD recovery was 0%; therefore, the RPD also was outside acceptance limits (it appears that the sample was not spiked for this compound). The chloroethane sample result for sample MW-222-VP36 was qualified with UJ as estimated non-detect.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

Several samples were diluted due to analytes exceeding the calibration curve for volatiles analysis as presented in Table 6. Only the analyte exceeding the calibration curve was reported from the dilution.

Several compounds (1,2-DIBROMO-3-CHLOROPROPANE, 2-BUTANONE, ACETONE, BROMOFORM, DIBROMOCHLOROMETHANE, DICHLORODIFLUOROMETHANE, METHYL TERT-BUTYL ETHER, and METHYLENE CHLORIDE) exhibited a % D greater than 20% in the calibration in several analytical batches. Since these are not compounds of concern for this work, the results were reported with J qualification as estimated (UJ for estimated nondetect).

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgment was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were collected for an overall project frequency of 10%: 10 field duplicates per 98 samples. The RPD ratings are listed on Table 7 as “Good” if the RPD is less than 40% and as “Poor” if the RPD exceeded 40%. Field duplicate results with “Poor” are

flagged “J” as estimated. No qualification of the data was made for analytes exhibiting poor precision where at least one of the sample results was less than the PQL. The sample results for acetone and methylene chloride were qualified U as non-detect due to method blank contamination.

1,1-DICHLOROETHANE and TETRACHLOROETHENE were qualified with J in the field duplicate sample pair MW-224-VP22/MW-224-VP901 due to poor precision.

Table 2 - List of Positive Results for Blank Samples

Method	SDG	Sample Name	Matrix	Analyte	Result	Qualifier	Units	MDL	QL
SW8260C	160-15639-1	MB-7735	LB	ACETONE	1.8	J*	UG/L	1.0	4.0
SW8260C	160-15639-1	MB-7735	LB	METHYLENE CHLORIDE	4.8	*	UG/L	0.50	2.0
SW8260C	160-15639-1	MB-7747	LB	ACETONE	2.1	J*	UG/L	1.0	4.0
SW8260C	160-15639-1	MB-7747	LB	METHYLENE CHLORIDE	4.3	*	UG/L	0.50	2.0
SW8260C	160-15675-1	MB-7767	LB	ACETONE	1.7	J*	UG/L	1.0	4.0
SW8260C	160-15675-1	MB-7767	LB	METHYLENE CHLORIDE	2.9	*	UG/L	0.50	2.0
SW8260C	160-15703-1	MB-7784	LB	ACETONE	1.3	J*	UG/L	1.0	4.0
SW8260C	160-15703-1	MB-7784	LB	METHYLENE CHLORIDE	2.9	*	UG/L	0.50	2.0
SW8260C	160-15711-1	MB-7791	LB	ACETONE	2.3	J*	UG/L	1.0	4.0
SW8260C	160-15711-1	MB-7791	LB	METHYLENE CHLORIDE	4.2	*	UG/L	0.50	2.0
SW8260C	160-15726-1	MB-7818	LB	ACETONE	2.6	J*	UG/L	1.0	4.0
SW8260C	160-15726-1	MB-7818	LB	METHYLENE CHLORIDE	4.7	*	UG/L	0.50	2.0
SW8260C	160-15776-1	MB-7848	LB	ACETONE	2.2	J*	UG/L	1.0	4.0
SW8260C	160-15776-1	MB-7848	LB	METHYLENE CHLORIDE	4.4	*	UG/L	0.50	2.0
SW8260C	160-16085-1	MB-8107	LB	ACETONE	1.4	J*	UG/L	1.0	4.0
SW8260C	160-16085-1	MB-8107	LB	METHYLENE CHLORIDE	3.7	*	UG/L	0.50	2.0
SW8260C	160-16189-1	MB-8204	LB	ACETONE	1.4	J	UG/L	1.0	4.0
SW8260C	160-16189-1	MB-8204	LB	METHYLENE CHLORIDE	3.5		UG/L	0.50	2.0
SW8260C	160-16194-1	MB-8224	LB	ACETONE	4.5		UG/L	1.0	4.0
SW8260C	160-16194-1	MB-8224	LB	METHYLENE CHLORIDE	5.2		UG/L	0.50	2.0
SW8260C	160-16253-1	MB-8266	LB	ACETONE	1.5	J	UG/L	1.0	4.0
SW8260C	160-16253-1	MB-8266	LB	METHYLENE CHLORIDE	4.1		UG/L	0.50	2.0
SW8260C	160-16253-1	MB-8275	LB	ACETONE	2.3	J	UG/L	1.0	4.0
SW8260C	160-16253-1	MB-8275	LB	METHYLENE CHLORIDE	6.7		UG/L	0.50	2.0
SW8260C	160-16254-1	MB-8259	LB	ACETONE	1.7	J	UG/L	1.0	4.0
SW8260C	160-16254-1	MB-8259	LB	METHYLENE CHLORIDE	3.7		UG/L	0.50	2.0
SW8260C	160-16256-1	MB-8247	LB	ACETONE	2.1	J	UG/L	1.0	4.0

Method	SDG	Sample Name	Matrix	Analyte	Result	Qualifier	Units	MDL	QL
SW8260C	160-16256-1	MB-8247	LB	METHYLENE CHLORIDE	4.5		UG/L	0.50	2.0
SW8260C	160-16269-1	MB-8273	LB	ACETONE	1.2	J	UG/L	1.0	4.0
SW8260C	160-16269-1	MB-8273	LB	METHYLENE CHLORIDE	3.7		UG/L	0.50	2.0
SW8260C	160-16317-1	MB-8291	LB	ACETONE	1.8	J	UG/L	1.0	4.0
SW8260C	160-16317-1	MB-8291	LB	METHYLENE CHLORIDE	6.9		UG/L	0.50	2.0
SW8260C	160-16305-1	MB-8296	LB	ACETONE	2.2	J	UG/L	1.0	4.0
SW8260C	160-16305-1	MB-8296	LB	METHYLENE CHLORIDE	7.6		UG/L	0.50	2.0
SW8260C	160-16330-1	MB-8301	LB	ACETONE	3.2	J	UG/L	1.0	4.0
SW8260C	160-16330-1	MB-8301	LB	METHYLENE CHLORIDE	6.4		UG/L	0.50	2.0
SW8260C	160-16354-1	MB-8321	LB	ACETONE	3.7	J	UG/L	1.0	4.0
SW8260C	160-16354-1	MB-8321	LB	METHYLENE CHLORIDE	7.0		UG/L	0.50	2.0
SW8260C	160-16357-1	MB-8334	LB	ACETONE	1.7	J	UG/L	1.0	4.0
SW8260C	160-16357-1	MB-8334	LB	METHYLENE CHLORIDE	5.3		UG/L	0.50	2.0
SW8260C	160-16446-1	MB-8382	LB	ACETONE	2.8	J	UG/L	1.0	4.0
SW8260C	160-16446-1	MB-8382	LB	METHYLENE CHLORIDE	5.1		UG/L	0.50	2.0
SW8260C	160-16466-1	MB-8403	LB	ACETONE	1.5	J	UG/L	1.0	4.0
SW8260C	160-16466-1	MB-8403	LB	METHYLENE CHLORIDE	3.2		UG/L	0.50	2.0
SW8260C	160-16486-1	MB-8422	LB	ACETONE	2.4	J	UG/L	1.0	4.0
SW8260C	160-16486-1	MB-8422	LB	METHYLENE CHLORIDE	5.0		UG/L	0.50	2.0
SW8260C	160-16476-1	MB-8450	LB	ACETONE	2.2	J	UG/L	1.0	4.0
SW8260C	160-16476-1	MB-8450	LB	METHYLENE CHLORIDE	5.3		UG/L	0.50	2.0
SW8260C	160-16566-1	MB-8478	LB	ACETONE	2.3	J	UG/L	1.0	4.0
SW8260C	160-16566-1	MB-8478	LB	METHYLENE CHLORIDE	6.9		UG/L	0.50	2.0
SW8260C	160-16565-1	MB-8479	LB	ACETONE	3.5	J	UG/L	1.0	4.0
SW8260C	160-16565-1	MB-8479	LB	METHYLENE CHLORIDE	7.7		UG/L	0.50	2.0
SW8260C	160-16565-1	MB-8514	LB	ACETONE	2.2	J	UG/L	1.0	4.0
SW8260C	160-16565-1	MB-8514	LB	METHYLENE CHLORIDE	6.3		UG/L	0.50	2.0
SW8260C	160-16601-1	MB-8532	LB	ACETONE	2.1	J	UG/L	1.0	4.0

Method	SDG	Sample Name	Matrix	Analyte	Result	Qualifier	Units	MDL	QL
SW8260C	160-16601-1	MB-8532	LB	METHYLENE CHLORIDE	7.2		UG/L	0.50	2.0
SW8260C	160-16601-1	MB-8543	LB	ACETONE	2.1	J	UG/L	1.0	4.0
SW8260C	160-16601-1	MB-8543	LB	METHYLENE CHLORIDE	4.7		UG/L	0.50	2.0

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-223-VP17	WG	Acetone	2.4	BJ*	ug/l	1.0	4.0	UJ Flag
SW8260C	MW-223-VP17	WG	METHYLENE CHLORIDE	3.9	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP19	WG	Acetone	2.0	BJ*	ug/l	1.0	4.0	UJ Flag
SW8260C	MW-223-VP19	WG	METHYLENE CHLORIDE	3.5	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP20	WG	Acetone	1.8	BJ*	ug/l	1.0	4.0	UJ Flag
SW8260C	MW-223-VP20	WG	METHYLENE CHLORIDE	3.3	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP22	WG	Acetone	2.1	BJ*	ug/l	1.0	4.0	UJ Flag
SW8260C	MW-223-VP22	WG	METHYLENE CHLORIDE	4.0	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP24	WG	ACETONE	1.6	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP24	WG	METHYLENE CHLORIDE	3.4	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP26	WG	ACETONE	1.9	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP26	WG	METHYLENE CHLORIDE	4.6	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP28	WG	ACETONE	2.4	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP28	WG	METHYLENE CHLORIDE	4.4	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP30	WG	ACETONE	2.2	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP30	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP900	WG	ACETONE	1.8	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP900	WG	METHYLENE CHLORIDE	4.5	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP32	WG	ACETONE	8.5	B*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP32	WG	METHYLENE CHLORIDE	2.7	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP35	WG	ACETONE	2.0	BJ*	UG/L	1.0	4.0	UJ Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-223-VP35	WG	METHYLENE CHLORIDE	3.2	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	DW-223	WC	ACETONE	1.7	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	DW-223	WC	METHYLENE CHLORIDE	2.7	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP36	WG	ACETONE	1.1	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP36	WG	METHYLENE CHLORIDE	2.8	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP38	WG	ACETONE	1.4	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP38	WG	METHYLENE CHLORIDE	2.8	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP40	WG	ACETONE	2.6	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP40	WG	METHYLENE CHLORIDE	2.9	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP901	WG	ACETONE	1.5	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP901	WG	METHYLENE CHLORIDE	3.0	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	RB-MW223	WQ	ACETONE	1.7	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	RB-MW223	WQ	METHYLENE CHLORIDE	2.7	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP42	WG	ACETONE	3.3	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP42	WG	METHYLENE CHLORIDE	3.7	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP44	WG	ACETONE	3.0	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP44	WG	METHYLENE CHLORIDE	4.0	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP48	WG	ACETONE	2.3	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP48	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP50	WG	ACETONE	2.9	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP50	WG	METHYLENE CHLORIDE	5.6	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP53	WG	ACETONE	1.9	BJ*	UG/L	1.0	4.0	UJ Flag
SW8260C	MW-223-VP53	WG	METHYLENE CHLORIDE	4.4	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-223-VP55	WG	METHYLENE CHLORIDE	3.0	B*	UG/L	0.50	2.0	UJ Flag
SW8260C	MW-224-VP17	WG	ACETONE	1.5	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP17	WG	METHYLENE CHLORIDE	2.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP04	WG	ACETONE	1.1	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP04	WG	METHYLENE CHLORIDE	2.8	B	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-224-VP06	WG	ACETONE	1.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP06	WG	METHYLENE CHLORIDE	3.0	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP08	WG	ACETONE	1.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP08	WG	METHYLENE CHLORIDE	2.9	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP10	WG	ACETONE	1.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP10	WG	METHYLENE CHLORIDE	3.0	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP12	WG	ACETONE	1.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP12	WG	METHYLENE CHLORIDE	3.0	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP14	WG	ACETONE	1.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP14	WG	METHYLENE CHLORIDE	2.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP900	WG	ACETONE	1.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP900	WG	METHYLENE CHLORIDE	3.3	B	UG/L	0.50	2.0	U Flag
SW8260C	RB-MW224	WQ	ACETONE	1.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	RB-MW224	WQ	METHYLENE CHLORIDE	2.9	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP20	WG	ACETONE	2.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP20	WG	METHYLENE CHLORIDE	4.4	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP22	WG	ACETONE	3.1	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP22	WG	METHYLENE CHLORIDE	4.3	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP901	WG	ACETONE	2.2	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP901	WG	METHYLENE CHLORIDE	4.1	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP19	WG	ACETONE	3.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP19	WG	METHYLENE CHLORIDE	4.1	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP19	WG	ACETONE	1.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP19	WG	METHYLENE CHLORIDE	3.4	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP20	WG	ACETONE	1.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP20	WG	METHYLENE CHLORIDE	3.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP22	WG	ACETONE	1.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP22	WG	METHYLENE CHLORIDE	3.2	B	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-221-VP900	WG	ACETONE	1.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP900	WG	METHYLENE CHLORIDE	3.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP27	WG	METHYLENE CHLORIDE	3.0	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP28	WG	ACETONE	1.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP28	WG	METHYLENE CHLORIDE	3.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP25	WG	ACETONE	2.2	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP25	WG	METHYLENE CHLORIDE	4.5	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP12	WG	ACETONE	13	B	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP12	WG	METHYLENE CHLORIDE	3.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP15	WG	ACETONE	1.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP15	WG	METHYLENE CHLORIDE	3.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP16	WG	ACETONE	2.1	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP16	WG	METHYLENE CHLORIDE	4.0	B	UG/L	0.50	2.0	U Flag
SW8260C	DW-221	WG	ACETONE	1.9	BJ	UG/L	1.0	4.0	U Flag
SW8260C	DW-221	WG	METHYLENE CHLORIDE	4.1	B	UG/L	0.50	2.0	U Flag
SW8260C	DW-224	WG	ACETONE	2.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	DW-224	WG	METHYLENE CHLORIDE	4.3	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP06	WG	ACETONE	2.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP06	WG	METHYLENE CHLORIDE	4.0	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP08	WG	ACETONE	2.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP08	WG	METHYLENE CHLORIDE	4.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP10	WG	ACETONE	3.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP10	WG	METHYLENE CHLORIDE	4.3	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP24	WG	ACETONE	1.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP24	WG	METHYLENE CHLORIDE	3.3	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP26	WG	ACETONE	1.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP26	WG	METHYLENE CHLORIDE	3.4	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP28	WG	ACETONE	1.2	BJ	UG/L	1.0	4.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-221-VP28	WG	METHYLENE CHLORIDE	3.5	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP901	WG	ACETONE	1.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP901	WG	METHYLENE CHLORIDE	3.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP30	WG	ACETONE	3.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP30	WG	METHYLENE CHLORIDE	5.4	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP32	WG	ACETONE	3.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP32	WG	METHYLENE CHLORIDE	6.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP31	WG	ACETONE	3.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP31	WG	METHYLENE CHLORIDE	3.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP32	WG	ACETONE	1.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP32	WG	METHYLENE CHLORIDE	6.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP35	WG	ACETONE	2.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP35	WG	METHYLENE CHLORIDE	6.7	B	UG/L	0.50	2.0	U Flag
SW8260C	RB-MW221	WG	ACETONE	2.5	BJ	UG/L	1.0	4.0	U Flag
SW8260C	RB-MW221	WG	METHYLENE CHLORIDE	6.4	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-224-VP36	WG	ACETONE	3.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-224-VP36	WG	METHYLENE CHLORIDE	7.5	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP34	WG	ACETONE	3.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP34	WG	METHYLENE CHLORIDE	6.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP36	WG	ACETONE	4.8	B	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP36	WG	METHYLENE CHLORIDE	7.0	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP38	WG	ACETONE	2.1	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP38	WG	METHYLENE CHLORIDE	5.0	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP40	WG	ACETONE	1.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP40	WG	METHYLENE CHLORIDE	4.5	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP42	WG	ACETONE	1.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP42	WG	METHYLENE CHLORIDE	4.3	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP44	WG	ACETONE	4.4	B	UG/L	1.0	4.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-221-VP44	WG	METHYLENE CHLORIDE	4.1	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-221-VP46	WG	ACETONE	1.9	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-221-VP46	WG	METHYLENE CHLORIDE	4.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP900	WG	ACETONE	2.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP900	WG	METHYLENE CHLORIDE	4.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP05	WG	ACETONE	2.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP05	WG	METHYLENE CHLORIDE	4.7	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP07	WG	ACETONE	2.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP07	WG	METHYLENE CHLORIDE	4.9	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP09	WG	ACETONE	2.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP09	WG	METHYLENE CHLORIDE	4.7	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP11	WG	ACETONE	2.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP11	WG	METHYLENE CHLORIDE	4.7	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP13	WG	ACETONE	2.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP13	WG	METHYLENE CHLORIDE	4.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP15	WG	ACETONE	2.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP15	WG	METHYLENE CHLORIDE	4.7	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP17	WG	ACETONE	2.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP17	WG	METHYLENE CHLORIDE	4.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP19	WG	ACETONE	2.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP19	WG	METHYLENE CHLORIDE	4.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP901	WG	ACETONE	2.2	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP901	WG	METHYLENE CHLORIDE	3.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP23	WG	ACETONE	2.1	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP23	WG	METHYLENE CHLORIDE	4.1	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP21	WG	ACETONE	2.2	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP21	WG	METHYLENE CHLORIDE	4.1	B	UG/L	0.50	2.0	U Flag
SW8260C	DW-222	WG	ACETONE	2.5	BJ	UG/L	1.0	4.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	DW-222	WG	METHYLENE CHLORIDE	5.3	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP26	WG	ACETONE	2.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP26	WG	METHYLENE CHLORIDE	5.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP27	WG	ACETONE	2.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP27	WG	METHYLENE CHLORIDE	5.8	B	UG/L	0.50	2.0	U Flag
SW8260C	RB-MW222	WG	ACETONE	3.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	RB-MW222	WG	METHYLENE CHLORIDE	5.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP29	WG	ACETONE	2.5	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP29	WG	METHYLENE CHLORIDE	5.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP31	WG	ACETONE	2.1	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP31	WG	METHYLENE CHLORIDE	5.7	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP03	WG	ACETONE	1.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP03	WG	METHYLENE CHLORIDE	4.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP05	WG	ACETONE	2.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP05	WG	METHYLENE CHLORIDE	4.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP07	WG	ACETONE	1.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP07	WG	METHYLENE CHLORIDE	4.5	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP09	WG	ACETONE	2.2	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP09	WG	METHYLENE CHLORIDE	4.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP900	WG	ACETONE	2.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP900	WG	METHYLENE CHLORIDE	4.4	B	UG/L	0.50	2.0	U Flag
SW8260C	DW-225	WC	ACETONE	2.1	BJ	UG/L	1.0	4.0	U Flag
SW8260C	DW-225	WC	METHYLENE CHLORIDE	4.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP11	WG	ACETONE	1.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP11	WG	METHYLENE CHLORIDE	4.9	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP13	WG	METHYLENE CHLORIDE	4.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP15	WG	ACETONE	2.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP15	WG	METHYLENE CHLORIDE	4.8	B	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-225-VP17	WG	ACETONE	2.5	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP17	WG	METHYLENE CHLORIDE	5.1	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP901	WG	ACETONE	2.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP901	WG	METHYLENE CHLORIDE	5.2	B	UG/L	0.50	2.0	U Flag
SW8260C	RB-MW225	WQ	ACETONE	1.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	RB-MW225	WQ	METHYLENE CHLORIDE	4.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP34	WG	ACETONE	3.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP34	WG	METHYLENE CHLORIDE	6.3	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP36	WG	ACETONE	2.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP36	WG	METHYLENE CHLORIDE	5.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP37	WG	ACETONE	2.1	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP37	WG	METHYLENE CHLORIDE	5.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP39	WG	ACETONE	2.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP39	WG	METHYLENE CHLORIDE	5.1	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP22	WG	ACETONE	2.3	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP22	WG	METHYLENE CHLORIDE	5.1	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP23	WG	ACETONE	2.0	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP23	WG	METHYLENE CHLORIDE	5.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP26	WG	ACETONE	1.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP26	WG	METHYLENE CHLORIDE	4.9	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP27	WG	ACETONE	1.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP27	WG	METHYLENE CHLORIDE	4.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP29	WG	ACETONE	1.7	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP29	WG	METHYLENE CHLORIDE	4.9	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP31	WG	ACETONE	3.5	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP31	WG	METHYLENE CHLORIDE	4.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP33	WG	ACETONE	3.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP33	WG	METHYLENE CHLORIDE	5.1	B	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-222-VP41	WG	ACETONE	7.7	B	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP41	WG	METHYLENE CHLORIDE	5.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP43	WG	ACETONE	2.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP43	WG	METHYLENE CHLORIDE	5.1	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP37	WG	ACETONE	1.8	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP37	WG	METHYLENE CHLORIDE	7.3	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP39	WG	ACETONE	2.5	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP39	WG	METHYLENE CHLORIDE	7.6	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP45	WG	ACETONE	2.4	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP45	WG	METHYLENE CHLORIDE	4.5	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP48	WG	ACETONE	2.2	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP48	WG	METHYLENE CHLORIDE	3.8	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-225-VP41	WG	ACETONE	3.2	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-225-VP41	WG	METHYLENE CHLORIDE	4.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-222-VP49	WG	ACETONE	2.6	BJ	UG/L	1.0	4.0	U Flag
SW8260C	MW-222-VP49	WG	METHYLENE CHLORIDE	4.1	B	UG/L	0.50	2.0	U Flag

Table 2B - List of Samples Qualified for Field Blank Contamination

None

Table 3 - List of Samples with Surrogates outside Control Limits

None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Parent Sample	Analyte	Dil Fac	Unit	Low Limit	High Limit	MS	Qualifier	MSD
SW8260C	MW-222-VP36	CHLOROETHANE	1	UG/L	46	146	82.2	J/UJ	0

Method	Parent Sample	Analyte	Dil Fac	Unit	RPD	RPD Limit	Qualifier	Sample Type
SW8260C	MW-222-VP36	CHLOROETHANE	1	UG/L	200	20	J/UJ	N

Table 5 - List LCS Recoveries outside Control Limits

None

Table 6 –Samples that were Re-analyzed

SDG	Matrix	Analytical Method	Sample Name	Sample Type	Detected	Number of Analytes	Dil Fac	Comments
160-16253-1	WG	SW8260C	MW-221-VP22	N	Y	1	10	Dilute to bring Cis-1,2-Dichloroethylene within the calibration range. Only Cis-1,2-Dichloroethylene reported from dilution.
160-16253-1	WG	SW8260C	MW-224-VP27	N	Y	1	100	Dilute to bring tetrachloroethene (PCE) within the calibration range. Only PCE reported from dilution.
160-16253-1	WG	SW8260C	MW-224-VP28	N	Y	1	100	Dilute to bring tetrachloroethene (PCE) within the calibration range. Only PCE reported from dilution.
160-16254-1	WG	SW8260C	MW-224-VP25	N	Y	2	10	Dilute to bring tetrachloroethene (PCE) and CIS-1,2-DICHLOROETHENE within the calibration range. Only PCE and CIS-1,2-DICHLOROETHENE reported from dilution.
160-16263-1	WG	SW8260C	MW-221-VP26	N	Y	1	10	Dilute to bring tetrachloroethene (PCE) within the calibration range. Only PCE reported from dilution.
160-16263-1	WG	SW8260C	MW-221-VP901	FD	Y	2	10	Dilute to bring tetrachloroethene (PCE) and CIS-1,2-DICHLOROETHENE within the calibration

SDG	Matrix	Analytical Method	Sample Name	Sample Type	Detected	Number of Analytes	Dil Fac	Comments
								range. Only PCE and CIS-1,2-DICHLOROETHENE reported from dilution.
160-16269-1	WG	SW8260C	MW-224-VP31	N	Y	1	10	Dilute to bring tetrachloroethene (PCE) within the calibration range. Only PCE reported from dilution.
160-16317-1	WG	SW8260C	MW-224-VP32	N	Y	1	10	Dilute to bring tetrachloroethene (PCE) within the calibration range. Only PCE reported from dilution.
160-16317-1	WG	SW8260C	MW-224-VP35	N	Y	1	10	Dilute to bring tetrachloroethene (PCE) within the calibration range. Only PCE reported from dilution.
160-16487-1	WG	SW8260C	MW-222-VP31	N	Y	1	10	Dilute to bring CIS-1,2-DICHLOROETHENE within the calibration range. Only CIS-1,2-DICHLOROETHENE reported from dilution.
160-16565-1	WG	SW8260C	MW-222-VP34	N	Y	1	10	Dilute to bring TRICHLOROETHENE (TCE) within the calibration range. Only TCE reported from dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-223-VP26	MW-223-VP900	RPD	RPD Rating	Sample Qual
SW8260C	1,1-DICHLOROETHANE	UG/L	WG	2.0	TRG	1.1	0.97	12.6%	Good	None
SW8260C	TETRACHLOROETHENE	UG/L	WG	2.0	TRG	0.65	0.51	24.1%	Good	None
SW8260C	TOLUENE	UG/L	WG	1.0	TRG	ND	0.50	NC	--	None < PQL
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	TRG	21	19	10.0%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-223-VP38	MW-223-VP901	RPD	RPD Rating	Sample Qual
SW8260C	TOLUENE	UG/L	WG	1.0	TRG	3.3	3.2	3.1%	Good	None
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	TRG	2.8	2.9	3.5%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-224-VP08	MW-224-VP900	RPD	RPD Rating	Sample Qual
SW8260C	(All results = Nondetect; no qualifiers required.)									

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-224-VP22	MW-224-VP901	RPD	RPD Rating	Sample Qual
SW8260C	1,1,1-TRICHLOROETHANE	UG/L	WG	2.0	TRG	21	15	33.3%	Good	None
SW8260C	1,1,2-TRICHLOROETHANE	UG/L	WG	2.0	TRG	0.60	ND	NC	--	None < PQL
SW8260C	1,1-DICHLOROETHANE	UG/L	WG	2.0	TRG	6.9	3.4	68.0%	Poor	J Flag
SW8260C	1,1-DICHLOROETHENE	UG/L	WG	2.0	TRG	32	24	28.6%	Good	None
SW8260C	BENZENE	UG/L	WG	2.0	TRG	3.8	ND	NC	--	None < PQL
SW8260C	CIS-1,2-DICHLOROETHENE	UG/L	WG	2.0	TRG	1.4	ND	NC	--	None < PQL
SW8260C	METHYL TERT-BUTYL ETHER	UG/L	WG	2.0	TRG	1.1	5.6	134.3%	Poor	None < PQL
SW8260C	TETRACHLOROETHENE	UG/L	WG	2.0	TRG	55	2.6	181.9%	Poor	J Flag
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	TRG	1.3	ND	NC	--	None < PQL

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-221-VP20	MW-221-VP900	RPD	RPD Rating	Sample Qual
SW8260C	1,1,1-TRICHLOROETHANE	UG/L	WG	2.0	TRG	1.0	0.95	5.1%	Good	None
SW8260C	1,1-DICHLOROETHENE	UG/L	WG	2.0	TRG	1.9	1.7	11.1%	Good	None
SW8260C	1,2-DICHLOROBENZENE	UG/L	WG	2.0	TRG	2.2	2.0	9.5%	Good	None
SW8260C	CIS-1,2-DICHLOROETHENE	UG/L	WG	2.0	TRG	29	28	3.5%	Good	None
SW8260C	METHYLCYCLOHEXANE	UG/L	WG	2.0	TRG	3.4	2.5	30.5%	Good	None
SW8260C	TETRACHLOROETHENE	UG/L	WG	2.0	TRG	15	15	0.0%	Good	None
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	TRG	43	42	2.4%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-221-VP26	MW-221-VP901	RPD	RPD Rating	Sample Qual
SW8260C	1,1,1-TRICHLOROETHANE	UG/L	WG	2.0	TRG	0.66	0.70	5.9%	Good	None
SW8260C	1,1-DICHLOROETHANE	UG/L	WG	2.0	TRG	0.83	0.88	5.8%	Good	None
SW8260C	1,1-DICHLOROETHENE	UG/L	WG	2.0	TRG	3.3	3.5	5.9%	Good	None
SW8260C	1,2-DICHLOROBENZENE	UG/L	WG	2.0	TRG	23	23	0.0%	Good	None
SW8260C	CIS-1,2-DICHLOROETHENE	UG/L	WG	2.0	TRG	160	160	0.0%	Good	None
SW8260C	TETRACHLOROETHENE	UG/L	WG	20	TRG	190	190	0.0%	Good	None
SW8260C	TRANS-1,2-DICHLOROETHENE	UG/L	WG	2.0	TRG	ND	0.54	NC	--	None < PQL

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-221-VP26	MW-221-VP901	RPD	RPD Rating	Sample Qual
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	TRG	110	110	0.0%	Good	None
SW8260C	VINYL CHLORIDE	UG/L	WG	2.0	TRG	9.0	9.9	9.5%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-222-VP07	MW-222-VP900	RPD	RPD Rating	Sample Qual
SW8260C	Trichloroethylene (TCE)	ug/l	WG	2.0	TRG	1.8	1.7	5.7%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-222-VP23	MW-222-VP901	RPD	RPD Rating	Sample Qual
SW8260C	1,1-DICHLOROETHENE	UG/L	WG	2.0	TRG	1.7	1.8	5.7%	Good	None
SW8260C	1,2-DICHLOROBENZENE	UG/L	WG	2.0	TRG	19	20	5.1%	Good	None
SW8260C	1,4-DICHLOROBENZENE	UG/L	WG	2.0	TRG	0.57	0.61	6.8%	Good	None
SW8260C	CHLOROFORM	UG/L	WG	2.0	TRG	0.76	0.71	6.8%	Good	None
SW8260C	CIS-1,2-DICHLOROETHENE	UG/L	WG	2.0	TRG	27	26	3.8%	Good	None
SW8260C	TETRACHLOROETHENE	UG/L	WG	2.0	TRG	110	110	0.0%	Good	None
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	TRG	89	94	5.5%	Good	None
SW8260C	VINYL CHLORIDE	UG/L	WG	2.0	TRG	5.8	5.9	1.7%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-225-VP05	MW-225-VP900	RPD	RPD Rating	Sample Qual
SW8260C	1,1,1-TRICHLOROETHANE	UG/L	WG	2.0	TRG	0.51	0.54	5.7%	Good	None
SW8260C	1,1-DICHLOROETHENE	UG/L	WG	2.0	TRG	2.1	2.1	0.0%	Good	None
SW8260C	TETRACHLOROETHENE	UG/L	WG	2.0	TRG	1.2	1.3	8.0%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-225-VP15	MW-225-VP901	RPD	RPD Rating	Sample Qual
SW8260C	(All results = Nondetect; no qualifiers required.)									

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte
NC = Not Calculated
ND = Not Detected
PQL = Practical Quantitation Limit
RPD = Relative Percent Difference
T = Tentatively Identified Compound

DATA REVIEW MEMORANDUM

DATE: February 27, 2015

TO: Daniel Kennedy, Project Manager, E & E, Buffalo

FROM: Lynne Kalmbach, Chemist, E & E, Buffalo
Joanna Christopher, Senior Radiation Scientist, E & E, Buffalo

SUBJ: Data Review - Sylvania Vertical Profile Sampling

REFERENCE:

I. SAMPLE IDENTIFICATION

For the sampling activities for the Sylvania Vertical Profile Sampling project, Ecology and Environment, Inc. (E & E) collected the samples listed on Table 1. The samples were analyzed for methods listed below. Matrix spike/matrix spike duplicates (MS/MSD) were designated in the field. Trip blanks were not included; however, rinsate blanks were included for each vertical profile boring. The samples for volatile organic analysis (VOA) were sent to American Analytical Laboratories, Farmingdale, NY for analysis, and the samples for total uranium was sent to GEL, Charleston, SC. All other tables are included at the end of this memorandum.

Data were reviewed for field and laboratory precision, accuracy, and completeness in accordance with procedures and quality control (QC) limits. Laboratory data qualifiers for compound identification and quantitation were accepted. Any additional data review qualifiers added are noted below and listed on the tables at the end of this memorandum. Definitions of all data qualifiers are given in the report.

Table 1 Sample Listing

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-8223-1	WG	MW-215-VP17	MW-215-VP17	1409031-001A	9/5/2014	N	
160-8269-1	WG	MW-215-VP20	MW-215-VP20	1409043-001A	9/8/2014	N	
160-8269-1	WG	MW-215-VP22	MW-215-VP22	1409043-002A	9/8/2014	N	
160-8269-1	WG	MW-215-VP24	MW-215-VP24	1409043-004A	9/8/2014	N	
160-8269-1	WG	MW-215-VP900	MW-215-VP900	1409043-003A	9/8/2014	FD	
160-8269-1	WQ	1409043-004AMS-2239	1409043-004AMS-2239	1409043-004AMS	9/8/2014	MS	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-8269-1	WQ	1409043-004AMSD-2239	1409043-004AMSD-2239	1409043-004AMSD	9/8/2014	MSD	
160-8277-1	WG	MW-215-VP26	MW-215-VP26	1409050-001A	9/9/2014	N	
160-8277-1	WG	MW-215-VP28	MW-215-VP28	1409050-002A	9/9/2014	N	
160-8278-1	WG	MW-216-VP16	MW-216-VP16	1409051-001A	9/9/2014	N	
160-8311-1	WG	MW-216-VP18	MW-216-VP18	1409062-001A	9/10/2014	N	
160-8311-1	WG	MW-216-VP21	MW-216-VP21	1409062-002A	9/10/2014	N	
160-8311-1	WG	MW-216-VP23	MW-216-VP23	1409062-003A	9/10/2014	N	
160-8311-1	WG	MW-216-VP25	MW-216-VP25	1409062-004A	9/10/2014	N	
160-8312-1	WG	MW-215-VP32	MW-215-VP32	1409063-001A	9/10/2014	N	
160-8312-1	WG	MW-215-VP35	MW-215-VP35	1409063-002A	9/10/2014	N	
160-8312-1	WG	MW-215-VP36	MW-215-VP36	1409063-003A	9/10/2014	N	
160-8312-1	WQ	1409063-003AMS-2271	1409063-003AMS-2271	1409063-003AMS	9/10/2014	MS	
160-8312-1	WQ	1409063-003AMSD-2271	1409063-003AMSD-2271	1409063-003AMSD	9/10/2014	MSD	
160-8362-1	WG	MW-215-VP38	MW-215-VP38	1409070-002A	9/11/2014	N	
160-8362-1	WG	MW-215-VP40	MW-215-VP40	1409070-007A	9/11/2014	N	
160-8362-1	WG	MW-215-VP42	MW-215-VP42	1409070-010A	9/11/2014	N	
160-8362-1	WG	MW-215-VP901	MW-215-VP901	1409070-008A	9/11/2014	FD	
160-8362-1	WG	MW-216-VP27	MW-216-VP27	1409070-001A	9/11/2014	N	
160-8362-1	WG	MW-216-VP28	MW-216-VP28	1409070-003A	9/11/2014	N	
160-8362-1	WG	MW-216-VP30	MW-216-VP30	1409070-004A	9/11/2014	N	
160-8362-1	WG	MW-216-VP32	MW-216-VP32	1409070-009A	9/11/2014	N	
160-8362-1	WQ	1409070-005AMS-2289	1409070-005AMS-2289	1409070-005A	9/11/2014	MS	
160-8362-1	WQ	1409070-006AMSD-2289	1409070-006AMSD-2289	1409070-006A	9/11/2014	MSD	
160-8363-1	WG	MW-216-VP34	MW-216-VP34	1409079-001A	9/12/2014	N	
160-8363-1	WG	MW-216-VP36	MW-216-VP36	1409079-002A	9/12/2014	N	
160-8373-1	WG	MW-215-VP47	MW-215-VP47	1409090-001A	9/15/2014	N	
160-8373-1	WG	MW-215-VP50	MW-215-VP50	1409090-002A	9/15/2014	N	
160-8374-1	WG	MW-216-VP38	MW-216-VP38	1409091-001A	9/15/2014	N	
160-8374-1	WG	MW-216-VP40	MW-216-VP40	1409091-003A	9/15/2014	N	
160-8374-1	WG	MW-216-VP42	MW-216-VP42	1409091-002A	9/15/2014	N	
160-8374-1	WQ	1409091-003AMS-2321	1409091-003AMS-2321	1409091-003AMS	9/15/2014	MS	
160-8374-1	WQ	1409091-	1409091-	1409091-	9/15/2014	MSD	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
		003AMSD-2321	003AMSD-2321	003AMSD			
160-8389-1	WG	MW-215-VP51	MW-215-VP51	1409106-002A	9/16/2014	N	
160-8389-1	WG	MW-215-VP52	MW-215-VP52	1409106-003A	9/16/2014	N	
160-8389-1	WG	MW-216-VP44	MW-216-VP44	1409106-001A	9/16/2014	N	
160-8389-1	WH	RB-01	RB-01	1409106-005A	9/16/2014	RB	
160-8411-1	WG	MW-215-VP55	MW-215-VP55	1409113-001A	9/17/2014	N	
160-8411-1	WG	MW-215-VP902	MW-215-VP902	1409113-002A	9/17/2014	FD	
160-8413-1	WG	MW-215-VP56	MW-215-VP56	1409116-001A	9/17/2014	N	
160-8413-1	WQ	1409116-002AMS-2336	1409116-002AMS-2336	1409116-002A	9/17/2014	MS	
160-8413-1	WQ	1409116-003AMSD-2336	1409116-003AMSD-2336	1409116-003A	9/17/2014	MSD	
160-8473-1	WG	MW-216-903	MW-216-903	1409151-002A	9/22/2014	FD	MW-216-VP903
160-8473-1	WG	MW-216-VP48	MW-216-VP48	1409151-001A	9/22/2014	N	
160-8473-1	WG	MW-216-VP50	MW-216-VP50	1409151-003A	9/22/2014	N	
160-8476-1	WH	RB-02	RB-02	1409158-001A	9/23/2014	RB	
160-8515-1	WG	MW-216-VP53	MW-216-VP53	1409172-001A	9/23/2014	N	
160-8516-1	WG	MW-216-VP54	MW-216-VP54	1409173-001A	9/24/2014	N	
160-8596-1	WG	MW-217-VP16	MW-217-VP16	1409200-001A	9/29/2014	N	
160-8596-1	WG	MW-217-VP18	MW-217-VP18	1409200-002A	9/29/2014	N	
160-8596-1	WG	MW-217-VP20	MW-217-VP20	1409200-004A	9/29/2014	N	
160-8596-1	WH	RB-03	RB-03	1409200-003A	9/29/2014	RB	
160-8617-1	WG	MW-217-VP23	MW-217-VP23	1410001-001A	9/30/2014	N	
160-8617-1	WG	MW-217-VP24	MW-217-VP24	1410001-002A	9/30/2014	N	
160-8617-1	WG	MW-217-VP26	MW-217-VP26	1410001-003A	9/30/2014	N	
160-8617-1	WG	MW-217-VP28	MW-217-VP28	1410001-004A	9/30/2014	N	
160-8626-1	WG	MW-217-VP31	MW-217-VP31	1410012-001A	10/1/2014	N	
160-8626-1	WG	MW-217-VP33	MW-217-VP33	1410012-002A	10/1/2014	N	
160-8626-1	WG	MW-217-VP34	MW-217-VP34	1410012-003A	10/1/2014	N	
160-8626-1	WG	MW-217-VP904	MW-217-VP904	1410012-004A	10/1/2014	FD	
160-8643-1	WG	MW-58-500	MW-58-500	160-8643-13	10/1/2014	FD	MW-58-VP500
160-8643-1	WG	MW-58-VP03	MW-58-VP03	160-8643-10	9/30/2014	N	
160-8643-1	WG	MW-58-VP04	MW-58-VP04	160-8643-11	10/1/2014	N	
160-8643-1	WG	MW-58-VP05	MW-58-VP05	160-8643-12	10/1/2014	N	
160-8643-1	WG	MW-58-VP06	MW-58-VP06	160-8643-14	10/1/2014	N	
160-8643-1	WQ	MW-58-	MW-58-	160-8643-11	10/1/2014	MS	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
		VP04MS	VP04MS				
160-8643-1	WQ	MW-58-VP04SD	MW-58-VP04SD	160-8643-11	10/1/2014	MSD	
160-8652-1	WG	MW-58-VP07	MW-58-VP07	160-8652-1	10/2/2014	N	
160-8652-1	WH	RB-04	RB-04	160-8652-2	10/2/2014	RB	
160-8652-1	WQ	MW-58-VP07MS	MW-58-VP07MS	160-8652-1	10/2/2014	MS	
160-8652-1	WQ	MW-58-VP07SD	MW-58-VP07SD	160-8652-1	10/2/2014	MSD	
160-8653-1	WG	MW-217-VP37	MW-217-VP37	1410023-001A	10/2/2014	N	
160-8653-1	WG	MW-217-VP39	MW-217-VP39	1410023-002A	10/2/2014	N	
160-8653-1	WG	MW-217-VP40	MW-217-VP40	1410023-003A	10/2/2014	N	
160-8690-1	WG	MW-217-VP42	MW-217-VP42	1410035-001A	10/3/2014	N	
160-8698-1	WG	MW-218-500	MW-218-500	358376010	10/6/2014	FD	
160-8698-1	WG	MW-218-VP02	MW-218-VP02	358376009	10/3/2014	N	
160-8698-1	WG	MW-218-VP04	MW-218-VP04	358376008	10/3/2014	N	
160-8698-1	WG	MW-218-VP06	MW-218-VP06	358376005	10/6/2014	N	
160-8698-1	WG	MW-218-VP08	MW-218-VP08	358376006	10/6/2014	N	
160-8698-1	WG	MW-218-VP10	MW-218-VP10	358376007	10/6/2014	N	
160-8698-1	WG	MW-218-VP12	MW-218-VP12	358376004	10/6/2014	N	
160-8698-1	WG	MW-218-VP14	MW-218-VP14	358376002	10/6/2014	N	
160-8698-1	WG	MW-218-VP16	MW-218-VP16	358376003	10/6/2014	N	
160-8698-1	WG	RB-05	RB-05	358376001	10/6/2014	RB	
160-8698-1	WQ	RB-05MS	RB-05MS	1203182573	10/6/2014	MS	
160-8698-1	WQ	RB-05SD	RB-05SD	1203182574	10/6/2014	MSD	
160-8708-1	WG	MW-217-VP44	MW-217-VP44	1410048-001A	10/6/2014	N	
160-8708-1	WG	MW-217-VP46	MW-217-VP46	1410048-002A	10/6/2014	N	
160-8745-1	WG	MW-217-VP48	MW-217-VP48	1410060-001A	10/7/2014	N	
160-8745-1	WG	MW-217-VP50	MW-217-VP50	1410060-003A	10/7/2014	N	
160-8745-1	WG	MW-217-VP905	MW-217-VP905	1410060-002A	10/7/2014	FD	
160-8797-1	WG	MW-217-VP52	MW-217-VP52	1410071-001A	10/8/2014	N	
160-8797-1	WQ	1410071-001AMS-2567	1410071-001AMS-2567	1410071-001AMS	10/8/2014	MS	
160-8797-1	WQ	1410071-001AMSD-2567	1410071-001AMSD-2567	1410071-001AMSD	10/8/2014	MSD	
160-8901-1	WG	MW-219-VP16	MW-219-VP16	1410122-001A	10/17/2014	N	
160-8936-1	WG	MW-219-VP18	MW-219-VP18	1410144-001A	10/20/2014	N	
160-8936-1	WG	MW-219-VP20	MW-219-VP20	1410144-002A	10/20/2014	N	
160-8936-1	WG	MW-219-VP22	MW-219-VP22	1410144-003A	10/20/2014	N	
160-8936-1	WG	MW-219-VP24	MW-219-VP24	1410144-004A	10/20/2014	N	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-8936-1	WG	MW-219-VP26	MW-219-VP26	1410144-005A	10/20/2014	N	
160-8983-1	WG	MW-219-VP28	MW-219-VP28	1410157-001A	10/21/2014	N	
160-8983-1	WG	MW-219-VP30	MW-219-VP30	1410157-002A	10/21/2014	N	
160-8983-1	WG	MW-219-VP32	MW-219-VP32	1410157-003A	10/21/2014	N	
160-8983-1	WG	MW-219-VP34	MW-219-VP34	1410157-004A	10/21/2014	N	
160-8995-1	WG	MW-219-500	MW-219-500	1410169-005A	10/22/2014	FD	MW-219-VP500
160-8995-1	WG	MW-219-VP37	MW-219-VP37	1410169-001A	10/22/2014	N	
160-8995-1	WG	MW-219-VP38	MW-219-VP38	1410169-002A	10/22/2014	N	
160-8995-1	WG	MW-219-VP40	MW-219-VP40	1410169-003A	10/22/2014	N	
160-8995-1	WG	MW-219-VP43	MW-219-VP43	1410169-004A	10/22/2014	N	
160-8995-1	WQ	1410169-005AMS-2701	1410169-005AMS-2701	1410169-005AMS	10/22/2014	MS	
160-8995-1	WQ	1410169-005AMSD-2701	1410169-005AMSD-2701	1410169-005AMSD	10/22/2014	MSD	
160-9022-1	WG	MW-219-VP50	MW-219-VP50	1410182-001A	10/24/2014	N	
160-9023-1	WG	MW-219-VP44	MW-219-VP44	1410177-001A	10/23/2014	N	
160-9023-1	WG	MW-219-VP46	MW-219-VP46	1410177-002A	10/23/2014	N	
160-9023-1	WG	MW-219-VP48	MW-219-VP48	1410177-003A	10/23/2014	N	
160-9061-1	WG	MW-219-VP501	MW-219-VP501	1410192-002A	10/27/2014	FD	
160-9061-1	WG	MW-219-VP52	MW-219-VP52	1410192-001A	10/27/2014	N	
160-9066-1	WG	MW-219-VP-54	MW-219-VP-54	1410196-001A	10/27/2014	N	MW-219-VP54
160-9066-1	WQ	1410196-001AMS-2726	1410196-001AMS-2726	1410196-001AMS	10/27/2014	MS	
160-9066-1	WQ	1410196-001AMSD-2726	1410196-001AMSD-2726	1410196-001AMSD	10/27/2014	MSD	
160-9245-1	WG	MW-59-VP02	MW-59-VP02	160-9245-2	11/5/2014	N	
160-9245-1	WG	MW-59-VP03	MW-59-VP03	160-9245-3	11/5/2014	N	
160-9245-1	WG	MW-59-VP04	MW-59-VP04	160-9245-4	11/5/2014	N	
160-9245-1	WG	MW-59-VP05	MW-59-VP05	160-9245-5	11/5/2014	N	
160-9245-1	WG	MW-59-VP06	MW-59-VP06	160-9245-6	11/5/2014	N	
160-9245-1	WG	MW-59-VP906	MW-59-VP906	160-9245-7	11/5/2014	FD	
160-9245-1	WQ	MW-59-VP02MS	MW-59-VP02MS	160-9245-2	11/5/2014	MS	
160-9245-1	WQ	MW-59-VP02SD	MW-59-VP02SD	160-9245-2	11/5/2014	MSD	
160-9245-1	WQ	MW-59-VP03MS	MW-59-VP03MS	160-9245-3	11/5/2014	MS	
160-9245-1	WQ	MW-59-VP03SD	MW-59-VP03SD	160-9245-3	11/5/2014	MSD	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-9245-1	WQ	MW-59-VP906MS	MW-59-VP906MS	160-9245-7	11/5/2014	MS	
160-9245-1	WQ	MW-59-VP906SD	MW-59-VP906SD	160-9245-7	11/5/2014	MSD	
160-9526-1	WG	MW-220-VP01	MW-220-VP01	1411126-001A	11/18/2014	N	
160-9526-1	WG	MW-220-VP04	MW-220-VP04	1411126-002A	11/18/2014	N	
160-9526-1	WG	MW-220-VP907	MW-220-VP907	1411126-003A	11/18/2014	FD	
160-9548-1	WG	MW-220-VP06	MW-220-VP06	1411143-001A	11/19/2014	N	
160-9548-1	WG	MW-220-VP09	MW-220-VP09	1411143-002A	11/19/2014	N	
160-9548-1	WG	MW-220-VP10	MW-220-VP10	1411143-003A	11/19/2014	N	
160-9548-1	WG	MW-220-VP12	MW-220-VP12	1411143-004A	11/19/2014	N	
160-9548-1	WQ	1411143-002AMS-2989	1411143-002AMS-2989	1411143-002AMS	11/19/2014	MS	
160-9548-1	WQ	1411143-002AMSD-2989	1411143-002AMSD-2989	1411143-002AMSD	11/19/2014	MSD	
160-9562-1	WG	MW-220-VP14	MW-220-VP14	1411155-002A	11/20/2014	N	
160-9562-1	WG	MW-220-VP16	MW-220-VP16	1411155-003A	11/20/2014	N	
160-9562-1	WG	MW-220-VP908	MW-220-VP908	1411155-001A	11/20/2014	FD	
160-9562-1	WH	RB-07	RB-07	1411155-004A	11/20/2014	RB	
160-9562-1	WQ	1411155-004AMS-3012	1411155-004AMS-3012	1411155-004AMS	11/20/2014	MS	
160-9562-1	WQ	1411155-004AMSD-3012	1411155-004AMSD-3012	1411155-004AMSD	11/20/2014	MSD	
160-9676-1	WG	MW-220-VP20	MW-220-VP20	1412008-001A	12/1/2014	N	
160-9676-1	WG	MW-220-VP22	MW-220-VP22	1412008-002A	12/1/2014	N	
160-9676-1	WG	MW-220-VP24	MW-220-VP24	1412008-003A	12/1/2014	N	
160-9676-1	WG	MW-220-VP26	MW-220-VP26	1412008-004A	12/1/2014	N	
160-9676-1	WG	MW-220-VP28	MW-220-VP28	1412008-005A	12/1/2014	N	
160-9676-1	WQ	1412008-005AMS-3116	1412008-005AMS-3116	1412008-005AMS	12/1/2014	MS	
160-9676-1	WQ	1412008-005AMSD-3116	1412008-005AMSD-3116	1412008-005AMSD	12/1/2014	MSD	
160-9677-1	WG	MW-220-VP32	MW-220-VP32	1412020-001A	12/2/2014	N	
160-9701-1	WG	MW-220-VP34	MW-220-VP34	1412032-001A	12/3/2014	N	
160-9701-1	WG	MW-220-VP36	MW-220-VP36	1412032-002A	12/3/2014	N	
160-9701-1	WG	MW-220-VP38	MW-220-VP38	1412032-003A	12/3/2014	N	
160-9701-1	WG	MW-220-VP40	MW-220-VP40	1412032-004A	12/3/2014	N	
160-9701-1	WQ	1412032-004AMS-3150	1412032-004AMS-3150	1412032-004AMS	12/3/2014	MS	

SDG	Matrix	Sample Name	Sample Code	Lab ID	Sample Date	Sample Type	ID Corrections
160-9701-1	WQ	1412032-004AMSD-3150	1412032-004AMSD-3150	1412032-004AMSD	12/3/2014	MSD	
160-9720-1	WG	MW-220-VP42	MW-220-VP42	1412044-001A	12/4/2014	N	
160-9720-1	WG	MW-220-VP45	MW-220-VP45	1412044-002A	12/4/2014	N	
160-9754-1	WG	MW-220-VP46	MW-220-VP46	1412049-001A	12/5/2014	N	

SDG	Matrix	Test Method	Prep Method	Number of Samples	Sample Type
160-8223-1	WG	SW8260C	SW5030C	1	N
160-8269-1	WG	SW8260C	SW5030C	1	FD
160-8269-1	WG	SW8260C	SW5030C	3	N
160-8277-1	WG	SW8260C	SW5030C	2	N
160-8278-1	WG	SW8260C	SW5030C	1	N
160-8311-1	WG	SW8260C	SW5030C	4	N
160-8312-1	WG	SW8260C	SW5030C	3	N
160-8362-1	WG	SW8260C	METHOD	1	N
160-8362-1	WG	SW8260C	SW5030C	1	FD
160-8362-1	WG	SW8260C	SW5030C	6	N
160-8363-1	WG	SW8260C	SW5030C	2	N
160-8373-1	WG	SW8260C	SW5030C	2	N
160-8374-1	WG	SW8260C	SW5030C	3	N
160-8389-1	WG	SW8260C	SW5030C	3	N
160-8389-1	WH	SW8260C	SW5030C	1	RB
160-8411-1	WG	SW8260C	SW5030C	1	FD
160-8411-1	WG	SW8260C	SW5030C	1	N
160-8413-1	WG	SW8260C	SW5030C	1	N
160-8473-1	WG	SW8260C	SW5030C	1	FD
160-8473-1	WG	SW8260C	SW5030C	2	N
160-8476-1	WH	SW8260C	SW5030C	1	RB
160-8515-1	WG	SW8260C	SW5030C	1	N
160-8516-1	WG	SW8260C	SW5030C	1	N
160-8596-1	WG	SW8260C	SW5030C	3	N
160-8596-1	WH	SW8260C	SW5030C	1	RB
160-8617-1	WG	SW8260C	SW5030C	4	N
160-8626-1	WG	SW8260C	SW5030C	1	FD
160-8626-1	WG	SW8260C	SW5030C	3	N
160-8643-1	WG	SW6010B	SW3010A	1	FD
160-8643-1	WG	SW6010B	SW3010A	4	N

SDG	Matrix	Test Method	Prep Method	Number of Samples	Sample Type
160-8643-1	WG	SW7470	SW7470A	1	FD
160-8643-1	WG	SW7470	SW7470A	4	N
160-8643-1	WG	SW8260B	SW5030B	1	FD
160-8643-1	WG	SW8260B	SW5030B	4	N
160-8652-1	WG	SW6010B	SW3010A	1	N
160-8652-1	WG	SW7470	SW7470A	1	N
160-8652-1	WG	SW8260B	SW5030B	1	N
160-8652-1	WH	SW6010B	SW3010A	1	RB
160-8652-1	WH	SW7470	SW7470A	1	RB
160-8652-1	WH	SW8260B	SW5030B	1	RB
160-8653-1	WG	SW8260C	SW5030C	3	N
160-8690-1	WG	SW8260C	SW5030C	1	N
160-8708-1	WG	SW8260C	SW5030C	2	N
160-8745-1	WG	SW8260C	SW5030C	1	FD
160-8745-1	WG	SW8260C	SW5030C	2	N
160-8797-1	WG	SW8260C	SW5030C	1	N
160-8901-1	WG	SW8260C	SW5030C	1	N
160-8936-1	WG	SW8260C	SW5030C	5	N
160-8983-1	WG	SW8260C	SW5030C	4	N
160-8995-1	WG	SW8260C	SW5030C	1	FD
160-8995-1	WG	SW8260C	SW5030C	4	N
160-9022-1	WG	SW8260C	SW5030C	1	N
160-9023-1	WG	SW8260C	SW5030C	3	N
160-9061-1	WG	SW8260C	SW5030C	1	FD
160-9061-1	WG	SW8260C	SW5030C	1	N
160-9066-1	WG	SW8260C	SW5030C	1	N
160-9245-1	WG	SW6010B	SW3010A	1	FD
160-9245-1	WG	SW6010B	SW3010A	5	N
160-9245-1	WG	SW7470	SW7470A	1	FD
160-9245-1	WG	SW7470	SW7470A	5	N
160-9245-1	WG	SW8260B	SW5030B	1	FD
160-9245-1	WG	SW8260B	SW5030B	5	N
160-9526-1	WG	SW8260C	SW5030C	1	FD
160-9526-1	WG	SW8260C	SW5030C	2	N
160-9548-1	WG	SW8260C	SW5030C	4	N
160-9562-1	WG	SW8260C	SW5030C	1	FD
160-9562-1	WG	SW8260C	SW5030C	2	N
160-9562-1	WH	SW8260C	SW5030C	1	RB

SDG	Matrix	Test Method	Prep Method	Number of Samples	Sample Type
160-9676-1	WG	SW8260C	SW5030C	5	N
160-9677-1	WG	SW8260C	SW5030C	1	N
160-9701-1	WG	SW8260C	SW5030C	4	N
160-9720-1	WG	SW8260C	SW5030C	2	N
160-9754-1	WG	SW8260C	SW5030C	1	N
160-9249-1	WH	SW8260B	SW5030B	1	RB

II. SAMPLE PROCEDURES

All samples were collected as specified in the work plan and documented on the chain-of-custody (COC). Samples were analyzed as specified on the COC. Samples were packaged, shipped and received as specified in the work plan. All samples must be received cold (4 +/-2) ^{o}C and in good condition as documented on the Cooler Receipt Form.

REVIEW RESULTS:

All sample procedures were followed except that custody seals were not present on the samples associated with the following sample delivery groups: 160-8223-1, 160-8269-1, 160-8278-1, 160-8363-1, and 160-8745-1. The sample coolers were received at the appropriate temperatures.

III. LABORATORY DATA

1.0 HOLDING TIMES

Holding times are established and monitored to ensure analytical results accurately represent analyte concentrations in a sample at the time of collection. Exceeding the holding time for a sample generally results in a loss of the analyte due to a variety of mechanisms, such as deposition on the sample container walls or precipitation.

REVIEW RESULTS:

All samples were analyzed within the project-specified holding time.

Go to Tables **List**

2.0 BLANKS

Laboratory and field blank samples are analyzed and evaluated to determine the existence and magnitude of possible contamination during the sampling and analysis process.

As noted in Table 2 (if applicable), analyte concentrations in the blanks are generally below the practical quantitation limit (PQL). If the analyte is present in the sample at similar trace levels, then the analyte is likely a common background contaminant from some phase of the sampling, extraction, or analytical procedure and associated low level sample concentrations are not considered to be site related. If the analyte concentration is above the PQL, then there is a potential contamination problem and sample results may be biased high or the data unusable.

REVIEW RESULTS:

All blanks were performed at the required frequency. Methylene chloride and acetone were detected in most of the method blanks as noted on Table 2. These analytes are common laboratory contaminants. Most of the sample results were less than 10X the blank detection and were qualified "U" as not detected as noted on Table 2A. If the sample result was greater was less than the PQL, the MDL was elevated to the sample result. If the sample result was greater than the PQL, then the PQL was elevated to the sample result. 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene were detected in one method blank. One sample was U qualified for these analytes due to the results being less than 5X the blank detections.

Arsenic, calcium, selenium and zinc were detected in the method blanks for Method SW6010B. Several sample results that were less than 5X the blank detection were U qualified as non-detect.

Several rinsate blanks had volatiles and metals detections as noted on Table 2. Results associated with these rinsate blanks were qualified U as non-detect as noted on Table 2B.

Total uranium was detected above the reporting limit in one rinsate blank as noted on Table 2. Associated sample results did not require qualification.

The water used during drilling was analyzed for volatiles. Acetone, methylene chloride, bromoform and dibromochloromethane were common detections in the water. Acetone and methylene chloride are likely lab related contamination. Bromoform and dibromochloromethane are common trihalomethanes formed from the chlorination of public drinking water. Bromoform was detected in two groundwater samples: MW-217-VP39 and MW-220-VP40. It is possible that the drill water was sampled in these instances rather than the actual groundwater. The samples collected above and below the sample MW-220-VP40 have detections of benzene, PCE, and toluene that are not present in the sample itself. However, the results for MW-217-VP39 are similar to the samples taken above and below it with all the analyte results being non-detect.

Trichloroethylene (TCE) was also detected in the drill water, which initiated a work stoppage and investigation to the source of contamination. The draft memorandum *Sylvania Corning FUSRAP – Drill Water TCE Summary* dated October 7, 2014(revised January 12, 2015) details the investigation of the source of TCE. The drill water contained trace levels of trihalomethanes which were generally not present in the groundwater samples; therefore, it is likely that the drill water was not inadvertently sampled during the vertical profile sampling. The TCE contaminated drill water would not have impacted data usability.

3.0 SURROGATE SPIKE RECOVERY

Laboratory performance for individual samples analyzed for organic compounds is established by means of surrogate spiking activities. Samples are spiked with surrogate compounds prior to preparation and analysis. Unusually low or high surrogate recovery values may indicate some deficiency in the analytical system or that some matrix effects exist, resulting in low or high sample results for target compounds. Sample surrogate recoveries outside QC limits (if applicable) are presented in Table 3.

REVIEW RESULTS:

Surrogate spikes were appropriately added to all field and QC samples. Recoveries were within laboratory QC limits except for those listed in Table 3. Two samples and one method blank exhibited poor recovery of dibromofluoromethane. No action was taken for one surrogate outside criteria.

4.0 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE ANALYSIS

The matrix spike and matrix spike duplicate (MS/MSD) analyses are intended to provide information about the effects that the sample matrix exerts on the digestion/extraction and measurement methodology. MS recovery values that do not meet laboratory QC criteria may indicate that sample analyte results are being attenuated in the analysis procedure. These results are presented in Table 4 (if applicable). The potential sample bias may be estimated by noting the degree to which the MS concentration was elevated or lowered in the spike analysis. However, this bias should serve only as approximations; sample-specific problems may be the cause of the discrepancy, particularly in soil samples. Recoveries of a post-digestion spike or a laboratory control sample (LCS) are used to verify that the analytical methodology is acceptable and that MS recoveries are due to matrix effects. An MSD analysis is performed to evaluate the precision of the sample results. Precision is measured as the relative percent difference (RPD)

between analytical results for duplicate samples. The laboratory's failure to produce similar results for MSD samples may indicate that the samples were non-homogeneous (particularly in soil samples), or that method defects may exist in the laboratory's techniques.

REVIEW RESULTS:

The MS/MSD sample analyses were performed at the required frequency. The recovery and RPD results were within QC criteria established except as noted on Table 4. For organic analyses, only the parent sample results are qualified based on MS/MSD outliers. The results in the parent sample was qualified J as estimated for spike recoveries that were outside of acceptance criteria. If the spike was recovered low and the result was non-detect in the parent sample, then the result was qualified UJ as estimated non-detect. No qualification of the data was made when the native sample concentration was greater than 4X the spiking concentration or if the spike recovery was high and the sample result was non-detect. Thirteen analytes were recovered low in MS and/or MSD of MW-220-VP28. All of the recoveries were low indicating a laboratory spiking error rather than an instrument or matrix issue. The spiking error also resulted in several analytes to exhibit poor precision between the MS and MSD. No qualification of the data was made.

5.0 LABORATORY CONTROL SAMPLE ANALYSIS

The LCS is analyzed to monitor the efficiency of the digestion/extraction procedure and analytical instrument operation. The ability of the laboratory to successfully analyze an LCS demonstrates that there are no analytical problems related to the digestion/sample preparation procedures and/or instrument operations. The LCS results outside QC limits are presented in Table 5 (if applicable). Sporadic and marginal QC failures for multiple component methods do not indicate an analytical concern. If recoveries are high and the compounds are not detected in the samples, then no data qualification is required. All recoveries should be above 10% or the data are flagged “R” as rejected.

REVIEW RESULTS:

All LCS analyses were performed at the required frequency. LCS recoveries were within control limits except as noted on Table 5. Several analytes were outside of acceptance criteria in the LCS. For LCS recoveries that were high and the analyte was not detected in the associated samples, no qualification of the data was made. For recoveries that failed either high

or low and the analyte was detected in the samples, the sample results were qualified J as estimated. If the recovery of the LCS was below acceptance criteria and the analyte was not detected in the samples, the sample results were qualified UJ as estimated non-detect.

IV. COMPOUND IDENTIFICATION AND QUANTITATION

Compounds detected below PQLs in samples should be considered estimated and are qualified "J." The samples with compounds above the linear range were all re-analyzed at a higher dilution factor.

REVIEW RESULTS:

Several samples were diluted due to analytes exceeding the calibration curve for volatiles analysis. Only the analyte exceeding the calibration curve was reported from the dilution.

Five samples were diluted due to the nature of the matrix and target analytes exceeding the calibration curve. All of the analytes were reported at the dilution; therefore, elevated reporting limits were provided.

It was noted in the narrative that tetrachloroethene exhibited a % D greater than 20% in the calibration of batch 1412008. Since tetrachloroethene is a compound of concern, it was requested to be reanalyzed. The results in batch 1412064 confirmed the initial results; therefore, the original results were reported. The results from batch 1412064 were not included in a report issued by TestAmerica.

For total uranium analysis, several samples required dilution and reanalysis to eliminate quenching due to the sample matrix. Several samples were spiked to confirm original results or determine whether quenching occurred. The reported results are considered valid and usable.

V. FIELD DUPLICATE SAMPLE RESULTS

Field duplicate samples were collected and analyzed as an indication of overall precision for both field and laboratory. Field duplicate results are summarized in Table 7 (if applicable). The results are expected to have more variability than laboratory duplicates, which measure only laboratory precision. It is expected also that soil field duplicates will exhibit greater variance than water field duplicates due to the difficulties associated with collecting identical field samples. The QC criteria used to assess field duplicate samples for this project was limits of 40% RPD for waters, or twice the general laboratory duplicate criteria. If both compounds were below the laboratory PQL or one of the compounds was present as a non-detect, then the compounds are

generally not qualified due to field duplicate precision. There are no guidelines regarding data qualification based on poor field duplicate precision. Professional judgment was used to determine whether or not to qualify results.

REVIEW RESULTS:

Field duplicates were collected for an overall project frequency of 10%: 12 field duplicates per 119 samples. The RPD ratings are listed on Table 7 as "Good" if the RPD is less than 40% and as "Poor" if the RPD exceeded 40%. Field duplicate results with "Poor" are flagged "J" as estimated. No qualification of the data was made for analytes exhibiting poor precision where at least one of the sample results was less than the PQL. The sample results for acetone and methylene chloride were qualified U as non-detect due to method blank contamination.

Trichloroethene was qualified J in the parent and field duplicate of sample MW-215-VP20 due to poor precision. Iron and manganese were qualified J in the parent and field duplicate of sample MW-59-VP06 due to poor precision. Total uranium was qualified J in the parent and field duplicate of sample MW-218-VP14 due to poor precision.

Table 2 - List of Positive Results for Blank Samples

Method	SDG	Sample Name	Matrix	Analyte	Result	Qualifier	Units	MDL	QL
ASTM D5174	160-8652-1	RB-04	RB	Total Uranium	0.188		ug/l	0.0582	0.100
SW6010B	160-8643-1	MB 160-151531/1-A	LB	Arsenic	2.3	J	ug/l	1.8	1.8
SW6010B	160-8643-1	MB 160-151531/1-A	LB	Calcium	103	J	ug/l	54	54
SW6010B	160-9245-1	MB 160-161012/1-A	LB	Calcium	58.1	J	ug/l	54	54
SW6010B	160-9245-1	MB 160-161012/1-A	LB	Selenium	3.8	J	ug/l	2.1	2.1
SW6010B	160-9245-1	MB 160-161012/1-A	LB	Zinc	9.8	J	ug/l	8.3	8.3
SW8260B	160-9245-1	MB 160-155703/6	LB	Acetone	0.725	J	ug/l	0.34	0.34
SW8260C	160-8223-1	MB-2219-2219	LB	ACETONE	5.2	*	UG/L	1.3	5.0
SW8260C	160-8223-1	MB-2219-2219	LB	METHYLENE CHLORIDE	8	*	UG/L	0.50	2.0
SW8260C	160-8269-1	MB-2239-2239	LB	ACETONE	4.8	J	UG/L	1.3	5.0
SW8260C	160-8269-1	MB-2239-2239	LB	METHYLENE CHLORIDE	8.2		UG/L	0.50	2.0
SW8260C	160-8277-1	MB-2253-2253	LB	ACETONE	2.5	J*	UG/L	1.3	5.0
SW8260C	160-8277-1	MB-2253-2253	LB	METHYLENE CHLORIDE	6.5	*	UG/L	0.50	2.0
SW8260C	160-8311-1	MB-2271-2271	LB	ACETONE	2.6	J*	UG/L	1.3	5.0
SW8260C	160-8311-1	MB-2271-2271	LB	METHYLENE CHLORIDE	7.6	*	UG/L	0.50	2.0
SW8260C	160-8362-1	MB-2289-2289	LB	ACETONE	2.7	J*	UG/L	1.3	5.0
SW8260C	160-8362-1	MB-2289-2289	LB	METHYLENE CHLORIDE	6.9	*	UG/L	0.50	2.0
SW8260C	160-8363-1	MB-2306-2306	LB	ACETONE	2.6	J*	UG/L	1.3	5.0
SW8260C	160-8363-1	MB-2306-2306	LB	METHYLENE CHLORIDE	6.3	*	UG/L	0.50	2.0
SW8260C	160-8373-1	MB-2321-2321	LB	ACETONE	1.8	J*	UG/L	1.3	5.0
SW8260C	160-8373-1	MB-2321-2321	LB	METHYLENE CHLORIDE	5.7	*	UG/L	0.50	2.0
SW8260C	160-8389-1	MB-2336-2336	LB	ACETONE	1.6	J*	UG/L	1.3	5.0
SW8260C	160-8389-1	MB-2336-2336	LB	METHYLENE CHLORIDE	6	*	UG/L	0.50	2.0
SW8260C	160-8470-1	MB-2381-2381	LB	ACETONE	1.7	J*	UG/L	1.3	5.0

Method	SDG	Sample Name	Matrix	Analyte	Result	Qualifier	Units	MDL	QL
SW8260C	160-8470-1	MB-2381-2381	LB	METHYLENE CHLORIDE	5.2	*	UG/L	0.50	2.0
SW8260C	160-8473-1	MB-2383-2383	LB	ACETONE	1.7	J*	UG/L	1.3	5.0
SW8260C	160-8473-1	MB-2383-2383	LB	METHYLENE CHLORIDE	5.5	*	UG/L	0.50	2.0
SW8260C	160-8476-1	MB-2406-2406	LB	ACETONE	3.1	J*	UG/L	1.3	5.0
SW8260C	160-8476-1	MB-2406-2406	LB	METHYLENE CHLORIDE	6.7	*	UG/L	0.50	2.0
SW8260C	160-8477-1	MB-2402-2402	LB	ACETONE	2	J*	UG/L	1.3	5.0
SW8260C	160-8477-1	MB-2402-2402	LB	METHYLENE CHLORIDE	4.8	*	UG/L	0.50	2.0
SW8260C	160-8515-1	MB-2413-2413	LB	ACETONE	5.4	*	UG/L	1.3	5.0
SW8260C	160-8515-1	MB-2413-2413	LB	METHYLENE CHLORIDE	8.8	*	UG/L	0.50	2.0
SW8260C	160-8596-1	MB-2482-2482	LB	ACETONE	3.4	J	UG/L	1.3	5.0
SW8260C	160-8596-1	MB-2482-2482	LB	METHYLENE CHLORIDE	5.6	*	UG/L	0.50	2.0
SW8260C	160-8626-1	MB-2497-2497	LB	ACETONE	3.4	J*m	UG/L	1.3	5.0
SW8260C	160-8626-1	MB-2497-2497	LB	METHYLENE CHLORIDE	4.5	*	UG/L	0.50	2.0
SW8260C	160-8653-1	MB-2510-2510	LB	ACETONE	3.5	J*	UG/L	1.3	5.0
SW8260C	160-8653-1	MB-2510-2510	LB	METHYLENE CHLORIDE	3.6	*	UG/L	0.50	2.0
SW8260C	160-8690-1	MB-2519-2519	LB	ACETONE	2.2	J*	UG/L	1.3	5.0
SW8260C	160-8690-1	MB-2519-2519	LB	METHYLENE CHLORIDE	3.3	*	UG/L	0.50	2.0
SW8260C	160-8708-1	MB-2531-2531	LB	ACETONE	1.6	J*	UG/L	1.3	5.0
SW8260C	160-8708-1	MB-2531-2531	LB	METHYLENE CHLORIDE	2.8	*	UG/L	0.50	2.0
SW8260C	160-8745-1	MB-2548-2548	LB	ACETONE	1.4	J*	UG/L	1.3	5.0
SW8260C	160-8745-1	MB-2548-2548	LB	METHYLENE CHLORIDE	2.3	*	UG/L	0.50	2.0
SW8260C	160-8797-1	MB-2567-2567	LB	1,2,3-TRICHLOROBENZENE	1.7	J	UG/L	0.50	2.0
SW8260C	160-8797-1	MB-2567-2567	LB	1,2,4-TRICHLOROBENZENE	0.81	J	UG/L	0.50	2.0
SW8260C	160-8797-1	MB-2567-2567	LB	METHYLENE CHLORIDE	2.7	*	UG/L	0.50	2.0
SW8260C	160-8901-1	MB-2650-2650	LB	ACETONE	2.2	J*	UG/L	1.3	5.0

Method	SDG	Sample Name	Matrix	Analyte	Result	Qualifier	Units	MDL	QL
SW8260C	160-8901-1	MB-2650-2650	LB	METHYLENE CHLORIDE	3.7	*	UG/L	0.50	2.0
SW8260C	160-8936-1	MB-2701-2701	LB	ACETONE	2.5	J*	UG/L	1.3	5.0
SW8260C	160-8936-1	MB-2701-2701	LB	METHYLENE CHLORIDE	5.4	*	UG/L	0.50	2.0
SW8260C	160-8995-1	MB-2706-2706	LB	ACETONE	2.2	J*	UG/L	1.3	5.0
SW8260C	160-8995-1	MB-2706-2706	LB	METHYLENE CHLORIDE	4.4	*	UG/L	0.50	2.0
SW8260C	160-9022-1	MB-2713-2713	LB	ACETONE	2.3	J*	UG/L	1.3	5.0
SW8260C	160-9022-1	MB-2713-2713	LB	METHYLENE CHLORIDE	6.1	*	UG/L	0.50	2.0
SW8260C	160-9061-1	MB-2725-2725	LB	ACETONE	1.7	J*	UG/L	1.3	5.0
SW8260C	160-9061-1	MB-2725-2725	LB	METHYLENE CHLORIDE	4.5	*	UG/L	0.50	2.0
SW8260C	160-9066-1	MB-2726-2726	LB	ACETONE	1.7	J*	UG/L	1.3	5.0
SW8260C	160-9066-1	MB-2726-2726	LB	METHYLENE CHLORIDE	4.5	*	UG/L	0.50	2.0
SW8260C	160-9526-1	MB-2971-2971	LB	ACETONE	2.7	J*m	UG/L	1.3	5.0
SW8260C	160-9526-1	MB-2971-2971	LB	METHYLENE CHLORIDE	6.9	*m	UG/L	0.50	2.0
SW8260C	160-9548-1	MB-2989-2989	LB	ACETONE	3.3	J*	UG/L	1.3	5.0
SW8260C	160-9548-1	MB-2989-2989	LB	METHYLENE CHLORIDE	5.9	*	UG/L	0.50	2.0
SW8260C	160-9562-1	MB-3012-3012	LB	ACETONE	3.7	J*	UG/L	1.3	5.0
SW8260C	160-9562-1	MB-3012-3012	LB	METHYLENE CHLORIDE	5.3	*	UG/L	0.50	2.0
SW8260C	160-9648-1	MB-3098-3098	LB	ACETONE	2.8	J*	UG/L	1.3	5.0
SW8260C	160-9648-1	MB-3098-3098	LB	METHYLENE CHLORIDE	5	*	UG/L	0.50	2.0
SW8260C	160-9676-1	MB-3116-3116	LB	ACETONE	3.4	J*	UG/L	1.3	5.0
SW8260C	160-9676-1	MB-3116-3116	LB	METHYLENE CHLORIDE	5.4	*	UG/L	0.50	2.0
SW8260C	160-9676-1	MB-3132-3132	LB	ACETONE	22	*	UG/L	1.3	5.0
SW8260C	160-9676-1	MB-3132-3132	LB	METHYLENE CHLORIDE	6.5	*	UG/L	0.50	2.0
SW8260C	160-9701-1	MB-3150-3150	LB	ACETONE	18	*	UG/L	1.3	5.0
SW8260C	160-9701-1	MB-3150-3150	LB	METHYLENE CHLORIDE	6	*	UG/L	0.50	2.0

Method	SDG	Sample Name	Matrix	Analyte	Result	Qualifier	Units	MDL	QL
SW8260C	160-9720-1	MB-3165-3165	LB	ACETONE	11	*	UG/L	1.3	5.0
SW8260C	160-9720-1	MB-3165-3165	LB	METHYLENE CHLORIDE	5.3	*	UG/L	0.50	2.0
SW8260C	160-9721-1	MB-2350-2350	LB	ACETONE	1.8	J*	UG/L	1.3	5.0
SW8260C	160-9721-1	MB-2350-2350	LB	METHYLENE CHLORIDE	5.7	*	UG/L	0.50	2.0
SW8260C	160-9722-1	MB-2369-2369	LB	ACETONE	5.6	*	UG/L	1.3	5.0
SW8260C	160-9722-1	MB-2369-2369	LB	METHYLENE CHLORIDE	16	*	UG/L	0.50	2.0
SW6010B	160-8652-1	RB-04	RB	Calcium	81	J	ug/l	54	54
SW6010B	160-8652-1	RB-04	RB	Lead	0.9	J	ug/l	0.6	0.6
SW6010B	160-8652-1	RB-04	RB	Zinc	14	J	ug/l	8.3	8.3
SW8260B	160-8652-1	RB-04	RB	Acetone	4.1		ug/l	0.34	0.34
SW8260B	160-8652-1	RB-04	RB	Methylene Chloride	0.38	J	ug/l	0.27	0.27
SW8260C	160-8389-1	RB-01	RB	ACETONE	2.1	BJ*	UG/L	1.3	5.0
SW8260C	160-8389-1	RB-01	RB	METHYLENE CHLORIDE	6	B*	UG/L	0.50	2.0
SW8260C	160-8476-1	RB-02	RB	ACETONE	2.9	BJ*	UG/L	1.3	5.0
SW8260C	160-8476-1	RB-02	RB	METHYLENE CHLORIDE	5.8	B*	UG/L	0.50	2.0
SW8260C	160-8596-1	RB-03	RB	ACETONE	4.1	BJ	UG/L	1.3	5.0
SW8260C	160-8596-1	RB-03	RB	METHYLENE CHLORIDE	4.8	B*	UG/L	0.50	2.0
SW8260C	160-9562-1	RB-07	RB	ACETONE	4.8	BJ*	UG/L	1.3	5.0
SW8260C	160-9562-1	RB-07	RB	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0
SW8260B	160-9249-1	RB-06	RB	2-BUTANONE (MEK)	1.3	J	UG/L	0.52	5.0
SW8260B	160-9249-1	RB-06	RB	2-HEXANONE	0.83	J	UG/L	0.22	5.0
SW8260B	160-9249-1	RB-06	RB	ACETONE	3.6		UG/L	0.34	2.0
SW8260B	160-9249-1	RB-06	RB	METHYLENE CHLORIDE	0.39	J	UG/L	0.27	1.0
SW8260B	160-9249-1	RB-06	RB	IRON	20	J	UG/L	13	100
SW8260B	160-9249-1	RB-06	RB	LEAD	1.1	J	UG/L	0.60	10

Method	SDG	Sample Name	Matrix	Analyte	Result	Qualifier	Units	MDL	QL
SW8260B	160-9249-1	RB-06	RB	SELENIUM	2.9	J	UG/L	2.1	15
SW8260B	160-9249-1	RB-06	RB	VANADIUM	5.5	J	UG/L	4.4	50
SW8260B	160-9249-1	RB-06	RB	ZINC	16	J	UG/L	8.3	30
SW8260B	160-9249-1	MB 160-155703/6	MB	ACETONE	0.725	J	UG/L	0.34	2.0
SW6010B	160-9249-1	MB 160-161013/1-A	MB	ZINC	9.90	J	UG/L	8.3	30

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW6010B	MW-58-VP06	WG	Arsenic	5.6	J	ug/l	1.8	1.8	U Flag
SW6010B	MW-59-VP03	WG	Selenium	2.1	J	ug/l	2.1	2.1	U Flag
SW6010B	MW-59-VP04	WG	Zinc	49		ug/l	8.3	8.3	U Flag
SW6010B	MW-59-VP05	WG	Zinc	41		ug/l	8.3	8.3	U Flag
SW6010B	MW-59-VP906	WG	Zinc	47		ug/l	8.3	8.3	U Flag
SW6010B	RB-04	WH	Calcium	81	J	ug/l	54	54	U Flag
SW8260B	MW-59-VP02	WG	Acetone	0.89	J	ug/l	0.34	0.34	U Flag
SW8260B	MW-59-VP03	WG	Acetone	1.1	J	ug/l	0.34	0.34	U Flag
SW8260B	MW-59-VP05	WG	Acetone	0.49	J	ug/l	0.34	0.34	U Flag
SW8260B	MW-59-VP06	WG	Acetone	0.51	J	ug/l	0.34	0.34	U Flag
SW8260C	MW-215-VP17	WG	ACETONE	7.1	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP17	WG	METHYLENE CHLORIDE	7.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP20	WG	ACETONE	4	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP20	WG	METHYLENE CHLORIDE	7.2	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP22	WG	ACETONE	4.8	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP22	WG	METHYLENE CHLORIDE	8.6	B	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-215-VP24	WG	ACETONE	3.7	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP24	WG	METHYLENE CHLORIDE	7.4	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP26	WG	ACETONE	2.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP26	WG	METHYLENE CHLORIDE	6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP28	WG	ACETONE	2.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP28	WG	METHYLENE CHLORIDE	6.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP32	WG	ACETONE	2.8	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP32	WG	METHYLENE CHLORIDE	8.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP35	WG	ACETONE	2.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP35	WG	METHYLENE CHLORIDE	8.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP36	WG	ACETONE	2.8	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP36	WG	METHYLENE CHLORIDE	6.8	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP38	WG	ACETONE	19	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP38	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP40	WG	ACETONE	2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP40	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP42	WG	ACETONE	1.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP42	WG	METHYLENE CHLORIDE	4.6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP47	WG	ACETONE	4.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP47	WG	METHYLENE CHLORIDE	4.9	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP50	WG	ACETONE	2.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP50	WG	METHYLENE CHLORIDE	5.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP51	WG	ACETONE	5.2	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP51	WG	METHYLENE CHLORIDE	6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP52	WG	ACETONE	2.7	BJ*	UG/L	1.3	5.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-215-VP52	WG	METHYLENE CHLORIDE	6.9	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP55	WG	ACETONE	3.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP55	WG	METHYLENE CHLORIDE	5.6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP56	WG	ACETONE	2.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP56	WG	METHYLENE CHLORIDE	5.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP900	WG	ACETONE	3.6	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP900	WG	METHYLENE CHLORIDE	7	B	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP901	WG	ACETONE	1.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP901	WG	METHYLENE CHLORIDE	4.6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-215-VP902	WG	ACETONE	4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-215-VP902	WG	METHYLENE CHLORIDE	5.6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-903	WG	ACETONE	2.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-903	WG	METHYLENE CHLORIDE	4.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP16	WG	ACETONE	2.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP16	WG	METHYLENE CHLORIDE	6.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP18	WG	ACETONE	2.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP18	WG	METHYLENE CHLORIDE	7.5	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP21	WG	ACETONE	2.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP21	WG	METHYLENE CHLORIDE	7.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP23	WG	ACETONE	2.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP23	WG	METHYLENE CHLORIDE	8.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP25	WG	ACETONE	2.8	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP25	WG	METHYLENE CHLORIDE	7.9	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP27	WG	ACETONE	1.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP27	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-216-VP28	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP30	WG	ACETONE	1.8	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP30	WG	METHYLENE CHLORIDE	4.8	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP32	WG	ACETONE	1.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP32	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP34	WG	ACETONE	2.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP34	WG	METHYLENE CHLORIDE	6.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP36	WG	ACETONE	2.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP36	WG	METHYLENE CHLORIDE	6.8	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP38	WG	ACETONE	1.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP38	WG	METHYLENE CHLORIDE	5.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP40	WG	ACETONE	1.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP40	WG	METHYLENE CHLORIDE	4.9	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP42	WG	ACETONE	1.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP42	WG	METHYLENE CHLORIDE	5.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP44	WG	ACETONE	1.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP44	WG	METHYLENE CHLORIDE	4.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP48	WG	ACETONE	2.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP48	WG	METHYLENE CHLORIDE	4.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP50	WG	ACETONE	1.6	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP50	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP53	WG	ACETONE	5.9	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP53	WG	METHYLENE CHLORIDE	7.5	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-216-VP54	WG	ACETONE	13	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-216-VP54	WG	METHYLENE CHLORIDE	8	B*	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-217-VP16	WG	ACETONE	3.7	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP16	WG	METHYLENE CHLORIDE	5.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP18	WG	ACETONE	4.2	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP18	WG	METHYLENE CHLORIDE	4.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP20	WG	ACETONE	3.9	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP20	WG	METHYLENE CHLORIDE	5.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP23	WG	ACETONE	3.2	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP23	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP24	WG	ACETONE	4.5	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP24	WG	METHYLENE CHLORIDE	5.8	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP26	WG	ACETONE	4	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP26	WG	METHYLENE CHLORIDE	5.6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP28	WG	ACETONE	4.4	BJ	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP28	WG	METHYLENE CHLORIDE	5.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP31	WG	ACETONE	3	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP31	WG	METHYLENE CHLORIDE	4.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP33	WG	ACETONE	3.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP33	WG	METHYLENE CHLORIDE	4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP34	WG	ACETONE	4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP34	WG	METHYLENE CHLORIDE	4.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP37	WG	ACETONE	3.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP37	WG	METHYLENE CHLORIDE	3.6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP39	WG	ACETONE	4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP39	WG	METHYLENE CHLORIDE	3.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP40	WG	ACETONE	3.6	BJ*	UG/L	1.3	5.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-217-VP40	WG	METHYLENE CHLORIDE	3.5	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP42	WG	ACETONE	2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP42	WG	METHYLENE CHLORIDE	2.6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP44	WG	ACETONE	1.8	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP44	WG	METHYLENE CHLORIDE	2.5	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP46	WG	ACETONE	2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP46	WG	METHYLENE CHLORIDE	3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP48	WG	ACETONE	1.6	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP48	WG	METHYLENE CHLORIDE	2.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP50	WG	ACETONE	1.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP50	WG	METHYLENE CHLORIDE	2.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP52	WG	1,2,3-TRICHLOROBENZENE	0.88	BJ	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP52	WG	1,2,4-TRICHLOROBENZENE	0.55	BJ	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP52	WG	METHYLENE CHLORIDE	2.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP904	WG	ACETONE	3.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP904	WG	METHYLENE CHLORIDE	4.6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-217-VP905	WG	ACETONE	1.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-217-VP905	WG	METHYLENE CHLORIDE	2.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-500	WG	ACETONE	2.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-500	WG	METHYLENE CHLORIDE	4.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP16	WG	ACETONE	2.6	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP16	WG	METHYLENE CHLORIDE	3.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP18	WG	ACETONE	2.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP18	WG	METHYLENE CHLORIDE	4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP20	WG	ACETONE	2.2	BJ*	UG/L	1.3	5.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-219-VP20	WG	METHYLENE CHLORIDE	4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP22	WG	ACETONE	2.3	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP22	WG	METHYLENE CHLORIDE	4.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP24	WG	ACETONE	2.3	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP24	WG	METHYLENE CHLORIDE	4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP26	WG	ACETONE	2.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP26	WG	METHYLENE CHLORIDE	3.9	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP28	WG	ACETONE	20	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP28	WG	METHYLENE CHLORIDE	4.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP30	WG	ACETONE	2.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP30	WG	METHYLENE CHLORIDE	4.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP32	WG	ACETONE	2.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP32	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP34	WG	ACETONE	2.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP34	WG	METHYLENE CHLORIDE	4.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP37	WG	ACETONE	2.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP37	WG	METHYLENE CHLORIDE	4.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP38	WG	ACETONE	2.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP38	WG	METHYLENE CHLORIDE	4.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP40	WG	ACETONE	2.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP40	WG	METHYLENE CHLORIDE	3.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP43	WG	ACETONE	2.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP43	WG	METHYLENE CHLORIDE	4.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP44	WG	ACETONE	2.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP44	WG	METHYLENE CHLORIDE	4	B*	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-219-VP46	WG	ACETONE	2.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP46	WG	METHYLENE CHLORIDE	4.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP48	WG	ACETONE	1.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP48	WG	METHYLENE CHLORIDE	4.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP50	WG	ACETONE	2.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP50	WG	METHYLENE CHLORIDE	4.5	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP501	WG	ACETONE	2.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP501	WG	METHYLENE CHLORIDE	4.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP52	WG	ACETONE	1.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP52	WG	METHYLENE CHLORIDE	4.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-219-VP-54	WG	ACETONE	2.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-219-VP-54	WG	METHYLENE CHLORIDE	4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP01	WG	ACETONE	2.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP01	WG	METHYLENE CHLORIDE	6.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP04	WG	ACETONE	2.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP04	WG	METHYLENE CHLORIDE	7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP06	WG	ACETONE	3.6	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP06	WG	METHYLENE CHLORIDE	6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP09	WG	ACETONE	3.8	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP09	WG	METHYLENE CHLORIDE	6.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP10	WG	ACETONE	3.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP10	WG	METHYLENE CHLORIDE	6.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP12	WG	ACETONE	3.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP12	WG	METHYLENE CHLORIDE	6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP14	WG	ACETONE	4.3	BJ*	UG/L	1.3	5.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-220-VP14	WG	METHYLENE CHLORIDE	4.9	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP16	WG	ACETONE	4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP16	WG	METHYLENE CHLORIDE	4.8	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP20	WG	ACETONE	3.7	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP20	WG	METHYLENE CHLORIDE	4.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP22	WG	ACETONE	4.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP22	WG	METHYLENE CHLORIDE	4.5	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP24	WG	ACETONE	4.4	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP24	WG	METHYLENE CHLORIDE	4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP26	WG	ACETONE	3.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP26	WG	METHYLENE CHLORIDE	4.3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP28	WG	ACETONE	4.2	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP28	WG	METHYLENE CHLORIDE	4.4	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP32	WG	ACETONE	22	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP32	WG	METHYLENE CHLORIDE	6.2	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP34	WG	ACETONE	13	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP34	WG	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP36	WG	ACETONE	21	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP36	WG	METHYLENE CHLORIDE	6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP38	WG	ACETONE	20	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP38	WG	METHYLENE CHLORIDE	6.1	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP40	WG	ACETONE	20	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP40	WG	METHYLENE CHLORIDE	5.7	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP42	WG	ACETONE	12	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP42	WG	METHYLENE CHLORIDE	4.2	B*	UG/L	0.50	2.0	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260C	MW-220-VP45	WG	ACETONE	7.1	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP45	WG	METHYLENE CHLORIDE	3	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP46	WG	ACETONE	11	B*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP46	WG	METHYLENE CHLORIDE	4.8	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP907	WG	ACETONE	2.5	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP907	WG	METHYLENE CHLORIDE	6	B*	UG/L	0.50	2.0	U Flag
SW8260C	MW-220-VP908	WG	ACETONE	3.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	MW-220-VP908	WG	METHYLENE CHLORIDE	4.5	B*	UG/L	0.50	2.0	U Flag
SW8260C	RB-01	WH	ACETONE	2.1	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	RB-01	WH	METHYLENE CHLORIDE	6	B*	UG/L	0.50	2.0	U Flag
SW8260C	RB-02	WH	ACETONE	2.9	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	RB-02	WH	METHYLENE CHLORIDE	5.8	B*	UG/L	0.50	2.0	U Flag
SW8260C	RB-03	WH	ACETONE	4.1	BJ	UG/L	1.3	5.0	U Flag
SW8260C	RB-03	WH	METHYLENE CHLORIDE	4.8	B*	UG/L	0.50	2.0	U Flag
SW8260C	RB-07	WH	ACETONE	4.8	BJ*	UG/L	1.3	5.0	U Flag
SW8260C	RB-07	WH	METHYLENE CHLORIDE	4.7	B*	UG/L	0.50	2.0	U Flag
SW8260B	RB-06	WH	ACETONE	3.6		UG/L	0.34	2.0	U Flag
SW6010B	RB-06	WH	ZINC	16	J	UG/L	8.3	30	U Flag

Table 2B - List of Samples Qualified for Field Blank Contamination

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW6010B	MW-58-VP06	WG	Zinc	23	J	ug/l	8.3	30	U Flag
SW8260B	MW-58-VP03	WG	Acetone	2.6		ug/l	0.34	2	U Flag
SW8260B	MW-59-VP03	WG	2-Butanone (MEK)	0.59	J	ug/l	0.52	5	U Flag

Method	Sample Name	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	QL	Sample Flag
SW8260B	MW-59-VP06	WG	2-Butanone (MEK)	0.63	J	ug/l	0.52	5	U Flag
SW8260B	MW-59-VP04	WG	2-Hexanone	2.2	J	ug/l	0.22	5	U Flag
SW8260B	MW-59-VP05	WG	2-Hexanone	1.6	J	ug/l	0.22	5	U Flag
SW8260B	MW-59-VP906	WG	2-Hexanone	0.29	J	ug/l	0.22	5	U Flag
SW8260B	MW-59-VP02	WG	Methylene Chloride	0.75	J	ug/l	0.27	1	U Flag
SW8260B	MW-59-VP03	WG	Methylene Chloride	0.28	J	ug/l	0.27	1	U Flag
SW8260B	MW-59-VP04	WG	Methylene Chloride	0.36	J	ug/l	0.27	1	U Flag
SW8260B	MW-59-VP05	WG	Methylene Chloride	0.38	J	ug/l	0.27	1	U Flag
SW8260B	MW-59-VP06	WG	Methylene Chloride	0.33	J	ug/l	0.27	1	U Flag
SW8260B	MW-59-VP906	WG	Methylene Chloride	0.31	J	ug/l	0.27	1	U Flag
SW6010B	MW-59-VP03	WG	Lead	0.6	J	ug/l	0.6	10	U Flag
SW6010B	MW-59-VP05	WG	Lead	0.6	J	ug/l	0.6	10	U Flag
SW6010B	MW-59-VP06	WG	Lead	0.6	J	ug/l	0.6	10	U Flag
SW6010B	MW-59-VP04	WG	Lead	1.1	J	ug/l	0.6	10	U Flag
SW6010B	MW-59-VP906	WG	Lead	1.1	J	ug/l	0.6	10	U Flag
SW6010B	MW-59-VP02	WG	Lead	1.3	J	ug/l	0.6	10	U Flag
SW6010B	MW-59-VP906	WG	Vanadium	4.4	J	ug/l	4.4	50	U Flag

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample ID	Sample Type	Analyte	Result	Units	Rec %	Low Limit	High Limit	Dil Fac	Qualifier
SW8260C	MW-217-VP52	N	DIBROMOFLUOROMETHANE	34	%REC	68.3	77	131	1	None
SW8260C	MB-2567-2567	LB	DIBROMOFLUOROMETHANE	37	%REC	73.0	77	131	1	None
SW8260C	MW-217-VP904	FD	DIBROMOFLUOROMETHANE	38	%REC	76.0	77	131	1	None

Table 4 - List MS/MSD Recoveries and RPDs outside Control Limits

Method	Parent Sample	Analyte	Dil Fac	Unit	Low Limit	High Limit	MS	Qualifier	MSD
SW6010B	MW-58-VP07	Aluminum	10	ug/l	80	120	-158	4X	493
SW6010B	MW-58-VP07	Antimony	10	ug/l	80	120	71	UJ Flag	51
SW6010B	MW-58-VP07	Barium	10	ug/l	80	120	77	J Flag	102
SW6010B	MW-58-VP07	Chromium	10	ug/l	80	120	73	J Flag	129
SW6010B	MW-58-VP07	Iron	10	ug/l	80	120	-770	4X	291
SW6010B	MW-58-VP07	Manganese	10	ug/l	80	120	54	J Flag	148
SW6010B	MW-58-VP07	Potassium	10	ug/l	80	120	78	J Flag	104
SW6010B	MW-58-VP07	Sodium	10	ug/l	80	120	15	J Flag	77
SW6010B	MW-59-VP906	Calcium	1	ug/l	80	120	122	J Flag	100
SW8260C	MW-216-VP40	TOLUENE	1	ug/l	54	134	0	UJ Flag	98.5
SW8260C	MW-220-VP09	ACETONE	1	ug/l	45	120	33.1	U Flag	33.7
SW8260C	MW-220-VP09	DICHLORODIFLUOROMETHANE	1	ug/l	35	135	130	None: High/ND	137
SW8260C	RB-07	DICHLORODIFLUOROMETHANE	1	ug/l	35	135	175	None: High/ND	171
SW8260C	RB-07	ACETONE	1	ug/l	45	120	37.4	U Flag	35.7
SW8260C	MW-220-VP28	BROMOFORM	1	ug/l	49	121	1.02	None	0
SW8260C	MW-220-VP28	1,2-DICHLOROBENZENE	1	ug/l	53	121	18.9	None	15.5
SW8260C	MW-220-VP28	1,3-DICHLOROBENZENE	1	ug/l	54	120	19.8	None	16
SW8260C	MW-220-VP28	1,4-DICHLOROBENZENE	1	ug/l	52	121	20.3	None	16.6
SW8260C	MW-220-VP28	DIBROMOCHLOROMETHANE	1	ug/l	54	131	2.6	None	2.02
SW8260C	MW-220-VP28	CIS-1,3-DICHLOROPROPENE	1	ug/l	40	133	27.8	None	23.5
SW8260C	MW-220-VP28	TRANS-1,3-DICHLOROPROPENE	1	ug/l	45	133	30.8	None	26.5
SW8260C	MW-220-VP28	CARBON TETRACHLORIDE	1	ug/l	47	134	37.4	None	30

Method	Parent Sample	Analyte	Dil Fac	Unit	Low Limit	High Limit	MS	Qualifier	MSD
SW8260C	MW-220-VP28	TRICHLOROETHENE	1	ug/l	50	130	41.6	None	37.2
SW8260C	MW-220-VP28	CHLOROBENZENE	1	ug/l	54	122	42.5	None	37.6
SW8260C	MW-220-VP28	TOLUENE	1	ug/l	54	134	49.8	None	45.5
SW8260C	MW-220-VP28	BROMODICHLOROMETHANE	1	ug/l	53	129	7.54	None	6
SW8260C	MW-220-VP28	1,1,1-TRICHLOROETHANE	1	ug/l	50	134	51.6	None	45

Method	Parent Sample	Analyte	Dil Fac	Unit	RPD	RPD Limit	Qualifier	Sample Type
SW6010B	MW-58-VP07	Aluminum	10	ug/l	53	20	4X	MSD
SW6010B	MW-58-VP07	Antimony	10	ug/l	33	20	UJ Flag	MSD
SW6010B	MW-58-VP07	Chromium	10	ug/l	38	20	J Flag	MSD
SW6010B	MW-58-VP07	Iron	10	ug/l	84	20	4X	MSD
SW6010B	MW-58-VP07	Manganese	10	ug/l	38	20	J Flag	MSD
SW8260C	MW-216-VP40	TOLUENE	1	ug/l	200	20	UJ Flag	MSD
SW8260C	MW-220-VP28	BROMOFORM	1	ug/l	200	20	None	MSD
SW8260C	MW-220-VP28	1,3-DICHLOROBENZENE	1	ug/l	21.6	20	None	MSD
SW8260C	MW-220-VP28	1,4-DICHLOROBENZENE	1	ug/l	20.1	20	None	MSD
SW8260C	MW-220-VP28	DIBROMOCHLOROMETHANE	1	ug/l	25.1	20	None	MSD
SW8260C	MW-220-VP28	CARBON TETRACHLORIDE	1	ug/l	21.8	20	None	MSD
SW8260C	MW-220-VP28	BROMODICHLOROMETHANE	1	ug/l	22.7	20	None	MSD

Table 5 - List LCS Recoveries outside Control Limits

Method	Parent Sample	Analyte	Dil Fac	Unit	Low Limit	High Limit	LCS	Qualifier
SW8260C	LCS-2253	2-BUTANONE	1	ug/l	35	125	17.3	UJ Flag
SW8260C	LCS-2381	VINYL CHLORIDE	1	ug/l	55	151	157	None: High/ND

Method	Parent Sample	Analyte	Dil Fac	Unit	Low Limit	High Limit	LCS	Qualifier
SW8260C	LCS-2383	CHLOROMETHANE	1	ug/l	58	146	150	None: High/ND
SW8260C	LCS-2383	TRICHLOROFLUOROMETHANE	1	ug/l	56	151	152	J Flag
SW8260C	LCS-2383	VINYL CHLORIDE	1	ug/l	55	151	163	None: High/ND
SW8260C	LCS-2402	CHLOROETHANE	1	ug/l	51	147	175	None: High/ND
SW8260C	LCS-2406	CHLOROETHANE	1	ug/l	51	147	181	None: High/ND
SW8260C	LCS-2413	CHLOROETHANE	1	ug/l	51	147	188	None: High/ND
SW8260C	LCS-2482	1,4-DIOXANE	1	ug/l	35	125	0	UJ Flag
SW8260C	LCS-2510	1,1,2-TRICHLOROETHANE	1	ug/l	53	132	147	None: High/ND
SW8260C	LCS-2510	1,2-DICHLOROBENZENE	1	ug/l	47	134	153	None: High/ND
SW8260C	LCS-2510	TRICHLOROETHENE	1	ug/l	52	134	154	None: High/ND
SW8260C	LCS-2510	1,4-DICHLOROBENZENE	1	ug/l	44	134	157	None: High/ND
SW8260C	LCS-2510	BROMOFORM	1	ug/l	34	138	159	J Flag
SW8260C	LCS-2510	1,1,2,2-TETRACHLOROETHANE	1	ug/l	38	133	160	None: High/ND
SW8260C	LCS-2510	1,3-DICHLOROBENZENE	1	ug/l	47	136	161	None: High/ND
SW8260C	LCS-2510	CHLOROBENZENE	1	ug/l	48	133	161	None: High/ND
SW8260C	LCS-2510	1,2-DICHLOROPROPANE	1	ug/l	47	145	162	None: High/ND
SW8260C	LCS-2510	1,2-DICHLOROETHANE	1	ug/l	52	136	164	None: High/ND
SW8260C	LCS-2510	CIS-1,3-DICHLOROPROPENE	1	ug/l	52	138	164	None: High/ND
SW8260C	LCS-2510	DIBROMOCHLOROMETHANE	1	ug/l	53	131	164	None: High/ND
SW8260C	LCS-2510	BROMODICHLOROMETHANE	1	ug/l	48	143	165	None: High/ND
SW8260C	LCS-2510	TOLUENE	1	ug/l	54	134	166	None: High/ND
SW8260C	LCS-2510	TRANS-1,3-DICHLOROPROPENE	1	ug/l	46	137	166	None: High/ND
SW8260C	LCS-2510	BENZENE	1	ug/l	51	138	168	None: High/ND
SW8260C	LCS-2510	TRANS-1,2-DICHLOROETHENE	1	ug/l	44	138	168	None: High/ND
SW8260C	LCS-2510	CHLOROFORM	1	ug/l	54	136	171	None: High/ND

Method	Parent Sample	Analyte	Dil Fac	Unit	Low Limit	High Limit	LCS	Qualifier
SW8260C	LCS-2510	1,1-DICHLOROETHANE	1	ug/l	46	138	172	None: High/ND
SW8260C	LCS-2510	ETHYLBENZENE	1	ug/l	53	134	174	None: High/ND
SW8260C	LCS-2510	1,1,1-TRICHLOROETHANE	1	ug/l	54	134	175	None: High/ND
SW8260C	LCS-2510	CARBON TETRACHLORIDE	1	ug/l	52	138	182	None: High/ND
SW8260C	LCS-2510	1,1-DICHLOROETHENE	1	ug/l	47	137	183	None: High/ND
SW8260C	LCS-2650	2-BUTANONE	1	ug/l	35	125	0	UJ Flag
SW8260C	LCS-2971	ACETONE	1	ug/l	45	120	39.9	U Flag
SW8260C	LCS-2971	DICHLORODIFLUOROMETHANE	1	ug/l	35	135	198	None: High/ND
SW8260C	LCS-2989	ACETONE	1	ug/l	45	120	43.7	U Flag
SW8260C	LCS-2989	DICHLORODIFLUOROMETHANE	1	ug/l	35	135	167	None: High/ND
SW8260C	LCS-3012	ACETONE	1	ug/l	45	120	43.6	U Flag
SW8260C	LCS-3012	DICHLORODIFLUOROMETHANE	1	ug/l	35	135	195	None: High/ND
SW8260C	LCS-3132	ACETONE	1	ug/l	45	120	41.7	U Flag
SW8260C	LCS-3132	CHLOROMETHANE	1	ug/l	58	146	151	None: High/ND
SW8260C	LCS-3132	TRICHLOROFLUOROMETHANE	1	ug/l	56	151	151	None: High/ND
SW8260C	LCS-3132	VINYL CHLORIDE	1	ug/l	55	151	162	None: High/ND

Table 6 –Samples that were Re-analyzed

SDG	Matrix	Analytical Method	Sample Name	Sample Type	Detected	Number of Analytes	Dil Fac	Comments
160-8643-1	WG	ASTM D5174	MW-58-500	FD	Y	1	10	Diluted due to quenching by the matrix.
160-8643-1	WG	ASTM D5174	MW-58-VP03	N	Y	1	10	Diluted due to quenching by the matrix.
160-8643-1	WG	ASTM D5174	MW-58-VP04	N	Y	1	10	Diluted due to quenching by the matrix.
160-8643-1	WG	ASTM D5174	MW-58-VP05	N	Y	1	10	Diluted due to quenching by the matrix.
160-8643-1	WG	ASTM D5174	MW-58-VP06	N	Y	1	10	Diluted due to quenching by the matrix.

SDG	Matrix	Analytical Method	Sample Name	Sample Type	Detected	Number of Analytes	Dil Fac	Comments
160-8643-1	WG	SW6010B	MW-58-500	FD	N	5	10	Dilute due to the nature of the matrix. The samples had a high level of sediment. Elevated reporting limits provided.
160-8643-1	WG	SW6010B	MW-58-500	FD	Y	17	10	INITIAL
160-8643-1	WG	SW6010B	MW-58-VP03	N	N	5	10	Dilute due to the nature of the matrix. The samples had a high level of sediment. Elevated reporting limits provided.
160-8643-1	WG	SW6010B	MW-58-VP03	N	Y	17	10	INITIAL
160-8643-1	WG	SW6010B	MW-58-VP04	N	N	7	10	Dilute due to the nature of the matrix. The samples had a high level of sediment. Elevated reporting limits provided.
160-8643-1	WG	SW6010B	MW-58-VP04	N	Y	15	10	INITIAL
160-8643-1	WG	SW6010B	MW-58-VP05	N	N	5	10	Dilute due to the nature of the matrix. The samples had a high level of sediment. Elevated reporting limits provided.
160-8643-1	WG	SW6010B	MW-58-VP05	N	Y	17	10	INITIAL
160-8643-1	WG	SW8260B	MW-58-VP03	N	Y	1	10	Dilute to bring tetrachloroethene (PCE) within the calibration range. Only PCE reported from dilution.
160-8652-1	WG	ASTM D5174	MW-58-VP07	N	Y	1	10	Diluted due to quenching by the matrix.
160-8652-1	WG	SW6010B	MW-58-VP07	N	N	6	10	Dilute to bring the concentration of target analytes within the calibration range. Elevated reporting limits provided.
160-8652-1	WG	SW6010B	MW-58-VP07	N	Y	16	10	INITIAL
160-8995-1	WG	SW8260C	MW-219-VP43	N	Y	1	10	Dilute to bring trichloroethene (TCE) within the calibration range. Only TCE reported from dilution.
160-9022-1	WG	SW8260C	MW-219-	N	Y	1	10	Dilute to bring trichloroethene (TCE) within the

SDG	Matrix	Analytical Method	Sample Name	Sample Type	Detected	Number of Analytes	Dil Fac	Comments
			VP50					calibration range. Only TCE reported from dilution.
160-9023-1	WG	SW8260C	MW-219-VP46	N	Y	1	10	Dilute to bring trichloroethene (TCE) within the calibration range. Only TCE reported from dilution.
160-9023-1	WG	SW8260C	MW-219-VP48	N	Y	1	10	Dilute to bring trichloroethene (TCE) within the calibration range. Only TCE reported from dilution.
160-9245-1	WG	SW8260B	MW-59-VP04	N	Y	1	5	Dilute to bring tetrachloroethene (PCE) within the calibration range. Only PCE reported from dilution.
160-9676-1	WG	SW8260C	MW-220-VP26	N	Y	1	10	Dilute to bring trichloroethene (TCE) within the calibration range. Only TCE reported from dilution.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-215-VP20	MW-215-VP900	RPD	RPD Rating	Sample Qual
SW8260C	1,1-DICHLOROETHANE	UG/L	WG	2.0	A	0.70	1.9	92.3%	Poor	None: <PQL
SW8260C	1,1-DICHLOROETHENE	UG/L	WG	2.0	A	ND	0.72	NC	--	--
SW8260C	ACETONE	UG/L	WG	5.0	A	4.0	3.6	10.5%	Good	U Flag: MB
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	7.2	7.0	2.8%	Good	U Flag: MB
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	A	4.6	19	122.0%	Poor	J Flag

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-215-VP40	MW-215-VP901	RPD	RPD Rating	Sample Qual
SW8260C	ACETONE	UG/L	WG	5.0	A	2.0	1.9	5.1%	Good	U Flag: MB
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	4.7	4.6	2.2%	Good	U Flag: MB

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-215-VP55	MW-215-VP902	RPD	RPD Rating	Sample Qual
SW8260C	2-BUTANONE	UG/L	WG	5.0	A	ND	1.4	NC	--	--
SW8260C	ACETONE	UG/L	WG	5.0	A	3.1	4.0	25.4%	Good	U Flag: MB

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-215-VP55	MW-215-VP902	RPD	RPD Rating	Sample Qual
SW8260C	BENZENE	UG/L	WG	2.0	A	0.66	0.66	0.0%	Good	None
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	5.6	5.6	0.0%	Good	U Flag: MB

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-216-VP42	MW-216-VP903	RPD	RPD Rating	Sample Qual
SW8260C	ACETONE	UG/L	WG	5.0	A	1.9	2.5	27.3%	Good	U Flag: MB
SW8260C	BENZENE	UG/L	WG	2.0	A	ND	0.68	NC	--	--
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	5.2	4.2	21.3%	Good	U Flag: MB
SW8260C	TOLUENE	UG/L	WG	1.0	A	ND	0.57	NC	--	--
SW8260C	TRICHLOROFLUOROMETHANE	UG/L	WG	2.0	A	1.4	0.59	81.4%	Poor	None: <PQL

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-217-VP31	MW-217-VP904	RPD	RPD Rating	Sample Qual
SW8260C	ACETONE	UG/L	WG	5.0	A	3.0	3.2	6.5%	Good	U Flag: MB
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	4.1	4.6	11.5%	Good	U Flag: MB

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-217-VP48	MW-217-VP905	RPD	RPD Rating	Sample Qual
SW8260C	ACETONE	UG/L	WG	5.0	A	1.6	1.4	13.3%	Good	U Flag: MB
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	2.2	2.3	4.4%	Good	U Flag: MB

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-218-VP14	MW-218-500	RPD	RPD Rating	Sample Qual
ASTM D5174	Total Uranium	UG/L	WG	0.100	A	1.39	0.894	43.4%	Poor	J

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-219-VP40	MW-219-VP500	RPD	RPD Rating	Sample Qual
SW8260C	1,1,1-TRICHLOROETHANE	UG/L	WG	2.0	A	0.52	0.50	3.9%	Good	None
SW8260C	1,1-DICHLOROETHENE	UG/L	WG	2.0	A	2.2	2.1	4.7%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-219-VP40	MW-219-VP500	RPD	RPD Rating	Sample Qual
SW8260C	ACETONE	UG/L	WG	5.0	A	2.1	2.2	4.7%	Good	U Flag: MB
SW8260C	CARBON TETRACHLORIDE	UG/L	WG	2.0	A	13	13	0.0%	Good	None
SW8260C	CHLOROFORM	UG/L	WG	2.0	A	0.98	1.0	2.0%	Good	None
SW8260C	CIS-1,2-DICHLOROETHENE	UG/L	WG	2.0	A	6.4	6.3	1.6%	Good	None
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	3.7	4.1	10.3%	Good	U Flag: MB
SW8260C	TETRACHLOROETHENE	UG/L	WG	2.0	A	11	10	9.5%	Good	None
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	A	120	110	8.7%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-219-VP52	MW-219-VP501	RPD	RPD Rating	Sample Qual
SW8260C	1,1,1-TRICHLOROETHANE	UG/L	WG	2.0	A	0.94	0.99	5.2%	Good	None
SW8260C	1,1-DICHLOROETHENE	UG/L	WG	2.0	A	2.3	2.4	4.3%	Good	None
SW8260C	ACETONE	UG/L	WG	5.0	A	1.9	2.4	23.3%	Good	U Flag: MB
SW8260C	CARBON TETRACHLORIDE	UG/L	WG	2.0	A	1.8	2.0	10.5%	Good	None
SW8260C	CHLOROFORM	UG/L	WG	2.0	A	0.50	ND	NC	--	--
SW8260C	CIS-1,2-DICHLOROETHENE	UG/L	WG	2.0	A	1.4	1.4	0.0%	Good	None
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	4.2	4.2	0.0%	Good	U Flag: MB
SW8260C	TETRACHLOROETHENE	UG/L	WG	2.0	A	25	27	7.7%	Good	None
SW8260C	TRICHLOROETHENE	UG/L	WG	2.0	A	48	50	4.1%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-220-VP04	MW-220-VP907	RPD	RPD Rating	Sample Qual
SW8260C	ACETONE	UG/L	WG	5.0	A	2.4	2.5	4.1%	Good	U Flag: MB
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	7.0	6.0	15.4%	Good	U Flag: MB

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-220-VP14	MW-220-VP908	RPD	RPD Rating	Sample Qual
SW8260C	ACETONE	UG/L	WG	5.0	A	4.3	3.9	9.8%	Good	U Flag: MB
SW8260C	METHYLENE CHLORIDE	UG/L	WG	2.0	A	4.9	4.5	8.5%	Good	U Flag: MB

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-58-VP04	MW-58-VP500	RPD	RPD Rating	Sample Qual
ASTM D5174	Total Uranium	UG/L	WG	0.100	A	98.5	89.2	9.91%	Good	None
SW6010B	Aluminum	UG/L	WG	6000	A	440000	430000	2.3%	Good	None
SW6010B	Arsenic	UG/L	WG	200	A	120	110	8.7%	Good	None
SW6010B	Barium	UG/L	WG	1000	A	710	740	4.1%	Good	None
SW6010B	Beryllium	UG/L	WG	100	A	16	16	0.0%	Good	None
SW6010B	Calcium	UG/L	WG	20000	A	18000	18000	0.0%	Good	None
SW6010B	Chromium	UG/L	WG	200	A	190	180	5.4%	Good	None
SW6010B	Copper	UG/L	WG	500	A	120	110	8.7%	Good	None
SW6010B	Iron	UG/L	WG	2000	A	120000	120000	0.0%	Good	None
SW6010B	Lead	UG/L	WG	200	A	220	220	0.0%	Good	None
SW6010B	Magnesium	UG/L	WG	20000	A	6900	7100	2.9%	Good	None
SW6010B	Manganese	UG/L	WG	300	A	960	910	5.3%	Good	None
SW6010B	Nickel	UG/L	WG	800	A	340	330	3.0%	Good	None
SW6010B	Potassium	UG/L	WG	100000	A	ND	9700	NC	--	--
SW6010B	Selenium	UG/L	WG	300	A	ND	48	NC	--	--
SW6010B	Sodium	UG/L	WG	20000	A	82000	83000	1.2%	Good	None
SW6010B	Vanadium	UG/L	WG	1000	A	150	160	6.5%	Good	None
SW6010B	Zinc	UG/L	WG	600	A	480	480	0.0%	Good	None
SW7470	Mercury	UG/L	WG	0.18	A	0.86	1	15.1%	Good	None
SW8260B	1,1,1-Trichloroethane	UG/L	WG	1	A	0.67	0.64	4.6%	Good	None
SW8260B	cis-1,2-Dichloroethene	UG/L	WG	1	A	0.29	0.28	3.5%	Good	None
SW8260B	Tetrachloroethene	UG/L	WG	1	A	20	18	10.5%	Good	None

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-59-VP06	MW-59-VP906	RPD	RPD Rating	Sample Qual
ASTM D5174	Total Uranium	UG/L	WG	0.100	A	ND	ND	NC	Good	None
SW6010B	Aluminum	UG/L	WG	300	A	210	200	4.9%	Good	None
SW6010B	Arsenic	UG/L	WG	10	A	2.2	ND	NC	--	--

Method	Analyte	Unit	Matrix	PQL	Anal Type	MW-59-VP06	MW-59-VP906	RPD	RPD Rating	Sample Qual
SW6010B	Barium	UG/L	WG	50	A	14	15	6.9%	Good	None
SW6010B	Calcium	UG/L	WG	1000	A	7900	8000	1.3%	Good	None
SW6010B	Cobalt	UG/L	WG	50	A	3.9	3.2	19.7%	Good	None
SW6010B	Copper	UG/L	WG	25	A	2.1	2.4	13.3%	Good	None
SW6010B	Iron	UG/L	WG	100	A	900	250	113.0%	Poor	J Flag
SW6010B	Lead	UG/L	WG	10	A	0.6	1.1	58.8%	Poor	None: <PQL
SW6010B	Magnesium	UG/L	WG	1000	A	1200	1200	0.0%	Good	None
SW6010B	Manganese	UG/L	WG	15	A	58	22	90.0%	Poor	J Flag
SW6010B	Nickel	UG/L	WG	40	A	140	150	6.9%	Good	None
SW6010B	Potassium	UG/L	WG	5000	A	1900	1800	5.4%	Good	None
SW6010B	Sodium	UG/L	WG	1000	A	11000	11000	0.0%	Good	None
SW6010B	Vanadium	UG/L	WG	50	A	ND	4.4	NC	--	--
SW6010B	Zinc	UG/L	WG	30	A	93	ND	NC	--	--
SW8260B	2-Butanone (MEK)	UG/L	WG	5	A	0.63	ND	NC	--	--
SW8260B	2-Hexanone	UG/L	WG	5	A	ND	0.29	NC	--	--
SW8260B	Acetone	UG/L	WG	2	A	0.51	ND	NC	--	--
SW8260B	Methylene Chloride	UG/L	WG	1	A	0.33	0.31	6.3%	Good	None
SW8260B	Tetrachloroethene	UG/L	WG	1	A	1.4	1.3	7.4%	Good	None

Note: Blank spaces indicate analytes was not analyzed or ND.

Key:

A = Analyte

NC = Not Calculated

ND = Not Detected

PQL = Practical Quantitation Limit

RPD = Relative Percent Difference

T = Tentatively Identified Compound

B Analytical Data

Provided on attached CD.

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C System Audits

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Monitoring well Sampling Audit

THE LOUIS BERGER GROUP, INC.

FIELD LOGBOOK AUDIT FORM

Audit Date: 4/12/16	**Site Name:** Sylvania FUSRAP
Auditor: Rachel Malaniak	**Team Members:** Erik Gustafson, S. Kromhout
Quality Assurance Notice (QAN):	J. Kennedy, E. Lambert, T. Dillon

Initial Information	Yes	No	NA	Comments
Site Name	X			
Location	X			
Client I.D.			X	
Date of Work	X			
Arrival/Departure Times	X			
Proposed Daily Activities	X			
On-going Weather	X			
Team Members and Duties	X			
Other Personnel and Affiliations	X			
Other:				
HEALTH AND SAFETY				
Meeting Conducted	X			
Personnel Attending		X	*	Sign Personnel in on HAS sheet
Levels of Protection for each Phase of Work			*	on HAS sheet
Safety Equipment			*	on HAS sheet
Equipment I.D. #			*	On Log sheet
Calibration			*	On Log/Cal sheet
Background Readings			X	
On-site Reading			X	
Other:				
SAMPLE/DATA COLLECTION EQUIPMENT				
Types	X			
Serial # (I.D. #)			*	on logs sheets
Calibration			*	on log sheets
Background Readings			*	on log sheets
On-site Readings/Locations	X			
Other:				

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FIELD LOGBOOK AUDIT FORM

	Yes	No	NA	Comments
DECONTAMINATION/DISPOSAL				
Solution Used	X			Alconox
Procedures for Personnel	X			
Procedures for Equipment	X			
Disposal Method for Wastes	X			
Other:				
PHOTO DOCUMENTATION				
Camera			X	
Lens			X	
Serial #			X	
Film Type/Roll #			X	
Sequence #/Frame #			X	
Photographer			X	
Direction			X	
Location/Subject			X	
Date and Time			X	
SITE ACTIVITY				
Conversation Interview with Site Representatives	X			
Description of Site Management Practices	X			
Descriptions of Wastes			X	
Pathways/targets			X	
Reconnaissance Observations			X	
Deviations from Approved Work Plan			X	
Site Maps/Sketches			X	
Field Calculations	X			on log sheets.
Assumptions			X	
Other:				

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FIELD LOGBOOK AUDIT FORM

	Yes	No	NA	Comments
SAMPLES				
Matrix and Numbers	X			
Dates/Times Collected	X			Also on log sheets
Who Collected Sample	X			
Locations	X			
Depth	*		*	on log sheet
Composite/Grab	*		*	on log sheet
Physical Descriptions	*		*	on log sheet
Field Measurements	*		*	on log sheets
Sample I.D. #				
Sampling Techniques				
Preservation Techniques			X	
Receipt for Samples Given			X	
Portions Offered to Site Representative			X	
Chain-of-custody (COC) Filled Out				at end
Crosscheck of Sample Inventory vs. COC				at end
Other:				
GENERAL				
Each Page Signed and Dated by Team Leader	X			
Entries Recorded by Anyone Else Initialed	X			
Blank Pages/Spaces Voided	X			
Corrections Made Properly	X			
Entries with 24-Hour Clock Time Notations	X			
Other:				

Additional Comments

THE LOUIS BERGER GROUP, INC.

FIELD AUDIT CHECKLIST

4/12/16

Project Name: Sylvania FUSRAP	Project Number:
Location: Hicksville, New York	
LBG Personnel: Rachel Malaniak	

Presampling Procedures

1. Are routine/special sampling requirements discussed and documented in the logbook?
   Comments: yes

2. Are personnel assigned as:
   a. Sample custodian (name): Dan Kennedy
   b. Team leader (name): Dan Kennedy
   c. Sampler (name): Stephanie Kromhout; Eric Lambert; Larry Roedl; Tim Dillon
   d. H&S (name): Tim Dillon

3. Does the team member responsible for the following activities known how to complete them:
   a. Sample documentation and inventory yes
   b. Decontamination procedures yes
   c. Photodocumentation yes
   d. Chain-of-custody yes
   e. Sample packaging and shipping yes
   f. Site generated wastes yes
   Comments:

4. Are past problems reviewed, discussed, and solutions identified and documented in the logbook?
   Comments: N/A

5. Are site safety concerns covered during the meeting?
   Comments: yes

Sampling Procedures and Documentation

1. Is a copy of the workplan/sampling plan available so the team members understand the procedures required for sampling and sample collection?
   Comments: yes

2. Do team members know what to do if procedures cannot be used as identified in the sampling plan?
   Comments: yes

3. Have changes in the sampling procedures been noted in the logbook?
   Comments: N/A

4. Does the team have the necessary equipment for collecting appropriate samples?
   Comments: yes

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FIELD AUDIT CHECKLIST

5. Does the team record appropriate information at the time that the sample is collected? (i.e., sample interval, sample type, composite or grab sample, etc.)
   Comments: yes

6. Are sample jars kept clean during transfer of sample material?
   Comments: yes

7. Are samples preserved as indicated in the sampling plan?
   Comments: yes

8. Are there any visible signs of contamination evident on the sampling equipment?
   Comments: No

Chain-of-Custody

1. Are samples kept in a controlled area (i.e., in a locked location or with a team member) at all times?
   Comments: yes

2. Is all of the sample information (sample type, date, time, etc.) noted on the chain-of-custody?
   Comments: yes

3. Have all samplers signed the chain-of-custody form?
   Comments:

4. Is the Federal Express air bill number listed on the chain-of-custody form?
   Comments:

5. Has a separate team member been assigned to cross check the sample inventory and the chain-of-custody prior to shipment?
   Comments: yes

6. Is the cross check procedure noted in the logbook?
   Comments:

7. Are the sample numbers and Federal Express bill numbers listed in the sample log or the site log-book?
   Comments:

8. Were the labels, logbooks, and chain-of-custody form cross checked?
   Comments:

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FIELD AUDIT CHECKLIST

Quality Control Samples

1. What QC samples are required (as per sampling plan)?
   Comments: Duplicates, tripblanks, rinse blanks, MS/MSDs

2. What frequency must QC samples be collected? 1 per 20 ms/msDs +Rinse Blanks
   ~~1 per 10 ms/msds~~ 1 per 10 Duplicates; 1 per shipment Trip Blanks

3. Are trip blanks being used?
   Comments: yes

4. Which laboratory provided trip blanks? Test America

5. Are appropriate materials used to generate QC samples?
   Comments: yes

Site Generated Wastes

1. What level of protective clothing is required?
   Level D

2. What equipment is available on site?
   ~~X-52~~, MP-50; WLIs, PIDs, YSI 650

3. Is the equipment calibrated daily and in accordance with appropriate procedures?
   Yes

4. Are calibration data recorded in appropriate logbooks?
   Comments: yes

5. Is data collected according to specific procedures and recorded in the site logbook?
   Comments: yes

Sample Packaging and Shipping

1. Describe sample packaging procedures.
   Same

2. Is packaging done at the end of the day, or as samples are collected?
   Both.

THE LOUIS BERGER GROUP, INC. FIELD AUDIT CHECKLIST
3. Was an inventory conducted for chain-of-custody, logbook, and sample containers? Comments:
4. Are samples packed on ice? Comments: yes
5. Is the proper information being entered on the Federal Express form for billing purposes (i.e., project number and cost code)? Comments:
Personnel Management
1. Is the team leader noting the time that each team member arrives and departs the site in the log-book? Comments: yes
2. Do the weekly time reports reflect the on-site time only? Comments:
PROJECT QC OFFICER: Rachel Malaniak
DATE OF AUDIT: 4/12/16
FIELD TEAM LEADER:

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NON-CONFORMANCE/QUALITY CONTROL REPORT

Date: April 13, 2016

Organization Name: Louis Berger

Initiator's Name & Title: Rachel Malaniak - Auditor (Louis Berger)

Problem Description:

Steel toe ~~boots~~ + safety glasses where not being worn at ten discussed in H+S meeting. 1 employee not wearing both, another not wearing safety glasses.

ptl was not in equilibration. discuss w/ Dan Kennedy.

Reported To: Erik Gustafson / Dan Kennedy

Corrective Action:

Told staff members to make sure to wear proper safety equipment at all times.

Dan Kennedy discuss w/ staff ptl issue prior to sampling.

Reviewed and Implemented by: X

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FIELD SAFETY AUDIT FORM

Date: 4/12/16 Region (START/CORP): USACE/K.C.

Prepared by: Rachel Malaniak TDD Number: _____

Pan Number: _____

I. A. **INCIDENT/SITE DESCRIPTION**

1. Site Name: Sylvania FUSRAP
2. Location: Hicksville 140 Cantiague Rd.
3. City/Town: Hicksville
4. State, County, Zip: New York
5. Area Affected: _____
6. Surrounding Population: _____
7. Building(s): _____
8. Topography: _____
9. Site Plan and Site Sketch Attached: Yes _____ No _____
10. Weather Conditions
11. OSC:
12. Assessed Overall Hazard: High_____ Moderate _____ Low _____ Unknown_____

B **COMMENTS:** Monthly well Sampling Audit

C. **TYPE OF ACTIVITY:**

II. A. **SITE WORK PLAN**

Description

Task 1 Monitoring Well Sampling

Task 2 _____

Task 3 _____

Task 4 _____

Task 5 _____

Task 6 _____

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FIELD SAFETY AUDIT FORM

B. SAMPLE REQUIREMENTS

Sample Shipment Procedures: Samples will be stored/shipped in coolers and will be using Fedex to ship to Laboratories.

Chain-of-Custody Procedures Followed: Yes _____ No _____

C. COMMENTS (Other Team Actions): _____

III. A. SITE SAFETY PLAN

1. Site Safety Plan Prepared By: LB/E+E
2. Site Safety Plan On-site: Yes X No _____ Location? _____
3. Site Safety Plan Complete: Yes X No _____
4. Chemicals Present: _____
5. Chemical Characteristics: Corrosive____ Ignitable____ Radioactive____ Toxic____ Volatile____ Biological____
6. Physical Characteristics: Solid____ Liquid____ Sludge____ Gas/Vapor____
7. Toxicological Characteristics: Respiratory Hazard: High _____ Low _____ Dermal Hazard: High _____ Low _____
8. Background Information: Complete _____ Incomplete _____
9. Overall Chemical Hazard: High _____ Low _____
10. LBG Personnel On-site and Responsibilities:
    1. S. Kromhout - Sampler
    2. E. Lambert - Sampler
    3. T. Dillon - E+E sampler/HSO
    4. L. Rodel - E+E sampler
    5. _____
    6. _____
    7. _____
    8. _____
11. Level of Protection: D
    Initial _____ Upgraded _____ Downgraded _____
    Action Level Upgrade Based on: _____
12. Monitoring/Survey Equipment Used:
    1. ~~YSI~~ YSI 650
    2. PID
    3. MP-50/~~MP-10~~
    4. _____
    5. _____
    6. _____
    7. _____
    8. _____

13. Decontamination Procedures: Alconox / Rinse w/ DI

14. First Aid Procedures Established: Yes ✓ No _____

15. Emergency Numbers Available: Yes ✓ No ____ Posted? Yes____ No ____

16. Emergency Routes Established: Yes ✓ No _____

17. LBG Employees' Knowledge of Emergency Procedures: Good ✓ Bad _____

B. **COMMENTS:**

Comments:

IV. A. **SITE EQUIPMENT**

1. Respiratory Equipment N/A

   a. Type: SCBA _____ APR _____ Airline _____ Other _____

   b. Cartridge/Canister Used:

   c. Condition: Good _____ Fair _____ Poor _____

   d. Checkout Procedures Follows: Yes _____ No _____

   e. Equipment Cleaned/Maintained: Yes _____ No _____

   By Whom:

   f. Comment:

2. Personnel Protective Equipment

   a. Level of Protection: A _____ B _____ C _____ D ✓

   b. Equipment Used: steel toe boots; reflective vest; safety glasses

   c. Equipment Checked-out Before Use: Yes ✓ No _____

   After Use: Yes _____ No _____

   d. Equipment Accessories: Eye Glass Inserts

   Nose Cups

   TLD

   Escape Pak

   Hard Hat

   Other

   e. Equipment Maintained By: Personnel

   f. Comments:

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FIELD SAFETY AUDIT FORM

3. Survey/Monitoring Equipment

a. Equipment Used: 1. V-52 5. _____
2. ~~MAP10~~/MP50 6. _____
3. PID 7. _____
4. WLI 8. _____

b. Equipment Condition: Good X Fair _____ Poor _____

c. Calibration Frequency: twice per day

d. Maintenance Frequency: when necessary

e. Operator's Knowledge: Good X Fair _____ Poor _____

f. Personnel/Area Monitoring Procedures: _____

g. Comments: _____

4. Decontamination Equipment

a. Equipment Used: 1. Alconox 5. _____
2. DI H2O 6. _____
3. _____ 7. _____
4. _____ 8. _____

b. POS Stations: 1. _____ 2 _____ 3 _____ 4 _____
5. _____ 6 _____ 7 _____ 8 _____

c. Decontamination Procedures: Alconox wash then DI Rinse

d. Comments: _____

5. First Aid Equipment

a. Equipment Available On-site: 1. ✓ 2. _____ 3. _____
4 _____ 5. _____ 6 _____

b. Equipment Condition: Good ✓ Fair _____ Poor _____

c. Personnel Trained in First Aid and CPR: Yes X No _____

d. Stress Drinks Available On-site: Yes X No _____

e. Comments: _____

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FIELD SAFETY AUDIT FORM

V. MISCELLANEOUS

a. Qualified/Trained Personnel On-site: Yes X No _____

b. HSRs On-Site: Yes X No _____

c. Personal Hygiene Habits: Good X Fair _____ Poor _____

d. Cooperativeness: Good X Fair _____ Poor _____

e. Site Safety Officer's Consciousness of Personnel: Good X Fair _____ Poor _____

f. Site Team Leader's Consciousness of Safety Needs: Good X Fair _____ Poor _____

VI. OVERALL COMMENTS

VII. CONCLUSIONS

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QUALITY CONTROL INSPECTION CHECKLIST FOR FIELD ACTIVITIES

INVESTIGATION-DERIVED WASTE	**YES**	**NO**	**NA**
Were investigation-derived soils and groundwater field screened?	☑	☐	☐
Was any potentially contaminated soil or groundwater (as determined by field screening) drummed?*	☑	☐	☐
Were all drums labeled and properly staged?*	☑	☐	☐
Was handling of investigation-derived waste performed in accordance with the work plan?	☒	☐	☐

COMMENTS Purge water is being stored in an on-site FRAC tank.

Location Sylvania FUSRAP **Date** 4/12/16

Field Team Leader Name Dan Kennedy

Field Team Leader Signature X D Kennedy

General Description of Today's Scope of Work Monitoring Well Sampling

MW205 through MW215

MW58, MW59

S1-325, S1-450

~~MW-P-110, MW-355~~ ®

MWP-110-440, MWP-110-355

THE LOUIS BERGER GROUP, INC.

NON-CONFORMANCE/QUALITY CONTROL REPORT

Date: 3/31/16

Organization Name: Louis Berger Grp

Initiator's Name & Title: Chris Watt, Manager

Problem Description:

Due to expedited TAT, the field team leader is unable review the sample Containers/coolers with the C-O-C prior to sending to the lab. The lab has a courier pick-up the coolers at the drilling site.

Reported To: Erik Gustafson, Field team leader.

Corrective Action:

A. Picture of the C-O-C is taken by the field sampler and sent to the FTL, who then reviews the C-O-C for accuracy & completeness.

Reviewed and Implemented by: Chris WATT and Erik Gustafson.

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QUALITY CONTROL INSPECTION CHECKLIST FOR FIELD ACTIVITIES

HEALTH and SAFETY (H&S)	YES	NO	NA
Was the daily safety meeting held and documented?	☑	☐	☐
Were site contaminants of concern discussed in meeting?	☑	☐	☐
Were other H&S aspects discussed in meeting? Note below.	☑	☐	☐
Were exceptions, additions, or other changes in H&S procedures discussed?	☑	☐	☐

What level(s) of protection is required in HASP for today's work sites? A B C (D)

What level of personal protective equipment (PPE) is being worn by personnel at today's work sites? A B C (D)

COMMENTS Add'l aspects included avoiding tree-limbs to pinch points, Silica inhalation and cleaning up leaks promptly

DAILY FIELD MEETING	YES	NO	NA
Was the daily meeting held by Field Team Leader and documented?	☑	☐	☐
Was the proposed scope of work discussed?	☑	☐	☐
Are work plan and subcontracts available for each field team to review if needed?	☑	☐	☐

COMMENTS MW-221 = Continuing to sample and drill
MW-224 = Building well.

NEAR-SURFACE SOIL SAMPLING	YES	NO	NA
Were the sample collection points located in accordance with the work plan?	☐	☐	☑
Was the sampling conducted in accordance with the work plan?	☐	☐	☑
Were the samples collected for the correct analyses?	☐	☐	☑
Was the appropriate field documentation completed?	☐	☐	☑

THE LOUIS BERGER GROUP, INC.

QUALITY CONTROL INSPECTION CHECKLIST FOR FIELD ACTIVITIES

Was the sample handling, preservation, and shipping performed in accordance with the work plan?	☐	☐	☐

COMMENTS _____

_____

_____

_____

DRILLING	**YES**	**NO**	**NA**
Have applicable drilling permits and utility clearances been obtained for this site?	☑	☐	☐
Was the exclusion zone and contaminant reduction zone established around the drill rig?	☑	☐	☐
Was the drilling and sampling equipment decontaminated prior to use in accordance with the work plan?	☑	☐	☐
Was the kill switch on the drill rig tested prior to drilling?	☑	☐	☐
Was the SSO present during drilling operations?	☐	☑	☐
Was the appropriate monitoring equipment used?	☑	☐	☐
Was the calibration of applicable equipment conducted?	☑	☐	☐
Were the instrument readings recorded?	☑	☐	☐
Were the geologic logs and proper documentation completed by the geologist?	☑	☐	☐
Were the soil samples field screened?	☑	☐	☐
Were the soil samples collected in accordance with the work plan?	☑	☐	☐
Was the collection of samples documented?	☑	☐	☐
Were the soil samples handled, cooled, and shipped in accordance with the work plan?	☑	☐	☐
Were drill cuttings field screened for contamination?	☑	☐	☐
If the cuttings required drumming, were the drums labeled and properly staged?	☑	☐	☐

COMMENTS _____

_____

_____

THE LOUIS BERGER GROUP, INC.

QUALITY CONTROL INSPECTION CHECKLIST FOR FIELD ACTIVITIES

GROUNDWATER SAMPLING AT ~~PERMANENT MONITORING WELLS~~ Profiling locations	YES	NO	NA
Was the well sampled a minimum of 14 days after grouting/ cementing (newly installed wells)?	☐	☐	☑
Was purge water screened and containerized (if necessary)?	☐	☐	☑
Were samples immediately placed inside a sample cooler with ice?	☑	☐	☐
Were the samples collected for the correct analyses?	☑	☐	☐
Were samples for dissolved metals (if any) field filtered?	☐	☐	☑
Was proper documentation completed for the samples collected?	☑	☐	☐
Were samples handled, preserved, and shipped in accordance with the work plan?	☐	☑	☐

COMMENTS Due to expedited TAT, FTL unable to review sample containers prior to courier pick-up. However FTL is emailed a photo of the C-O-C.

SEEP/SURFACE WATER/SEDIMENT SAMPLING	YES	NO	NA
Were sample collection points located in accordance with the work plan?	☐	☐	☑
Were downstream samples collected before upstream?	☐	☐	☐
At each location, was the surface water sample collected prior to the sediment sample?	☐	☐	☐
Was proper documentation completed for the samples collected?	☐	☐	☐
Were field parameters measured and recorded for each surface water sample?	☐	☐	☐
Was the sampling conducted in accordance with the work plan?	☐	☐	☐
Were samples handled, preserved, and shipped in accordance with the work plan?	☐	☐	☐

COMMENTS _____

THE LOUIS BERGER GROUP, INC.

QUALITY CONTROL INSPECTION CHECKLIST FOR FIELD ACTIVITIES

INVESTIGATION-DERIVED WASTE	YES	NO	NA
Were investigation-derived soils and groundwater field screened?	☑	☐	☐
Was any potentially contaminated soil or groundwater (as determined by field screening) drummed?	☑	☐	☐
Were all drums labeled and properly staged?	☑	☐	☐
Was handling of investigation-derived waste performed in accordance with the work plan?	☑	☐	☐

COMMENTS _____

Location S/YUANIA FUSRAP Site. MW 221 **Date** 3/3/16

Field Team Leader Name Erik. Gustafson

Field Team Leader Signature _____

General Description of Today's Scope of Work _____

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FIELD LOGBOOK AUDIT FORM

Audit Date: 3/6/16	**Site Name:** Slyvana - FUSRAP
Auditor: Chris Watt	**Team Members:** Erik Gustafson
Quality Assurance Notice (QAN):	Eric Lambert, Omar Sokal

Initial Information	Yes	No	NA	Comments
Site Name	✓			
Location	✓			
Client I.D.	✓			
Date of Work	✓			
Arrival/Departure Times	✓			
Proposed Daily Activities	✓			
On-going Weather	✓			
Team Members and Duties	✓			
Other Personnel and Affiliations	✓			
Other:				
HEALTH AND SAFETY				
Meeting Conducted	✓			REFER TO DAILY SAFETY MEETING RECORD
Personnel Attending	✓			
Levels of Protection for each Phase of Work	✓			
Safety Equipment	✓			
Equipment I.D. #	✓			
Calibration	✓			
Background Readings	✓			
On-site Reading	✓			
Other:				
SAMPLE/DATA COLLECTION EQUIPMENT				
Types	✓			
Serial # (I.D. #)			✓	
Calibration			✓	
Background Readings			✓	
On-site Readings/Locations			✓	
Other:				

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FIELD LOGBOOK AUDIT FORM

	Yes	No	NA	Comments
DECONTAMINATION/DISPOSAL				
Solution Used	✓			
Procedures for Personnel	✓			
Procedures for Equipment	✓			
Disposal Method for Wastes	✓			
Other:				
PHOTO DOCUMENTATION				
Camera	✓			
Lens			✓	
Serial #			✓	
Film Type/Roll #			✓	
Sequence #/Frame #			✓	
Photographer			✓	
Direction			✓	
Location/Subject			✓	
Date and Time	✓			
SITE ACTIVITY				
Conversation Interview with Site Representatives	✓			
Description of Site Management Practices	✓			
Descriptions of Wastes	✓			
Pathways/targets	✓			
Reconnaissance Observations	✓			
Deviations from Approved Work Plan	✓			
Site Maps/Sketches	✓			
Field Calculations	✓			
Assumptions				
Other:				

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FIELD LOGBOOK AUDIT FORM

	Yes	No	NA	Comments
SAMPLES				
Matrix and Numbers	✓			
Dates/Times Collected	✓			
Who Collected Sample	✓			
Locations	✓			
Depth	✓			
Composite/Grab	✓			
Physical Descriptions	✓			
Field Measurements	✓		✓	
Sample I.D. #	✓			
Sampling Techniques	✓			
Preservation Techniques	✓			
Receipt for Samples Given			✓	
Portions Offered to Site Representative			✓	
Chain-of-custody (COC) Filled Out	✓			
Crosscheck of Sample Inventory vs. COC	✓			via photo
Other:				
GENERAL				
Each Page Signed and Dated by Team Leader		✓		
Entries Recorded by Anyone Else Initialed	✓			
Blank Pages/Spaces Voided	✓			
Corrections Made Properly	✓			
Entries with 24-Hour Clock Time Notations	✓			
Other:				
Additional Comments				

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FIELD AUDIT CHECKLIST

Project Name: Sylvania - Fusarp	Project Number:
Location: Hicksville, NY	
LBG Personnel: E. Gustafson, E. Lambert, C. Watt, O. Sokol	

Presampling Procedures

1. Are routine/special sampling requirements discussed and documented in the logbook?
   Comments:

2. Are personnel assigned as:
   a. Sample custodian (name): E+E
   b. Team leader (name): Erik Gustafson.
   c. Sampler (name): Eric Lambert
   d. H&S (name): Erik Gustafson.

3. Does the team member responsible for the following activities known how to complete them:
   a. Sample documentation and inventory ✓
   b. Decontamination procedures ✓
   c. Photodocumentation ✓
   d. Chain-of-custody ✓
   e. Sample packaging and shipping ✓
   f. Site generated wastes ✓
   Comments:

4. Are past problems reviewed, discussed, and solutions identified and documented in the logbook?
   Comments: Yes

5. Are site safety concerns covered during the meeting?
   Comments: Yes.

Sampling Procedures and Documentation

1. Is a copy of the workplan/sampling plan available so the team members understand the procedures required for sampling and sample collection?
   Comments: Yes

2. Do team members know what to do if procedures cannot be used as identified in the sampling plan?
   Comments: Yes

3. Have changes in the sampling procedures been noted in the logbook?
   Comments: Yes

4. Does the team have the necessary equipment for collecting appropriate samples?
   Comments: Yes

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FIELD AUDIT CHECKLIST

5. Does the team record appropriate information at the time that the sample is collected? (i.e., sample interval, sample type, composite or grab sample, etc.)
   Comments: Yes

6. Are sample jars kept clean during transfer of sample material?
   Comments: Yes

7. Are samples preserved as indicated in the sampling plan?
   Comments: Yes

8. Are there any visible signs of contamination evident on the sampling equipment?
   Comments: No.

Chain-of-Custody

1. Are samples kept in a controlled area (i.e., in a locked location or with a team member) at all times?
   Comments: Yes

2. Is all of the sample information (sample type, date, time, etc.) noted on the chain-of-custody?
   Comments: Yes

3. Have all samplers signed the chain-of-custody form?
   Comments: Yes

4. Is the Federal Express air bill number listed on the chain-of-custody form?
   Comments: Not Nec. / Cevron.

5. Has a separate team member been assigned to cross check the sample inventory and the chain-of-custody prior to shipment?
   Comments: Yes

6. Is the cross check procedure noted in the logbook?
   Comments: No.

7. Are the sample numbers and Federal Express bill numbers listed in the sample log or the site log-book?
   Comments: Yes

8. Were the labels, logbooks, and chain-of-custody form cross checked?
   Comments: Yes

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FIELD AUDIT CHECKLIST

Quality Control Samples

1. What QC samples are required (as per sampling plan)?
   Comments: Dup + Trip Blanks

2. What frequency must QC samples be collected?
   Per QAPP

3. Are trip blanks being used?
   Comments: Yes

4. Which laboratory provided trip blanks?
   Yes

5. Are appropriate materials used to generate QC samples?
   Comments: Yes

Site Generated Wastes

1. What level of protective clothing is required?
   D

2. What equipment is available on site?
   D

3. Is the equipment calibrated daily and in accordance with appropriate procedures?
   Yes

4. Are calibration data recorded in appropriate logbooks?
   Comments: Yes

5. Is data collected according to specific procedures and recorded in the site logbook?
   Comments: Yes

Sample Packaging and Shipping

1. Describe sample packaging procedures.
   Per QAPP - & Expect FTL coord check COC Prior to Courier

2. Is packaging done at the end of the day, or as samples are collected?
   as collected

THE LOUIS BERGER GROUP, INC. FIELD AUDIT CHECKLIST	
3. Was an inventory conducted for chain-of-custody, logbook, and sample containers? Comments:	Yes @ Sample location
4. Are samples packed on ice? Comments:	Yes
5. Is the proper information being entered on the Federal Express form for billing purposes (i.e., project number and cost code)? Comments:	N/A
Personnel Management	
1. Is the team leader noting the time that each team member arrives and departs the site in the log-book? Comments:	Yes
2. Do the weekly time reports reflect the on-site time only? Comments:	N/A
PROJECT QC OFFICER:	Chris WATT
DATE OF AUDIT:	3/31/16
FIELD TEAM LEADER:	Erik Gustafson