POST-REMOVAL GROUNDWATER SAMPLING REPORT

Area of Concern (AOC) No. 2 Former Schenectady Army Depot - Voorheesville Area Guilderland, New York

Contract No. DACA87-02-D-0005 Task Order No. 18

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Prepared By:



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List of Acronyms

AOC	Area of Concern
DOD	Department of Defense
EE/CA	Engineering Evaluation & Cost Analysis
MW	Monitoring Well
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCMW	Post Construction Monitoring Well
SADVA	Schenectady Army Depot - Voorheesville Area
USACE	United States Army Corps of Engineers
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

This Groundwater Sampling Report has been prepared by Parsons for the U.S. Army Corps of Engineers (USACE), New York District under Contract No. DACA87-02-D-0005, Task Order No. 18 with the USACE Huntsville Center.

Two groundwater monitoring wells within the Area of Concern (AOC) 2, known as the former Post Commander's Landfill at the former Schenectady Army Depot – Voorheesville Area (SADVA), were sampled on May 1, 2008. This sampling event was conducted at the request of the New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC) to confirm recent sampling results. The first two rounds of post-removal groundwater sampling were completed in April and October 2007 and were discussed in a report by Shaw Environmental, Inc dated October 2007. For the October 2007 sampling event, volatile organic compounds (VOCs) were not detected in any of the wells. The summary tables of results for the first two sampling rounds can be found in Attachment A. The former Post Commander's Landfill (also known as AOC 2) is located west of County Route 201. This 40.6 acre parcel was part of the SADVA from its inception in 1941 until its sale to a private landowner in 1963. Historical information indicates the parcel was used as a transit troop bivouac area and officer's family housing area in the 1950s and 1960s. Sometime after purchasing the property in 1963, the new owners noticed a disposal area (later referred to as the Post Commander's Landfill). The existence of the landfill was subsequently reported to the NYSDEC. The USACE commenced planning for a remedial investigation in 1999. A subsequent Engineering Evaluation and Cost Analysis (EE/CA) described the waste disposal area as consisting of several distinct waste areas with waste materials including salt/iodine pill bottles, drums, glass bottles containing flammable liquids and other materials.

During the time spanning September 2005 to October 2006, an interim removal action was completed within AOC 2. This removal action, performed by Shaw Environmental under USACE direction, consisted of the excavation and disposal of waste materials and impacted soils followed by restoration to grade. The excavation activities were concentrated in areas defined in the EE/CA and in other impacted areas identified during the excavation activities. The removal action resulted in the excavation and off-site disposal of approximately 10,000 cubic yards of waste and impacted soils. These wastes primarily consisted of dried paint residues, flammable liquids, mercury-contaminated flammable liquids, and other materials.

AOC 2 presently has a residence located on the property; this residence dates back to the Department of Defense's (DOD) use of the property. The residence is located about 300 yards from the former Post Commander's Landfill. A small barn, a farm pond, and small sheds are also presently located on the property, but were not part of the DOD use of the site. All of these structures are located 200 yards or more from the Post Commander's Landfill area.

3.0 SAMPLING AND ANALYTICAL METHODOLOGY

One remedial investigation monitoring well (MW-03) and one post construction monitoring well (PCMW-02) were sampled on May 1, 2008. A field duplicate sample (PCMW-12) was collected from PCMW-02 as a quality control check on the representativeness of the sampling methods. A site map providing the well locations is included as Figure 1. All sampling and analyses were performed in accordance with procedures that included the following:

- Prior to sample collection, each monitoring well was gauged for depth to water and depth to bottom of well.
- Each well was purged and sampled using low-flow techniques to ensure that the samples collected were representative of groundwater quality with minimal disturbance. During purging activities, a continuous flow-through water quality meter was used to measure the pH, conductivity, and turbidity of the water. Purging continued until there was no more than a ten percent variation in the field-measured water quality parameters between each measuring point.
- The monitoring wells were allowed to recharge following purging activities.
- Samples were packaged and submitted under Chain of Custody for analysis to an off-site subcontract laboratory for VOCs by method SW-8260LL.
- The samples were analyzed by GPL Laboratories in Frederick, Maryland. GPL is certified by the State of New York to perform the requested analyses.

Field sampling logs are included in Attachment B. Attachment C contains the Data Usability Report for the GPL data package.

4.0 RESULTS

Table 1 presents the analytical results for MW-03 and PCMW-02. VOCs were not detected in either sample.

Table 1 also presents a summary of the field duplicate (PCMW-12) and trip blank analytical results. No VOCs were detected in the trip blank sample, meaning the samples were not adversely affected by sampling handling and shipping. The results for PCMW-02 matched the field duplicate sample PCMW-12, meaning the sampling methods yielded representative samples.

The laboratory quality control results are discussed in the Data Usability Report attached as Attachment C to this report. Results for acetone, bromomethane, 2-hexanone and vinyl chloride were flagged as estimated values due to continuing calibrations that were outside specifications. The results for those analytes are valid and usable. Based on the results of the post-removal action groundwater sampling, the USACE will prepare and coordinate a proposed plan recommending that no further actions to be taken at AOC 2.

TABLES

TABLE 1 SUMMARY OF ANALYTICAL RESULTS GROUNDWATER SAMPLING AT SADVA AOC 2 MAY 2008

			SAMPLE ID:	MW-03	PCMW-02	PCMW-12	TRIP BLANK
			LAB ID:	805012-001-001-1/3	805012-002-004-1/3	805012-003-007-1/3	805012-004-010-1/3
			LAB:	GPL	GPL	GPL	GPL
			SDG:	805012	805012	805012	805012
			MATRIX:	Groundwater	Groundwater	Groundwater	Groundwater
			SAMPLE DATE:	5/1/2008	5/1/2008	5/1/2008	5/1/2008
			VALIDATION DATE:	5/16/2008	5/16/2008	5/16/2008	5/16/2008
		NYSDEC CLASS GA					
CAS	VOLATILE ORGANIC	STANDARDS/					
NUMBER	COMPOUNDS	GUIDANCE VALUES	UNITS				
71-55-6	1 1 1-Trichloroethane	5	ug/l	1	1	111	1
79-34-5	1 1 2 2-Tetrachloroethane	5	ug/L	1 []	1 1	1 1	1 1
79-00-5	1 1 2-Trichloroethane	1	ug/L	1 []	1 U	1 []	1 1
75-34-3	1 1-Dichloroethane	5	ug/L	1 0	1 1	1 1	1 1
75-35-4	1 1-Dichloroethene	5	ug/L	1 U	1 1	1 1	1 1
107-06-2	1 2-Dichloroethane	0.6	ug/L	1 11*	1 11*	1 1 1*	1 11*
78-87-5	1.2-Dichloropropane	1	ug/L	1 U	1 1	1 1	1 1
78-93-3	2-Butanone	50 G	ug/L	511	511	511	511
591-78-6	2-Hevanone	50 G	ug/L	5 11 1	5 11 1	5 111	5 11 1
108-10-1	4-Methyl-2-Pentanone	NS	ug/L	5 11	5 11	5 11	5 11
67-64-1	Acetone	50 G	ug/L	5 11 1	5 111	5 111	5 111
71-43-2	Benzene	1	ug/L	1 11	1 11	1 11	1 11
75-27-4	Bromodichloromethane	50 G	ug/L	1 U	1 1	1 1	1 1
75-25-2	Bromoform	50 G	ug/L	1 U	1 1	1 1	1 1
74-83-9	Bromomethane	5	ug/L	1 111	1 111	1 111	1 111
75-15-0	Carbon Disulfide	NS	ug/L	1 11	1 11	1 11	1 00
56-23-5	Carbon Tetrachloride	5	ug/L	1 []	1 1	1 1	1 1
108-90-7	Chlorobenzene	5	ug/L	1 U	1 1	1 1	1 1
75-00-3	Chloroethane	5	ug/L	1 U	1 1	1 1	1 1
67-66-3	Chloroform	7	ug/L	1 []	1 1	1 1	1 1
74-87-3	Chloromethane	5	ug/L	1 U	1 1	1 1	1 1
124-48-1	Dibromochloromethane	50 G	ug/L	1 U	1 1	1 1	1 1
100-41-4	Ethylbenzene	5	ug/L	1 U	1 U	1 U	1 []
75-09-2	Methylene Chloride	5	ug/L	1 U	1 1	1 []	1 1
100-42-5	Styrene	5	ug/L	1 []	1 1	1 1	1 1
127-18-4	Tetrachloroethylene	5	ug/L	1 0	1 1	1 1	1 1
108-88-3	Toluene	5	ug/L	1 U	1 U	1 U	1 []
79-01-6	Trichloroethene	5	ug/L	1 U	1 U	1 U	1 []
75-01-4	Vinyl Chloride	2	ug/L	1 0	1 111	1 111	1 111
156-59-2	cis-1 2-Dichloroethene	5	ug/L	1 U	1 U	1 U	1 U
10061-01-5	cis-1 3-Dichloropropene	0.4(a)	ug/L	1 U*	1 11*	1 11*	1 *
136777-61-2	m p-Xylene	NS	ug/L	1 Ü	1 U	1 U	1 U
95-47-6	o-Xvlene	5	ua/L	1 U	1 U	1 U	1 U
156-60-5	trans-1.2-Dichloroethene	5	ua/L	1 U	1 U	1 U	1 U
10061-02-6	trans-1,3-Dichloropropene	0.4 (a)	ug/L	1 U**	1 U**	1 U**	1 U**

U = Undetected.

"UJ" = The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria. * - The method detection limit for this analyte is 0.2 ug/L

NS - No Standard exists at this time

G - Guidance Value

(a) - Applies to sum of cis- and trans- isomers

** - The method detection limit for this analyte is 0.3 ug/L

FIGURES



ATTACHMENT A

Summary of Previous Post-Removal Groundwater Sampling Results

Table 1 AOC-2 Water Monitoring VOC Results

	NYDEC MCL							
Compound	(ug/l)	RL (ug/L)	PCMW-01	PCMW-02	MW-3	MW-5	MW-7	SURFACE H2O
Date Collected			4/12/2007	4/12/2007	4/12/2007	4/12/2007	4/12/2007	4/12/2007
1,1,1,-Trichloroethane	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2,2-Tetrachloroethane	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2-Trichloroethane	1	1.0	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethane	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethene	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	3	1.0	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichloroethane	0.6-ADL	1.0	BQL	3.5	BQL	BQL	BQL	BQL
1,3-Dichlorobenzene	3	1.0	BQL	BQL	BQL	BQL	BQL	BQL
1,3-Dichloropropane	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	3	1.0	BQL	BQL	BQL	BQL	BQL	BQL
2-Butanone (MEK)	50	5.0	BQL	BQL	BQL	BQL	BQL	BQL
4-Methyl-2-Pentanone (MIBK)	NS	5.0	BQL	BQL	BQL	BQL	BQL	BQL
Acetone	50	5.0	BQL	BQL	BQL	BQL	BQL	BQL
Benzene	1	1.0	0.37	2.9	1.5	0.4	0.4	0.17
Bromochloromethane	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Bromomethane	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Disulfide	NS	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Tetrachloride	5	1.0	BQL	BQL	BQL	0.44	BQL	BQL
Chlorobenzene	5	1.0	0.42	2.3	1.2	BQL	BQL	0.24
Chloroethane	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Chloroform	7	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Chloromethane	NS	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Dibromochloromethane	50	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Ethylbenzene	5	1.0	BQL	3.8	0.16	BQL	0.25	BQL
Freon 113	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Methylene Chloride	5	1.0	BQL	1.4	BQL	BQL	1.5	0.78
Styrene	930	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Tetrachloroethene	5	1.0	0.41	17	7.5-JM	0.36	0.29	0.18
Toluene	5	1.0	0.14	0.94	0.45	0.16	1.0	BQL
Xylenes (total)	5	1.0	BQL	2.3	1.1	BQL	1.0	BQL
Trichloroethene	5	1.0	BQL	0.51	0.24	BQL	BQL	BQL
Trichlorofluoromethane	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Vinyl Chloride	2	1.0	BQL	BQL	BQL	BQL	BQL	BQL
trans-1,2 Dichloroethene	5	1.0	BQL	BQL	BQL	BQL	BQL	BQL

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Results in **bold** type are >MCL

JM-flagged as "estimated minimum value" due to poor QC Matrix recovery

Table 1 AOC-2 Water Monitoring VOC Results

	NYDEC MCL						
Compound	(ug/l)	RL (ug/L)	PCMW-01	PCMW-02	MW-3	MW-5	MW-7
Date Collected			10/10/2007	10/10/2007	10/10/2007	10/10/2007	10/10/2007
1,1,1,-Trichloroethane	5	1.0	BQL	BQL	BQL	BQL	BQL
1,1,2,2-Tetrachloroethane	5	1.0	BQL	BQL	BQL	BQL	BQL
1,1,2-Trichloroethane	1	1.0	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethane	5	1.0	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethene	5	1.0	BQL	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	3	1.0	BQL	BQL	BQL	BQL	BQL
1,2-Dichloroethane	0.6-ADL	1.0	BQL	BQL	BQL	BQL	BQL
1,3-Dichlorobenzene	3	1.0	BQL	BQL	BQL	BQL	BQL
1,3-Dichloropropane	5	1.0	BQL	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	3	1.0	BQL	BQL	BQL	BQL	BQL
2-Butanone (MEK)	50	5.0	BQL	BQL	BQL	BQL	BQL
4-Methyl-2-Pentanone (MIBK)	NS	5.0	BQL	BQL	BQL	BQL	BQL
Acetone	50	5.0	BQL	BQL	BQL	BQL	BQL
Benzene	1	1.0	BQL	BQL	BQL	BQL	BQL
Bromochloromethane	5	1.0	BQL	BQL	BQL	BQL	BQL
Bromomethane	5	1.0	BQL	BQL	BQL	BQL	BQL
Carbon Disulfide	NS	1.0	BQL	BQL	BQL	BQL	BQL
Carbon Tetrachloride	5	1.0	BQL	BQL	BQL	BQL	BQL
Chlorobenzene	5	1.0	BQL	BQL	BQL	BQL	BQL
Chloroethane	5	1.0	BQL	BQL	BQL	BQL	BQL
Chloroform	7	1.0	BQL	BQL	BQL	BQL	BQL
Chloromethane	NS	1.0	BQL	BQL	BQL	BQL	BQL
Dibromochloromethane	50	1.0	BQL	BQL	BQL	BQL	BQL
Ethylbenzene	5	1.0	BQL	BQL	BQL	BQL	BQL
Freon 113	5	1.0	BQL	BQL	BQL	BQL	BQL
Methylene Chloride	5	1.0	BQL	BQL	BQL	BQL	BQL
Styrene	930	1.0	BQL	BQL	BQL	BQL	BQL
Tetrachloroethene	5	1.0	BQL	BQL	BQL	BQL	BQL
Toluene	5	1.0	BQL	BQL	BQL	BQL	BQL
Xylenes (total)	5	1.0	BQL	BQL	BQL	BQL	BQL
Trichloroethene	5	1.0	BQL	BQL	BQL	BQL	BQL
Trichlorofluoromethane	5	1.0	BQL	BQL	BQL	BQL	BQL
Vinyl Chloride	2	1.0	BQL	BQL	BQL	BQL	BQL
trans-1,2 Dichloroethene	5	1.0	BQL	BQL	BQL	BQL	BQL

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Results in **bold** type are >MCL

JM-flagged as "estimated minimum value" due to poor QC Matrix recovery

	NYDEC MCL						
Compound	(ug/l)	RL (ug/L)	PCMW-01	PCMW-02	MW-3	MW-5	MW-7
Date Collected			4/12/2007	4/12/2007	4/12/2007	4/12/2007	4/12/2007
2,4,5-Trichlorophenol	2	1.1	BQL	BQL	BQL	BQL	BQL
2,4-Dichlorophenol	2	1.1	BQL	BQL	BQL	BQL	BQL
2,4-Dinitrophenol	2	2.6	BQL	BQL	BQL	BQL	BQL
2,4-Dinitrotoluene	5	0.21	BQL	BQL	BQL	BQL	BQL
2,6-Dinitrotoluene	5	0.21	BQL	BQL	BQL	BQL	BQL
2-Chlorophenol	2	1.1	BQL	BQL	BQL	BQL	BQL
2-Methylnaphthalene	NS	0.21	BQL	BQL	BQL	BQL	BQL
2-Nitroaniline	5	0.21	BQL	BQL	BQL	BQL	BQL
2-Nitrophenol	2	1.1	BQL	BQL	BQL	BQL	BQL
2-methylphenol	2	1.1	BQL	BQL	BQL	BQL	BQL
3-Nitroaniline	5	0.21	BQL	BQL	BQL	BQL	BQL
4-Chloroaniline	5	0.21	BQL	BQL	BQL	BQL	BQL
4-Nitroaniline	5	0.21	BQL	BQL	BQL	BQL	BQL
4-Nitrophenol	2	2.6	BQL	BQL	BQL	BQL	BQL
4-chloro-3-methylphenol	2	1.1	BQL	BQL	BQL	BQL	BQL
4-methylphenol	2	1.1	BQL	BQL	BQL	BQL	BQL
Acenaphthene	20	0.21	BQL	BQL	BQL	BQL	BQL
Acenaphthylene	NS	0.21	BQL	BQL	BQL	BQL	BQL
Aniline	5	0.21	BQL	BQL	BQL	BQL	BQL
Anthracene	50	0.21	BQL	BQL	BQL	BQL	BQL
Benzo(a) anthracene	0.002-ADL	0.21	BQL	BQL	BQL	0.078-J	BQL
Benzo(a) pyrene	ADL	0.21	BQL	BQL	BQL	BQL	BQL
Benzo(b) fluoranthene	0.002-ADL	0.21	BQL	BQL	BQL	0.067-J	BQL
Benzo(g,h,i)perylene	NS	0.21	BQL	BQL	BQL	0.078-J	BQL
Benzo(k) fluoranthene	0.002-ADL	0.21	BQL	BQL	BQL	BQL	BQL
Butyl benzyl phthalate	50	0.21	BQL	BQL	BQL	BQL	BQL

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Values in **bold** type are above MCL, including MCLs established at ADL

	NYDEC MCL						
Compound	(ug/l)	RL (ug/L)	PCMW-01	PCMW-02	MW-3	MW-5	MW-7
Date Collected			4/12/2007	4/12/2007	4/12/2007	4/12/2007	4/12/2007
Chrysene	0.002-ADL	0.21	BQL	BQL	BQL	0.067-J	BQL
Dibenz(a,h) Anthracene	NS	0.21	BQL	BQL	BQL	0.056-J	BQL
Dibenzofuran	NS	0.21	BQL	BQL	BQL	BQL	BQL
Diethyl Phthalate	50	0.21	0.22	0.13-J	0.12-J	0.4	0.13-J
Dimethyl Phthalate	50	0.21	BQL	BQL	BQL	BQL	BQL
Fluoranthene	50	0.21	BQL	BQL	BQL	0.067-J	BQL
Fluorene	50	0.21	BQL	BQL	BQL	BQL	BQL
Hexachlorobenzene	0.04-ADL	0.21	BQL	BQL	BQL	BQL	BQL
Hexachlorocyclopentadiene	5	0.21	BQL	BQL	BQL	BQL	BQL
Indeno(1,2,3-c,d) Pyrene	0.002-ADL	0.21	BQL	BQL	BQL	0.067-J	BQL
Isophorone	50	0.21	BQL	BQL	BQL	BQL	BQL
Naphthalene	10	0.21	BQL	BQL	BQL	BQL	BQL
Nitrobenzene	0.4	0.21	BQL	BQL	BQL	BQL	BQL
Pentachlorophenol	2	2.6	BQL	BQL	BQL	BQL	BQL
Phenanthrene	50	0.21	0.17	0.18	BQL	BQL	BQL
Phenol	2	1.1	BQL	BQL	BQL	BQL	BQL
Pyrene	50	0.21	BQL	BQL	BQL	0.056-J	BQL
bis(2-ethylhexyl) phthalate	5	0.21	2.8	4	1.7	2.7	5.4
di-n-Butyl Phthalate	50	0.21	0.16-J	0.16-J	0.23	0.21	0.24
di-n-Octyl Phthalate	50	0.21	BQL	BQL	BQL	BQL	BQL

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Values in **bold** type are above MCL, including MCLs established at ADL

	NYDEC MCL							
Compound	(ug/l)	RL (ug/L)	SURFACE H2O	PCMW-1	PCMW-2	MW-3	MW-5	MW-7
Date Collected			4/12/2007	10/10/2007	10/10/2007	10/10/2007	10/10/2007	10/10/2007
2,4,5-Trichlorophenol	2	1.1	BQL	BQL	BQL	BQL	BQL	BQL
2,4-Dichlorophenol	2	1.1	BQL	BQL	BQL	BQL	BQL	BQL
2,4-Dinitrophenol	2	2.6	BQL	BQL	BQL	BQL	BQL	BQL
2,4-Dinitrotoluene	5	0.21	BQL	BQL	BQL	BQL	BQL	BQL
2,6-Dinitrotoluene	5	0.21	BQL	BQL	BQL	BQL	BQL	BQL
2-Chlorophenol	2	1.1	BQL	BQL	BQL	BQL	BQL	BQL
2-Methylnaphthalene	NS	0.21	BQL	BQL	BQL	BQL	BQL	BQL
2-Nitroaniline	5	0.21	BQL	BQL	BQL	BQL	BQL	BQL
2-Nitrophenol	2	1.1	BQL	BQL	BQL	BQL	BQL	BQL
2-methylphenol	2	1.1	BQL	BQL	BQL	BQL	BQL	BQL
3-Nitroaniline	5	0.21	BQL	BQL	BQL	BQL	BQL	BQL
4-Chloroaniline	5	0.21	BQL	BQL	BQL	BQL	BQL	BQL
4-Nitroaniline	5	0.21	BQL	BQL	BQL	BQL	BQL	BQL
4-Nitrophenol	2	2.6	BQL	BQL	BQL	BQL	BQL	BQL
4-chloro-3-methylphenol	2	1.1	BQL	BQL	BQL	BQL	BQL	BQL
4-methylphenol	2	1.1	BQL	BQL	BQL	BQL	BQL	BQL
Acenaphthene	20	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Acenaphthylene	NS	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Aniline	5	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Anthracene	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(a) anthracene	0.002-ADL	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(a) pyrene	ADL	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(b) fluoranthene	0.002-ADL	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(g,h,i)perylene	NS	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(k) fluoranthene	0.002-ADL	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Butyl benzyl phthalate	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Values in **bold** type are above MCL, including MCLs established at ADL

	NYDEC MCL							
Compound	(ug/l)	RL (ug/L)	SURFACE H2O	PCMW-1	PCMW-2	MW-3	MW-5	MW-7
Date Collected			4/12/2007	10/10/2007	10/10/2007	10/10/2007	10/10/2007	10/10/2007
Chrysene	0.002-ADL	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Dibenz(a,h) Anthracene	NS	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Dibenzofuran	NS	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Diethyl Phthalate	50	0.21	BQL	0.10-J	BQL	BQL	BQL	BQL
Dimethyl Phthalate	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Fluoranthene	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Fluorene	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Hexachlorobenzene	0.04-ADL	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Hexachlorocyclopentadiene	5	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Indeno(1,2,3-c,d) Pyrene	0.002-ADL	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Isophorone	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Naphthalene	10	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Nitrobenzene	0.4	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Pentachlorophenol	2	2.6	BQL	BQL	BQL	BQL	BQL	BQL
Phenanthrene	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL
Phenol	2	1.1	BQL	BQL	BQL	BQL	BQL	BQL
Pyrene	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL
bis(2-ethylhexyl) phthalate	5	0.21	3	1.6	3	1.8	1.7	0.72
di-n-Butyl Phthalate	50	0.21	0.18-J	1	0.86	0.62	0.63	0.29
di-n-Octyl Phthalate	50	0.21	BQL	BQL	BQL	BQL	BQL	BQL

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Values in **bold** type are above MCL, including MCLs established at ADL

Table 3

AOC-2

Water Monitoring

Pesticide Results

	NYDEC MCL	MCL								
Compound	(ug/l)	RL (ug/L)	PCMW-01	PCMW-02	MW-3	MW-5	MW-7	SURFACE H2O		
			4/12/2007	4/12/2007	4/12/2007	4/12/2007	4/12/2007	4/12/2007		
4,4-DDD	0.3	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
4,4-DDE	0.2	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
4,4-DDT	0.2	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Aldrin	ADL	0.052	0.028-J	BQL	BQL	BQL	BQL	BQL		
alpha-BHC	ADL	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
beta-BHC	0.04	0.052	0.075	BQL	BQL	BQL	BQL	BQL		
Chlordane	0.05-ADL	1.0	BQL	BQL	BQL	BQL	BQL	BQL		
delta-BHC	ADL	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Dieldrin	0.004-ADL	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Endosulfan I	NS	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Endosulfan II	NS	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Endosulfan Sulfate	NS	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Endrin	ADL	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Gamma-BHC (Lindane)	0.05	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Heptachlor	0.04	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Heptachlor Epoxide	0.03	0.052	BQL	BQL	BQL	BQL	BQL	0.068		
Methoxychlor	35	0.052	BQL	BQL	BQL	BQL	BQL	BQL		
Toxaphene	0.06	1.0	BQL	BQL	BQL	BQL	BQL	BQL		

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Table 3

AOC-2

Water Monitoring

Pesticide Results

	NYDEC MCL		res	r esticide Results							
Compound	(ug/l)	RL (ug/L)	PCMW-01	PCMW-02	MW-3	MW-5	MW-7				
			10/10/2007	10/10/2007	10/10/2007	10/10/2007	10/10/2007				
4,4-DDD	0.3	0.052	BQL	BQL	BQL	BQL	BQL				
4,4-DDE	0.2	0.052	BQL	BQL	BQL	BQL	BQL				
4,4-DDT	0.2	0.052	BQL	BQL	BQL	BQL	BQL				
Aldrin	ADL	0.052	BQL	BQL	BQL	BQL	BQL				
alpha-BHC	ADL	0.052	BQL	BQL	BQL	BQL	BQL				
beta-BHC	0.04	0.052	BQL	BQL	BQL	BQL	BQL				
Chlordane	0.05-ADL	1.0	BQL	BQL	BQL	BQL	BQL				
delta-BHC	ADL	0.052	BQL	BQL	BQL	BQL	BQL				
Dieldrin	0.004-ADL	0.052	BQL	BQL	BQL	BQL	BQL				
Endosulfan I	NS	0.052	BQL	BQL	BQL	BQL	BQL				
Endosulfan II	NS	0.052	BQL	BQL	BQL	BQL	BQL				
Endosulfan Sulfate	NS	0.052	BQL	BQL	BQL	BQL	BQL				
Endrin	ADL	0.052	BQL	BQL	BQL	BQL	BQL				
Gamma-BHC (Lindane)	0.05	0.052	BQL	BQL	BQL	BQL	BQL				
Heptachlor	0.04	0.052	BQL	BQL	BQL	BQL	BQL				
Heptachlor Epoxide	0.03	0.052	BQL	BQL	BQL	BQL	BQL				
Methoxychlor	35	0.052	BQL	BQL	BQL	BQL	BQL				
Toxaphene	0.06	1.0	BQL	BQL	BQL	BQL	BQL				

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Table 4 AOC-2 Water monitoring Metals Results

	NYDEC							
Metal	MCL (ug/l)	RL (ug/L)	PCMW-01	PCMW-02	MW-3	MW-5	MW-7	SURFACE H2O
Date Collected			4/12/2007	4/12/2007	4/12/2007	4/12/2007	4/12/2007	4/12/2007
Aluminum	2000	100	27000	2424	107	1560	104	398
Antimony	6	1	0.56	BQL	BQL	BQL	BQL	0.3
Arsenic	50	5	11	2.2	BQL	BQL	BQL	1.3
Barium	2000	5	178	33.9	13	22.2	7.8	14.9
Beryllium	3	0.2	1.1	0.11	BQL	0.059	BQL	BQL
Cadmium	10	0.5	0.49	0.39	BQL	0.16	0.68	0.17
Calcium	NS	1000	104000	90700	555000	444000	550000	14700
Chromium	100	2	39	3.4	BQL	2.6	BQL	BQL
Cobalt	NS	1	13	5.8	0.87	3.4	BQL	0.46
Copper	1000	2	44.9	5.3	1.9	3.2	2.5	2.8
Iron	600	50	71800	4830	557	2280	134	819
Lead	50/15	2	25.8	1.3	0.46	1.7	0.49	0.71
Magnesium	35000	100	43600	46300	210000	418000	56200	6100
Manganese	600	2	1310	1350	1240	1630	271	66.3
Mercury	1.4	0.2	BQL	BQL	BQL	BQL	BQL	BQL
Nickel	200	1	35.1	11.1	4.5	8.2	2.5	4
Potassium	NS	1000	27700	1440	9810	15800	3890	790
Selenium	20	5	1.6	BQL	BQL	BQL	BQL	BQL
Silver	100	0.3	0.24	BQL	BQL	BQL	BQL	BQL
Sodium	NS	1000	45000	32800	50200	215000	1550	3360
Thallium	0.5	2	0.46	0.22	0.096	0.14	0.12	BQL
Vanadium	NS	10	52	4.1	BQL	3.7	BQL	BQL
Zinc	5000	10	82.8	15.6	5.2	8.2	6.4	8.2

MCL for Lead also reflects current drinking water value of 15ug/l

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Values in **bold** type are above MCL

Lead values in *italics* are above DW MCL but below NYDEC TOGS 111 limit

* result from Shaw requested re-analyis performed on 11/7/2007 after original data indicated a potential for improperly reported data

Values in *italics* exceed one or more criteria Values in **bold** face exceed all criteria

Table 4 AOC-2 Water monitoring Metals Results

	NYDEC							
Metal	MCL (ug/l)	RL (ug/L)	PCMW-1	PCMW-2	MW-3*	MW-5*	MW-7	
Date Collected			10/10/2007	10/10/2007	10/10/2007	10/10/2007	10/10/2007	
Aluminum	2000	100	397	804	53.3	471	352	
Antimony	6	1	BQL	BQL	BQL	0.28	BQL	
Arsenic	50	5	2.4	BQL	1.3	BQL	BQL	
Barium	2000	5	524	25.4	14.7	18.4	9.6	
Beryllium	3	0.2	0.056	0.13	BQL	0.037	BQL	
Cadmium	10	0.5	BQL	1.3	BQL	0.27	0.1	
Calcium	NS	1000	136000	41000	570000	469000	551000	
Chromium	100	2	3.7	2.5	BQL	3	BQL	
Cobalt	NS	1	0.28	6.9	0.71	3.1	0.54	
Copper	1000	2	2.4	6.3	3	3.6	3.3	
Iron	600	50	16800	1440	1620	1100	432	
Lead	50/15	2	0.71	0.84	0.26	0.82	0.62	
Magnesium	35000	100	53100	22800	226000	453000	75900	
Manganese	600	2	222	697	1540	1600	348	
Mercury	1.4	0.2	BQL	0.076	BQL	BQL	BQL	
Nickel	200	1	1.6	11.4	3.4	8.2	2.4	
Potassium	NS	1000	16500	900	11200	18400	5100	
Selenium	20	5	BQL	BQL	BQL	BQL	BQL	
Silver	100	0.3	BQL	BQL	BQL	BQL	BQL	
Sodium	NS	1000	109000	43600	59400	255000	2000	
Thallium	0.5	2	0.27	0.14	0.1	0.099	0.23	
Vanadium	NS	10	52	2.4	BQL	2.2	BQL	
Zinc	5000	10	82.8	29.4	9.9	14.2	10.9	

MCL for Lead also reflects current drinking water value of 15ug/l

MCL from NYDEC TOGS 111- Groundwater Effluent Standards Class GA

Values in **bold** type are above MCL

Lead values in *italics* are above DW MCL but below NYDEC TOGS 111 limit

* result from Shaw requested re-analyis performed on 11/7/2007 after original data indicated a potential for improperly reported data

Values in *italics* exceed one or more criteria Values in **bold** face exceed all criteria

Table 5 AOC-2 Water Sampling Field QC

Apr-07

Oct-07

	NYDEC	RL	Trip				
Metal	MCL (ug/l)	(ug/L)	Blank	MW-7	B. DUP	RPD	
1,1,1,-Trichloroethane	5	1.0	BQL	BQL	BQL	INDETER	
1,1,2,2-Tetrachloroethane	5	1.0	BQL	BQL	BQL	INDETER	
1,1,2-Trichloroethane	1	1.0	BQL	BQL	BQL	INDETER	
1,1-Dichloroethane	5	1.0	BQL	BQL	BQL	INDETER	
1,1-Dichloroethene	5	1.0	BQL	BQL	BQL	INDETER	
1,2-Dichlorobenzene	3	1.0	BQL	BQL	BQL	INDETER	
1,2-Dichloroethane	0.6	1.0	BQL	BQL	BQL	INDETER	
1,3-Dichlorobenzene	3	1.0	BQL	BQL	BQL	INDETER	
1,3-Dichloropropane	5	1.0	BQL	BQL	BQL	INDETER	
1,4-Dichlorobenzene	3	1.0	BQL	BQL	BQL	INDETER	
2-Butanone (MEK)	50	5.0	BQL	BQL	BQL	INDETER	
4-Methyl-2-Pentanone (MIBK)	NS	5.0	BQL	BQL	BQL	INDETER	
Acetone	50	5.0	BQL	BQL	BQL	INDETER	
Benzene	1	1.0	BQL	0.4	0.20	66.7	J-flagged
Bromochloromethane	5	1.0	BQL	BQL	BQL	INDETER	
Bromomethane	5	1.0	BQL	BQL	BQL	INDETER	
Carbon Disulfide	NS	1.0	BQL	BQL	BQL	INDETER	
Carbon Tetrachloride	5	1.0	BQL	BQL	BQL	INDETER	
Chlorobenzene	5	1.0	BQL	BQL	0.20	INDETER	
Chloroethane	5	1.0	BQL	BQL	BQL	INDETER	
Chloroform	7	1.0	BQL	BQL	BQL	INDETER	
Chloromethane	NS	1.0	BQL	BQL	BQL	INDETER	
Dibromochloromethane	50	1.0	BQL	BQL	BQL	INDETER	
Ethylbenzene	5	1.0	BQL	0.25	BQL	INDETER	
Freon 113	5	1.0	BQL	BQL	BQL	INDETER	
Methylene Chloride	5	1.0	1.5	1.5	1.1	30.8	
Styrene	930	1.0	BQL	BQL	BQL	INDETER	
Tetrachloroethene	5	1.0	BQL	0.29	0.20	36.7	J-flagged
Toluene	5	1.0	0.13	1.0	0.41	83.7	J-flagged
Xylenes (total)	5	1.0	BQL	1.0	0.46	74.0	J-flagged
Trichloroethene	5	1.0	BQL	BQL	BQL	INDETER	
Trichlorofluoromethane	5	1.0	BQL	BQL	BQL	INDETER	
Vinyl Chloride	2	1.0	BQL	BQL	BQL	INDETER	
trans-1,2 Dichloroethene	5	1.0	BQL	BQL	BQL	INDETER	

Trip			
Blank	MW-3	DUPE	RPD
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER
BQL	BQL	BQL	INDETER

Table 5 AOC-2 Water Sampling Field QC

				Apr-07			
	NYDEC	RL	Trip				
Metal	MCL (ug/l)	(ug/L)	Blank	MW-7	B. DUP	RPD	
Aluminum	2000	100	NA	104	BQL	INDETER	
Arsenic	50	5	NA	BQL	33.1	INDETER	
Barium	2000	5	NA	7.8	52.6	148.3	
Cadmium	10	0.5	NA	0.68	BQL	INDETER	
Calcium	NS	1000	NA	550000	558000	1.4	
Cobalt	NS	1	NA	BQL	6	INDETER	
Copper	1000	2	NA	2.5	1.3	63.2	
Iron	600	50	NA	134	20400	197.4	
Lead	50/15	2	NA	0.49	BQL	INDETER	
Magnesium	35000	100	NA	56200	34900	46.8	
Manganese	600	2	NA	271	1820	148.2	
Nickel	200	1	NA	2.5	6.4	87.6	
Potassium	NS	1000	NA	3890	4520	15.0	
Sodium	NS	1000	NA	1550	4040	89.1	
Thallium	0.5	2	NA	0.12	0.19	45.2	
Zinc	5000	10	NA	6.4	5.3	18.8	
Diethyl Phthalate	50	0.13	NA	0.13	BQL	INDETER	
bis(2-ethylhexyl) phthalate	5	0.21	NA	5.4	3	57.1	
di-n-Butyl Phthalate	50	0.21	NA	0.24	0.16	40.0	

Oct-07

Trip				
Blank	MW-3	DUPE	RPD	
NA	54.1	69.5	24.9	
NA	1.2	1	18.2	
NA	14.8	15.7	5.9	
NA	BQL	BQL	INDETER	
NA	546000	586000	7.1	
NA	1	1.1	9.5	
NA	2.7	2.6	3.8	
NA	1670	1750	4.7	
NA	0.29	0.37	24.2	
NA	224000	243000	8.1	
NA	1500	1510	0.7	
NA	3.6	3.8	5.4	
NA	10900	11100	1.8	
NA	57300	58200	1.6	
NA	0.12	0.22	58.8	J-flagged
NA	7.9	10.8	31.0	J-flagged
NA	BQL	BQL	INDETER	
NA	1.8	2.9	46.8	
NA	0.62	0.43	36.2	

Field Duplicate data reflects hits only-no hits for Pesticides in either sample or Duplicate sample

ATTACHMENT B

Groundwater Sampling Field Data Sheets

				PARS	ONS		Page 1 c	of	
			WELL PU	RGING	OBSERV	ATIONS			
SITE N.	AME:		DNSC Sch	enectady Dep	pot AOC-2				1
PROJE	CT NUMBER	1: 743	3440.08	000					
SAMPL	E NUMBER:	nl la-	- 3	1		<i>c</i> 1.	10.0 /- '	()	
DATE:	5-1-0	8		- ·	IME: 9 : 00	Clear SJ	Mry, Cold (305	-405	
CAMPI	FDO	HAIL			-/	1 Dent they of	p to purge		
SAMPLI	ERS: Dw	IT Dilla	nan		of	Par Son	15		
DESCR	IPTION OF S	AMPLING PC	DINT						
S	ample Locatio	on: We	11 mw-	3 top	J. hill				
S	ample Metho	e Depth:	- 28-19	3 Ft Fra	n Toc				
			WFION	PERISTE	tic pu	ng			
GROUN	IDWATER PL	IRGING			x 9:30		,		
In	nitial Static Wa	ater Level:	6.01 f	m TOC		7D= 2	8.2 Fm To (
0	ne Well Volui	me:	-		1		<u>3 Volumes</u>		
	2-Inch Casi	ng:/	Feet of Wat	er x 0.16 Gal	lons/Foot =	3,5	3 Gallons 10.6		
	4-Inch Casi	ng	Feet of Wate	er x 0.36 Gal	lons/Foot =		Gallons		
	i mon ousi	ig	Feet of Wate	er x 0.65 Gal	ions/Foot =		Gallons		
Vo	olume of grou	ndwater purg	ed: 5	.5	Gallo	ns			
Pu	urging Device	: Perisi	Laltic P.	mp					
Pu	urge Water Di	sposition (e.g	., contained):						
FIELD		MENTS					L Job W - 1 W		
						E W	i arched nov. bu = OK 9	1.40	
Time	pН	Conductivity	Temp.	Turbidity	DO	ORP			
	0	(mS)	(Degrees C)	(NTUs)			Comments		
0:12	Begiv	Purge	2				Batteryerror an Hu change Bertery	- alc	
1.28	6.67	3.93	9.86	15.8	0,00	62	300 m//min	7,48	DTW
1. 55	4,68	3.92	10,01	18.4	0,00	57	Z40 ml/min	7.41	DTW
2.2	618	3.92	10.16	19-27	0.00	53	225 m/min	V	
37	\$ 60			1.		50			
0:42	6.69	3.92	10,15	10,5	0,00	00	L25 ml/mm	7,43	DTN
0:42	6.69	3.92	10,15	8,2	0,00	48	180 ml/mm	7,43	DTW
0:42	- 6.69 6.69 - 6.69	3.92 3.91 3.90	10,15 10,17 10,129	10,5 8,2 18	0,00	48	180 ml/mm 205 ml/min 205 ml/min	7,43 7,47 7,40	DTW Puny Stapp
0:42	6.69 6.69 6.69 6.69	3.92 3.91 3.90 3.90	10,15 10,17 10,29 10,23	10,5 8,2 18 5,2	0,00 0,00 0,00	48 47 45	180 ml/min 205 ml/min	7,43 7,47 7,40	DTW PUM Shappe DTW PUM Shappe
0:42 0:42 0:47 0:52 1:58	6.69 6.69 6.69 6.69 6.69 6.69	3.92 3.91 3.90 3.90 3.90 3.87	10,15 10,17 10,29 10,29 10,29	10,5 8,2 18 5,2 11.9	0,00 0,00 0,00 0,00	48 47 45 45	180 ml/mm 180 ml/min 205 ml/min 250 ml/min	7,43 7,47 7,40	DTW PTW PUNY Shappa DTW PUNY Shop ATW
0:42 0:42 0:47 0:52 1:58 1:02	6.69 6.69 6.69 6.69 6.69 6.69 6.69	3.92 3.91 3.90 3.90 3.90 3.87 3.85	10,15 10,17 10,29 10,29 10,29 10,35	10,5 8,2 18 5,2 11.9 1	0,00 0,00 0,00 0,00 0,00 0,00	48 47 45 45 45 44	250 ml/min 250 ml/min 250 ml/min 220 ml/min	7.43 7.47 7.40 7.56	DTW Prover Stopper Prover Stopper Prover Stop Prover Stop ATW ATL

Note: prop will not run slower than 200 ml/min

SITE NA PROJEC	ME: T NUMBER:	743	DNSC Sche	enectady Dep	ot AOC-2			
SAMPLE DATE:		MW-2	>		EATHER:	clear, sun	ny light breez	c 405-50
SAMPLE	$RS: \int_{Co}$	H Dill	man	_	Of	es larga	5	
Time	рН	Conductivity (mS)	(Temp. (Degrees C)	Turbidity (NTUs)	DO m g/L	ORP mV	Comments	
11:18	6,69	3.83	10.23	11.9	0.60	43	225 m//min	7,710
11:29	6.67	3,85	10.36	6.6	0.00	43	225 n//min	7.73 (
11:33	6.69	3.81	10.32	7.8	0.00	43	225 m//min 225 w//min	1791
	collect	Samp (e at	11:35	for	VOCS	- J all win	1. (10
	TGT	al pur	ed 5.	5 galla	ns wa	Air dischar	ged to grown	d.
							arand	Sudkint
	624	ter dea	S, NO	stain	or oda.	-	1	
	Wer	er got	fizzy i	n lab b	He,r	cacted c	.th	
	th	L acid	· Tiff	cult to	get 56	Able fre	e sample	
							J	

			WELL PU	PARS RGING (ONS DBSERVA	TIONS	Page 1 of
SITE N/ PROJE	AME: CT NUMBER	: 743	DNSC Sche	enectady Dep	ot AOC-2		
SAMPL	ENUMBER: 5-1-02	PCMW 8	-02	– V – T	VEATHER:	Sunny, 1	putty cloudy light brees
SAMPLE	ERS: <u>5</u> 6	H Dillo	6M		of^	al San	5
DESCRI Si Si	IPTION OF S ample Locatio creen/Sample ample Method	AMPLING PC on: > Depth: d:	PCMW PCMW Zi460	- 02 tw Prom perist	-Toc	TAZ	3 feet for TOC
In Or Vc Pt Pt	itial Static Wa ne Well Volur 2-Inch Casir 3-Inch Casir 4-Inch Casir blume of grou urging Device urge Water Di	ater Level: me: ng: ng: ng: ng: ng: ng: sposition (e.g.)	Feet of Wate Feet of Wate Feet of Wate ed: Flow	6 frm er x 0.16 Gall er x 0.36 Gall er x 0.65 Gall <u>Perist</u> <u>Disch</u>	TOC ons/Foot = ons/Foot = Gallor The f	1,62	<u>3 Volumes</u> Gallons <u>5.1</u> Gallons Gallons
FIELD		VIENTS					
Time	pН	Conductivity	Temp.	Turbidity	DO	ORP	
55	St.	ct o	(Degrees C)	(INTUS)			Comments
00	6.45	1 -1	8,4	408	(2.38	72	350 ml/min
05	6.37	1.40	8.19	37-	(DAZ	24	270
10	6.05	1,30	8.29	9.0	0.00	67	30 11/ 2.51
10	5.84	1.27	8.26	2.5	6.61	88	325 41/4 6 2.51
15		126	8.30	0,6	1.27	93	280 m/min 2:51
15 20	5.82	nop	0.0	1	1 . /	0	1/10/11
15 20 25	5.82	1.26	8,32	1.0	1161	95	300 ml/min 2.51
15 20 25 30	5.82 5.82 5.81	1.26	8,32	0.0	1.86	95	300 m/min 2.51 300 m/min 2.51
15 20 25 30 35	5.82 5.82 5.81 5.79	1.26	8,32 8,34 8,40	0.0	1.86 2.09	95 97 99	300 m/min 2.51 300 m/min 2.51 300 m/min 2.51
15 20 25 30 35 40	5.82 5.82 5.81 5.79 5.79	1.26 1.26 1.26 1.26 1.26	8,32 8.34 8.40 8.24	0.0	1.86 7.69 7.31	97 97 99 101	300 m/ (min 2.51 300 m/ (min 2.5) 300 m/ (min 2.5) 310 m/ (min 2.51

				PARSO RGING O	ONS BSERVA	TIONS	rage	
SITE NA PROJEC	ME: T NUMBER:	7430	DNSC Scher	ectady Depo	ot AOC-2			
SAMPLE DATE:	NUMBER: 1 5-1-08	CMW-0	2	W TI	EATHER: S ME: 1:4	Type Pa	the cloudy, light	50's-60°
SAMPLE	RS: <u>3-5</u>	+ Dilln	an		of^	arsm	5	
Time	рН	Conductivity (mSi Gm	(Degrees C)	Turbidity	DO	ORP	Commente	
1:50	5.78	126	8.35	6.0	7.57	Ind	Comments	1- 251
:55	5.78	1.26	8 35	6.7	7.78	106	280 m//min	JIW 421
2:00	5.77	1.27	838	0,0	2.80	100	200 m1/hin	DTW 40
2:05	5.77	1.27	8.47	0,0	2.99	108	290	751-
2:10	5.77	1.27	8.50	6.4	3,18	109	290 ml/min	2.5/7
2:14	5.77	1.27	8.37	6.0	3.21	110	11 11	111
2:19	5.78	1.26	8.47	10.2	3.23	111	• •	17
	Col	lect 5	angle	2:25	-	tal pu	red 7	Tal
	No	odor no	o stam,	water	- clear	1	1	, ,
			/					

ATTACHMENT C

Laboratory Analytical Data Usability Memo

ATTACHMENT A

DATA USABILITY REPORT FOR SAMPLES COLLECTED AT FORMER SCHENECTADY ARMY DEPOT - VOORHEESVILLE AREA (SADVA) AOC 2

Introduction

This data usability report presents the results of the quality assurance (QA) evaluation, performed by Parsons, of sample analytical data and results for samples collected at the SADVA Area of Concern (AOC) 2 – Former Post Commander's Landfill. Three groundwater samples were collected by Parsons on May 01, 2008 and were analyzed by GPL Laboratories, LLLP (GPL), Frederick, Maryland. A trip blank was shipped and submitted with the field samples. Analytical data and results were presented by GPL in a report identified as "Analytical Report for 805012". The report was signed by Chino Ortiz under the statement on the cover page that 'GPL Laboratories, LLLP certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted".

The specific samples contained in the data package and the analyses performed are presented in Table 1. Recommended data qualifiers resulting from this QA evaluation are summarized on Table 2.

Table 1 – Summary of Samples and Analyses									
Parsons Sample ID	Collection Date	Matrix	Analyses Performed						
MW-03	05/01/2008	Groundwater	Volatile Organic Compounds (VOCs) by Method SW8260B						
PCMW-02	05/01/2008	Groundwater	Volatile Organic Compounds (VOCs) by Method SW8260B						
PCMW-12	05/01/2008	Groundwater	Volatile Organic Compounds (VOCs) by Method SW8260B						
TRIP BLANK	05/01/2008	Laboratory Water	Volatile Organic Compounds (VOCs) by Method SW8260B						

QA Evaluation Results

All samples were received by the laboratory on May 02, 2008, intact and properly preserved. The cooler was submitted under proper chain of custody and received with an internal temperature of 4°C, which is within the acceptance range of 4°C \pm 2°C.

The following describes the overall QA/QC indicators:

Analytical holding time: All samples were analyzed on May 06, 2008, which is 5 days from sample collection, within analysis holding time of 14 days for acid-preserved samples. The sample "pH <2" was verified for each sample by the laboratory prior to analysis.

GC/MS instrument tuning and performance verification: The GC/MS system was tuned and met the method performance criteria (BFB ion abundance criteria).

Analysis sequence: All analyses and QC runs were completed with the method analysis time and sequence requirements (12-hour tune clock).

Calibration results: The initial calibration results met QC acceptance criteria. The initial calibration verification results met QC acceptance criteria ($\pm 25\%$ D) for all target analytes, with the exception of Acetone (-37.9%D) and 2-Hexanone (-41.6%D). The continuing calibration verification met QC acceptance criteria ($\pm 20\%$ D) for all target analytes, with the exception of Acetone (-69.0%D), 2-Hexanone (-35.4%D), Bromomethane (-25.6%D), and Vinyl Chloride (-20.5%D). The sample results for these four analytes should be considered to be estimated values, biased low.

Internal standard results: Internal standard results [retention time and recovery (areas)] for all samples met QC acceptance criteria.

Surrogate compound results: Surrogate compound recoveries for all samples met QC acceptance criteria.

Method blank: No target analytes were reported as detected in the method blank.

Laboratory Control Sample (LCS): The LCS recoveries met QC acceptance criteria for all target analytes.

Matrix spike/matrix spike duplicate (MS/MSD) results: MS/MSD results met QC acceptance criteria for recovery (%R) and for relative percent difference (RPD) for each target analyte, with the exception of 2-Butanone (59% RPD), which exceeded the QC acceptance limit of 25% RPD. However, since the recoveries of the MS and MSD met QC acceptance criteria, no sample results are recommended for data qualification or restricted data usability.

Field QC (trip blank) results: No target analytes were reported as detected in the trip blank.

Data Usability Summary

Target VOC data should be utilized without qualification, with the exception that the results of four VOCs (Acetone, Bromomethane, 2-Hexanone, and Vinyl Chloride) in each of the samples should be considered to be estimated values, biased low, due to the non-compliance of the associated continuing calibration verification results. Data qualification recommendations are summarized in Table 2.

Table 2 – Data Qualification Recommendations								
Analyte	Sample Concentration (ug/L)	Recommended Data Qualifier						
Acetone Bromomethane 2-Hexanone Vinyl chloride	U	UJ						

Data Qualifiers

"U" = Undetected.

"UJ"= The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.